

5 COMMERCIAL OPERATIONS

5.1 Management Objectives

1. To encourage high standard commercial activities which enhance the visitor experience and /or supplement visitor management in the Nature Park.
2. To ensure that any commercial activities are of a high standard and compatible with the park's character and values.

5.2 Background

Concessions provide services that management considers are more appropriately offered by private enterprise. When operated appropriately, concessions can be an important tool for managing visitors and better utilising staff resources. Well managed concessions make Parks easily accessible and more enjoyable to a greater number of people and benefit the tourist industry.

It is intended that there will be opportunities for private enterprise to take up concessions in the Park. The attributes of the Nature Park and the range of recreational opportunities available may be enhanced by selective small scale commercial developments. These developments or commercial activities should not be detrimental to the Park's values.

Opportunities for appropriate concessions may include:

- the commercial sale of food, souvenirs and other supplies; and
- guided tours

Viability of any commercial operation will be dependent on the demand for services. Permits have been issued for the operation of the kiosk but the demand for the services has not been sufficient to sustain an economically viable business. The Service will remain open to suggestions for commercial operations in the Park.

From 1 April 2006 all tour operators are required to have a permit to conduct tours in NT Parks and Reserves. This permitting system has been introduced with the cooperation of the tourism industry to ensure that adequate industry standards are maintained. The permit system will also allow the Service to communicate and work cooperatively with the industry to develop and maintain high standards of service in Parks and Reserves.

5.3 Management Actions

1. All commercial operations within the Park will be required to operate under a concession lease or license agreement in accordance with the Parks and Wildlife Service's concession policy.
2. Monitor all operations to ensure they conform to required standards and to evaluate the application for lease/license renewal.
3. Ensure that the type and number of operations does not compromise the character and/or visitor experience in the Park.
4. Ensure all leases and licenses include conditions that ensure the protection of the Park's values in accordance with the Parks and Wildlife Service's concession policy.
5. Any commercial food and beverage operation must comply with relevant provisions of the *Public Health Act, Food Act* and Building Code of Australia.
6. Assess land claim and native title claim implications before issuing any lease or license.
7. No concession activity will be allowed that has the potential to impact deleteriously upon the Park's values.
8. Regulate or prohibit tour operator activities if they have a damaging affect on the values of the Park.

6 KEY NATURAL RESOURCE MANAGEMENT PROGRAMS

Management of threatening processes is a primary focus of management activities in the Nature Park this includes control of wildfire, feral animal and weeds.

6.1 Fire Management

6.1.1 Summary

The area has been subject to regular burning since pre-European settlement times. Fire management in the Park focuses on protecting assets and lives in the event of wildfires. Management strategies aim to reduce the frequency, intensity and extent of fires and prevent wildfires from entering the Park and/or escaping from the Park to surrounding properties.

Speargrass and weeds such as mission grass and gamba grass provide a highly combustible fuel and when burnt under uncontrolled conditions late in the dry season can cause extensive damage to the Park. A number of swamps remain sufficiently wet throughout the year to generally exclude fires and act as natural firebreaks. The monsoon forest that is potentially

affected by wildfire is well protected because it largely occurs in wet areas and sites where fire is excluded. Other vegetation communities in the Park are well adapted to fire although frequent intense wildfires are likely to affect these communities as well.

Parallel firebreaks have been established around most of the Park boundary. The area between the firebreak and the boundary is burnt to give a broad protection zone. There are also a number of internal firebreaks to protect visitors and park developments, and to reduce the fire hazard.

6.1.2 Management Objectives

1. To minimise the detrimental impacts of wildfires on native plants, animals and the natural environment.
2. To protect people, personal property and park assets from harm due to fire.
3. To establish a cooperative working relationship with neighbours and other stakeholders in managing fire.

