

DAMPIER ARCHIPELAGO ISLAND NATURE RESERVES AND SECTION 5(g) RESERVES MANAGEMENT PLAN

ISSUES PAPER

INTRODUCTION

The Department of Conservation and Land Management, on behalf of the Conservation Commission of Western Australia, is in the process of preparing a management plan for the island nature reserves and section 5(g) reserves of the Dampier Archipelago. The management plan will determine how these reserves are managed over the next 10 years, or until another plan is prepared.

Both the Commission and the Department are committed to providing opportunities for public participation in the conservation of Western Australia's biodiversity. Involving the public in management planning is one way in which this is done. A draft management plan is usually prepared following consultation with key stakeholders, which may include public meetings, discussions with specific interest groups, liaison with local and state government agencies, or invitations for written submissions. The draft management plan is then released for a minimum two-month period, during which time members of the public can submit their comments on the draft. Submissions to the draft plan are considered in preparing the final management plan, which is then implemented following approval by the Minister for Environment.

This paper highlights some of the main management issues of the Dampier Archipelago, and has been prepared to inform and assist public participation in the management planning process. The Department welcomes constructive, creative and innovative suggestions on ways in which it can address these issues or any others that have direct relevance to this reserve.

Brief Overview

There are 42 islands, islets and rocks off the coast of Dampier, Western Australia, ranging in size from less than 2ha to 3290ha. Twenty-five are contained within four nature reserves, gazetted for the purpose of conservation of flora and fauna. It is these islands only that are covered by the current management plan, *Dampier Archipelago Nature Reserves Management Plan 1990-2000*.

The review of the current management plan will also include the Dampier Archipelago islands reserved under section 5(g) of the *Conservation and Land Management Act 1984* (gazetted for conservation and recreation) (see table 1). The incorporation of these islands in one planning process will facilitate efficient use of resources and ensure integrated management.

The area adjoins a significant and sensitive marine environment. The surrounding waters are the subject of an indicative management plan for the proposed Dampier Archipelago/Cape Preston Marine Conservation Reserve, currently in production.

The current management plan recommended that the purpose of the Dampier Archipelago nature reserves be altered to national park in recognition of their potential recreational use, whilst protecting their important conservation values. Such a change in vesting has not yet occurred and will be addressed in the management plan review.

Key Values

The key values of the Dampier Archipelago include:

- ❖ its rich diversity and complexity of terrestrial and marine communities and habitats representative of Western Australia's north-west offshore islands;
- ❖ significant breeding grounds and refuge sites for a variety of land, sea and shore bird species;
- ❖ important habitat and breeding sites for five of the six species of marine turtle occurring in Western Australia;
- ❖ plant communities representative of the area's natural vegetation associations;
- ❖ cultural significance to both indigenous and non-indigenous people and location of Indigenous and non-indigenous heritage sites; and
- ❖ terrestrial and marine environment that offers varied recreational and educational opportunities and experiences in close proximity to the mainland.

MANAGING THE NATURAL ENVIRONMENT

Native Plants and Plant Communities

The planning area supports a diverse assemblage of vegetation and flora. Although sparsely vegetated, nearly 300 species of native terrestrial plants and several vegetation associations are known from the islands. Due to the area's rugged terrain and relative inaccessibility, these vegetation associations are important for their relatively undisturbed state, which to some extent reflects the vegetation of the adjacent mainland prior to pastoral and industrial activities.

Native Animals and Habitats

The planning area displays rich and diverse terrestrial and marine communities and habitats. It provides important refuge for threatened and specially protected species such as the Pilbara olive python (*Morelia olivacea barroni*) and supports several species and communities of conservation significance. In particular, the islands' sandplain areas warrant special protection as they support the most diverse flora and fauna, and have been shown to be critical in the continued survival of the Rothschilds rock-wallaby (*Petrogale rothschildi*) on Enderby and Rosemary Islands. Rothschilds rock-wallaby, a species restricted to the Pilbara region, is also found on Dolphin and West Lewis Islands. The populations of Rothschilds rock-wallaby in the planning area are monitored by the Department.