6.1.3 Management Actions

1. Prepare a Fire Management Program for the Park based on a strategic approach that includes preparation of an annual fire action plan prepared in consultation with the NT Fire Service, Bushfires Council and adjacent landowners.
2. Fire management activities will follow sound strategic planning principles with decisions and actions based on the best information available. Specific attention in planning and implementing the Fire Management program will be given to:
 - protection of native plants, animals and the natural environment;
 - minimising impact on the recreational and aesthetic values and ensuring the protection of people, personal property and park assets;
 - identification of cultural resources that may be damaged by fire and adoption of strategies to ensure their protection;
 - systematic monitoring with the aim of achieving better understanding of fire-habitat relationships and more informed fire management in the future; and
 - staff and visitor safety
3. Controlled burning will be undertaken inside the Park boundaries, around assets and in selected areas within these boundaries, to reduce fuel loads and minimise the frequency of large intense fires. The Fire Action Plan will be reviewed and updated annually.
4. A permit from the Director of Parks and Wildlife will be required for the lighting of any open fires within the Park, except for management purposes.

6.2 Exotic Animal Species Management

6.2.1 Summary

Feral animals recorded within the Park and the Reserve includes cats, dogs, buffaloes and pigs. They compete with native animals for food and destroy wildlife habitats. Domestic animals such as horses and pets can also adversely affect wildlife and are a nuisance in heavily used areas. Buffaloes and pigs have been largely excluded from the Nature Park by the boundary fence but occasionally animals enter the Park from the Hunting Reserve especially when the fences are damaged.

Cane toads are likely to establish themselves in the Park in greater numbers over the next 5 years. Control of this pest is desirable and may be possible in small areas by trapping however control of these pests in the wider Park area is probably impossible. The spread of the toad could be slowed by active trapping programs conducted in conjunction with surrounding landholders. The aim of feral animal strategies in the park is to eliminate dogs and pigs and prevent them from entering the park where possible.

6.2.2 Management Objective

1. To minimise the impact of exotic animals on the native plants, animals and natural environment of NT Parks.
2. To minimise the safety risk of visitors

6.2.3 Management Actions

1. Prepare a feral animal management plan based on a strategic approach to the control of exotic animals with attention being directed at:
 - the ecology and behaviour of feral animals;
 - assessment of the impact of exotic animals, and of a range of possible mitigation measures;
 - staff competencies and training requirements;
 - the interests of stakeholders;
 - consultation with surrounding landholders; and
 - safety of staff and Park visitors.
2. Maintain stock proof fencing along appropriate boundaries of the Nature Park.
3. Investigate the options to control cane toads in and around the waterhole and picnic area by trapping.

6.3 Weed Management

6.3.1 Summary

Approximately 19 weed species have been recorded in the Nature Park (Table 2) including *Hyptis suaveolens*, *Stachytarpheta spp*, *Sida acuta* and *Sida cordifolia*. Exotic trees were planted to provide shade near the waterhole and in the picnic areas in the Park. These trees are source of weeds in the surrounding bushland.

Table 2: Weeds in Howard Springs Nature Park

Family	Scientific Name	Common Name	Weed Mgt Act class
AGAVACEAE	<i>Sansevieria trifasciata</i>	Mother in laws tongue	
ANACARDIACEAE	<i>Mangifera indica</i>	Mango	
ARECACEAE	<i>Cryotis mitis</i>	Fishtail Palms	
	<i>Alocasia macrorhiza</i>	Elephant Ear Fern	
	<i>Cocos nucifera</i>	Coconut Palm	
CAESALPINIACEAE	<i>Senna alata</i>	Caddle Bush	B
	<i>Senna obtusifolia</i>	Sicklepod	
	<i>Senna occidentalis</i>	Coffee Senna	
	<i>Delonix regia</i>	Poinciana	
FABACEAE	<i>Crotalaria goreensis</i>	Gambia Pea / Rattlepod	
LAMIACEAE	<i>Hyptis suaveolens</i>	Hyptis, Horehound	B
MALVACEAE	<i>Sida acuta</i>	Spinyhead Sida	B
	<i>Sida cordifolia</i>	Flannel Weed	B
	<i>Hibiscus sabdariffa</i>	Rosella	
POACEAE	<i>Pennisetum polystachion</i>	Mission Grass	B
	<i>Pennisetum pedicellatum</i>	Annual Mission Grass	B
	<i>Andropogon gayanus</i>	Gamba Grass	
RUBIACEAE	<i>Mitracarpus hirtus</i>	Berrimah Grass	
VERBENAEAE	<i>Stachytarpheta cayennensis</i>	Snakeweed	B

Weeds are generally located around visitor sites and along walk tracks, fire breaks and service roads. They may also be spread by native and feral animals as they move through the park. With increasing development next to the park there is a corresponding increase in the risk of exotic plants entering the Park.