Of the six species of marine turtle occurring in Western Australia, five are recorded in the planning area: the green (*Chelonia mydas*), loggerhead (*Caretta caretta*), flatback (*Natator depressus*), leatherback (*Dermochelys coriacea*) and hawksbill turtles (*Eretmochelys imbricata*). Rosemary, Legendre and Delambre Islands provide suitable nesting beaches for four of these species of marine turtle. An inventory of turtle use of the Archipelago is currently in progress and long-term tagging studies of the turtles in the Archipelago are ongoing.

The planning area includes significant breeding grounds and refuge sites for a variety of bird species. Specifically, the islands provide breeding sites for at least 14 species of sea and shore bird and some of the numerous land bird species known in the planning area also use the islands to nest. Some islands are

internationally important as feeding and resting sites for migratory birds protected under the Japan Australia Migratory Bird Agreement and the China Australia Migratory Bird Agreement.

Environmental Weeds

Several environmental weed species are known from isolated sections in the planning area. Islands subjected to the greatest disturbances (eg. shack leases) generally have correspondingly high concentrations of weeds. Notable environmental weed species include buffel grass (*Cenchrus ciliaris*), kapok bush (*Aerva javanica*) and prickly pear (*Opuntia stricta*).

Monitoring of prickly pear has been carried out on East and West Lewis Islands. The eradication of prickly pear from these islands is expected to be completed by the end of 2002.

There is a need for the area to be surveyed to determine the extent and distribution of introduced plants and allow the prioritisation of weed control. This is particularly urgent in 'at risk' habitat types (ie. sandplain), which would be mapped first.

Problem Animals

The planning area is monitored for the presence of foxes on an ongoing basis and regular fox control with 1080 poison bait is undertaken as an integral part of the Department's Western Shield Program. Baiting is carried out annually on Dolphin, Angel and Gidley Islands, with consideration currently being given to increasing baiting to twice a year on Dolphin Island. No specific baiting of feral cats is undertaken, but should be considered.

Fire

Fires in the Archipelago are generally infrequent. In the event of a wildfire, direct suppression is attempted where possible. As recommended in the current management plan, a no planned burn policy for the islands has been implemented. It is recommended that a burn plan be developed for the larger islands. The status of firebreaks in the planning area will be assessed as part of the suggested burn plan.

MANAGING OUR CULTURAL HERITAGE

Indigenous Heritage/Indigenous Involvement In Management

The planning area's Aboriginal heritage is diverse and internationally significant, comprising shell and stone tool scatters and middens, stone arrangements, grinding patches, burials, sites of spiritual and cultural significance.

There are currently three native title claims over the planning area.

State Government policy provides for an increased level of Aboriginal involvement in nature conservation and land management than has previously occurred. Specifically, consultation and liaison with Aboriginal people regarding management of conservation reserves is to be strengthened. The management planning process for the Dampier Archipelago islands will seek to establish formal processes for Aboriginal consultation and interaction in management and management planning.

MANAGING RECREATION AND TOURISM

Visitor Access

The North West Coastal Highway is a major route for industrial and private transport connecting the Dampier region with Perth and Port Hedland. There are no sealed roads on the islands of the Archipelago. However, the Nor-West Game Fishing Club is permitted to use approved tracks on Rosemary Island, within the club's lease area. Further consideration is required regarding appropriate access on and around the islands for management purposes, such as access to islands for oil spills, feral control work, fire and installation of essential structures.

Appropriate access to the nature reserves was designated through the implementation of a zoning scheme, as recommended by the current management plan. This scheme zoned for various degrees of public access, including 'Special Conservation Zone' (no public access at any time), 'Conservation Zone' (some passive recreation and daylight access only) and 'Recreation Zone' (daytrips and camping permitted). These zones will be reviewed as part of the planning process.

Recreational Use and Opportunities

The planning area's terrestrial and marine environment offers varied and valued recreational opportunities in close proximity to the local community. Popular activities in the area include recreational fishing, diving, surface water-sports and wildlife viewing.

There is extensive recreational use of the waters of the Archipelago by local people from the nearby towns of Dampier, Karratha, Wickham, Point Samson and Roebourne. Appropriate access for recreation on the island nature reserves is allocated using a zoning scheme detailed in the current management plan.