The weed management program aims to identify weeds particularly those classified under the *Northern Territory Weed Management Act* and prioritise management activities to control and/or eradicate these where possible and required. The weed management strategies also aim to minimise the spread of weeds throughout the Park although they may be hard to locate and treat when they occur away from main visitor use sites and are spread by native and feral animals.

Weeds such as *Mimosa pigra* are identified as a priority weed. This noxious weed is found just outside the boundary of the Park and poses a potential threat to the wetlands within the Nature Park. This weed species is likely to enter the park from upstream locations or through movement of feral animals such as pigs. The Parks and Wildlife Service work cooperatively with surrounding landholders to control this, and other weeds on areas outside of the Park.

6.3.2 Management Objectives

1. To minimise the impact of weeds on the native plants, animals and natural the environment of Nature Park.
2. To minimise the impact of weeds on the recreational use of the Nature Park.

6.3.3 Management Actions

1. Prepare a weed management plan based on a strategic approach that gives attention to the following:
 - criteria for assessing priority such as threat to rare or sensitive habitats, aesthetic and recreational impacts, status under legislation and probability of long-term success;
 - assessment of the impact of weeds, and of a range of possible mitigation measures;
 - monitoring and maintenance of identified priority weed-free areas;
 - control options best suited to different species and conditions, including burning, slashing, physical removal and chemical and biological control;
 - the ecology and life cycle of target weed species;
 - education and cooperation of neighbours and visitors in minimising the risk of weed spread;
 - minimising the risk of seed spread during and after control activities; and
 - staff training and safety standards.
2. Control all declared weeds in accordance with the *Weeds Management Act*.
3. Identify and eradicate new exotic species found within the Park.

4. Progressively remove and/or replace exotic species except where they are essential for soil stabilisation.
5. Where possible, maintain the main visitor use areas free of weeds, particularly picnic areas.
6. In association with the Weeds Management Unit (DNRETA), the spread of *Mimosa*, *Typha* and *Salvinia molesta* within and around the Park, will be carefully monitored, and any outbreaks controlled.

7 PARK ADMINISTRATION

7.1 General Administration

7.1.1 Summary

The Park is managed by the Darwin Park District staff based at Howard Springs. The rangers based in the Howard Springs Nature Park office are also responsible for management of the Shoal Bay Coastal Reserve, Tree Point Conservation Area, Howard Springs Hunting Reserve and Charles Darwin National Park.

The ranger station consists of one room adjacent to the kiosk and has limited working space and privacy. Some interpretive material, and visitor information is offered by a number of signs in the covered veranda outside the office and brochures are available outside the office. Additional working space for park staff and visitor information areas are required. It is important, however, that the office should remain close to the main visitor use area.

Overall management of the Nature Park is guided by a legislative and policy framework. A number of standard operating procedures have been developed to ensure that the legislation and policies are implemented appropriately and in accordance with relevant legislation. For proper management of the Park, and the safety of persons and property, it is essential that by-laws and regulations are in place and properly enforced.

7.1.2 Management Objectives

1. To provide responsible management and appropriate and efficient administration of the Nature Park.
2. To maximise the safety of visitors.

4. Progressively remove and/or replace exotic species except where they are essential for soil stabilisation.
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7.1.2 Management Objectives

1. To provide responsible management and appropriate and efficient administration of the Nature Park.
2. To maximise the safety of visitors.

7.1.3 Management Actions

1. Document and implement Emergency Response Procedures in accordance with the Service's standard operating procedures.
2. Install visitor information, including signs and interpretation material to inform visitors of potential safety hazards and appropriate precautions.
3. Enforce the provisions of the *Territory Parks and Wildlife Conservation Act*, including its By-laws and regulations, and other legislation where applicable.
4. Manage the Park in accordance with approved policies and standard operating procedures to ensure the safety of staff and visitors.

7.2 Stakeholder Engagement

7.2.1 Summary

Ultimate responsibility for management of the Park rests with the Parks and Wildlife Service however there are a number of stakeholders with interests in the management of the Park. The largest of these is the users of the Park.

Community involvement covers a broad spectrum of activities. It can include passive involvement, which may include "keeping an eye out" for untoward activities within the Park and reporting activities to the Service or other authorities. At the other end of the spectrum individuals can become involved in organized management programs such as weed control and vegetation management.