Within the Dampier Archipelago, the Department licences 33 shacks to the Dampier Archipelago Recreational Dwellers Association Inc. These shacks are situated in islands of the Archipelago reserved under section 5(g) of the CALM Act. A further two shacks are licensed by the Department, one to the King Bay Game Fishing Club and the other to an individual. The Nor-West Game Fishing Club has a shack on Rosemary Island, which is on a lease issued by the Department of Land Administration.

Tourism and Commercial Operations

The islands are under continued pressure to be developed for commercial interests. They currently provide a land base for commercial activity, including aquaculture and tourism. The Department of Fisheries is the licensing authority for aquaculture and other marine-based harvesting activities. There is currently one area on West Lewis Island used as a land base for aquaculture in the Archipelago. The use of this facility is managed through a licence issued under the CALM Act. A similar licence on Dolphin Island has recently expired, and the associated structure is in the process of being removed from the island.

According to the Marine Parks and Reserves Selection Working Group (1994), of all the islands on the Pilbara coast, those of the Dampier Archipelago have the greatest potential for tourism. In particular, the area has undoubted ecotourism attraction, formed in part by its significant nature conservation values. Careful management is required to ensure these values are not adversely affected by inappropriate tourism and recreation.

Although over fifty commercial activity licenses are issued for the Dampier Archipelago, it is estimated that only four to five operators currently utilise the islands on a regular basis. These operators mainly focus on fishing, but also access the islands for day and overnight trips. A number of other operators may occasionally access the area. There is ongoing interest in the establishment of visitor accommodation in the Archipelago. Any proposed development in the area must balance the protection of the environment, and other potential uses, to obtain the best long-term benefit.

Tourism infrastructure is not permitted in a nature reserve, but may be considered in a national park. If the land were national park, any proposed development would need to be approved via a management plan or public advertising as a compatible operation. If approved, it would be advertised seeking expressions of interest. Should the purpose of the islands be changed to national park it would permit the assessment of the suitability of compatible visitor facilities/nature based operations on those islands that are currently nature reserves as well as those whose purpose is conservation and recreation.

MANAGING SUSTAINABLE RESOURCE USE

Mining

Dampier is a major exporting base for the State's minerals, oil and gas, while salt production is a major industry in the Dampier area. While there are no petroleum prospects on the Archipelago, the area contains extensive deposits of limestone and limesand which represent potential lime resources for a variety of industrial uses (DRD 2001). These lime resources were assessed as a potential supply sector in *Towards a State Lime Strategy - Draft for stakeholder comment* (DRD 2001).

There are currently no mining tenements, exploration licences nor prospecting licences in the planning area.

INVOLVING THE COMMUNITY

Community involvement is an integral component off the Department's operations. The community, as individuals or groups, is encouraged to be involved in both the planning and management.

The planning area provides a valuable opportunity for community education about island ecosystems. The Department currently facilitates the education of visitors through the provision of information and interpretive material. An information shelter is located at the Dampier boat ramp and provides relevant material about the islands, including the current access zoning scheme. Material is also available to visitors at the local Department offices in the form of brochures, bird lists and turtle watching notes. Departmental staff provide further information to the public and media regarding such topics as island management, turtle watching and feral animal control, and also present talks to school groups and community groups on a variety of topics.

REFERENCES

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Table 1.

Islands of the Dampier Archipelago vested in the Conservation Commission of Western Australia and managed by the Department of Conservation and Land Management

RESERVE NUMBER	TENURE	ISLAND NAME/S
34944	Nature Reserve	Dolphin Island
36913	Nature Reserve	Angel Island
		Bare Rock
		Brigadier Island
		Collier Rocks
		Conzinc Island
		Delambre Island
		Eaglehawk Island
		Elphick Nob
		Egret Island
		Gidley Island
		Goodwyn Island
		Hauy Island
		Keast Island
		Kendrew Island
		Lady Nora Island
		Malus Island (part)
		Mawby Island
		Millers Rocks
Nelson Rocks		
Tozer Island		
Wilcox Island		
36915	Nature Reserve	Enderby Island
39202	Nature Reserve	Cohen Island
		Rosemary Island
36907	5(g) Reserve	East Lewis Island
36909	5(g) Reserve	West Lewis Island
36910	5(g) Reserve	Malus Island (part)