The involvement of the local community in management of the Park provides benefits for both the community and the Service. Some benefits include increased community support, additional resources, and opportunities for individuals and groups to serve the community and increased knowledge and skills. Whilst many Park users will not become involved in management programs they will want to remain informed about management of the Park. There is a need to engage all stakeholders if the Service wishes to maintain support.

Aboriginal people have registered interest in the Park and surrounding area by lodging land claims and native title claims. Aboriginal people are also custodians of sacred sites and sites of significance and may have knowledge of the natural values of the area. The presence of shell middens on areas outside the Park suggests that the area was an important resource for

Aboriginal people. From this perspective it is important to involve and consult with Aboriginal people especially in regards to the management of Aboriginal heritage sites.

7.2.2 Management Objectives

1. To ensure adequate and appropriate consultation and representation of stakeholders interests in the management of the Nature Park.
2. To foster the involvement of stakeholders in relevant areas of park management and establish effective mechanisms for consultation with the key stakeholders.

7.2.3 Management Actions

1. Develop a strategy for the involvement of the local community in the management of the Park. The Strategy will provide details of community based projects and volunteering activity priorities and actions under Park management programs.
2. Liaise with and involve relevant government agencies in management of the Park and its values.
3. Regularly liaise with neighbours to facilitate cooperative management for the control of fire, stock and feral animals, weeds, soil conservation, fences, aspects of Aboriginal interest, visitor access and tourism development.
4. Release site development plans and other development proposals for public comment and exhibition.
5. Encourage and facilitate participation of relevant Aboriginal people and/or their representative organisations in management of Park values.

8 PROGRAMS

Some of the more specific actions for the management of the Nature Park have been regrouped and presented below as programs. The systematic implementation of these programs will result in the provision of a range of opportunities in the Park for public recreation and enjoyment, as well as the protection of natural resources.

Priorities are assigned as follows:

High (H) Imperative to achieve the Plan's stated objectives;

Medium (M) Very important to achieve the Plan's stated objectives but subject to the availability of resources;

Low (L) Desirable, but will be undertaken only if the necessary resources are available or other conditions stated in the guidelines are fulfilled.

Ongoing (O) These are long term ongoing management actions that will occur over the life of the Plan of Management

Management of the Park's Natural and Cultural Values

Implement the Park zoning scheme	H, O
Maintain rock wall around spring	H
Develop a formal walking track from the waterhole to the spring and install directional and information signs and viewing deck	M
Liaise closely with NT Government officers responsible for water allocation planning	H
Investigate connecting park residences, office and drinking water supplies to town water mains.	M
Identify areas susceptible to soil erosion rehabilitate areas of active soil erosion	H, O
Investigate the need to install sediment and pollutant traps and / or retention basin	M
Close and rehabilitate vehicle tracks	L, O

Implement Water Quality Management and Monitoring Program	O, H
Install water safety signs and interpretation signs	H
Monitor the groundwater bore	O, M
Encourage study of the Nature Park's water plants and aquatic ecosystems	L
Regularly monitor the Park waterhole for crocodiles	O, H
Manage and protect sites of Aboriginal or other cultural significance	H
Conduct assessment of Aboriginal heritage	M
Conduct a heritage assessment of the weir	L

Management for Visitor Use

Prepare and implement a site development plan	M
Investigate the need to regulate fish feeding activities	L
Monitor visitor use	H, O
Extend opening hours of Park	M
Prepare an Interpretive Plan	L

Key Natural Resource Management Programs

Prepare a Fire Management Program for the Park	H, O
Prepare a Feral Animal Management plan	H
Maintain stock proof fencing along appropriate boundaries	H
Investigate the options to control cane toads	M
Prepare a Weed Management Plan	H
Progressively remove and/or replace exotic tree species	O, M

Park Administration

Investigate use of contractors for general maintenance activities	L
Document Emergency Response Procedures	H
Install visitor safety information signs	M
Enforce the provisions of the <i>Territory Parks and Wildlife Conservation Act</i> ,	O, H
Develop a Community Involvement Strategy	M
Liaise with neighbours to facilitate cooperative management	O, H

9 SELECTED REFERENCES

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