# Department of Fisheries and Wildlife 108 Adelaide Terrace PERTH

\_\_OUTLINE FOR DRAFT MANAGEMENT PLAN

HERMITE ISLAND

BY

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### I INTRODUCTION

Hermite Island (939 ha) is the largest island in the Monte Bellos, a group of over 100 islands situated off the Pilbara coast of Western Australia. This outline for a draft management plan has been prepared in anticipation of Hermite Island being declared a Reserve for the Conservation of Flora and Fauna, vested wholly or jointly in the Western Australian Wildlife Authority. It is proposed that all other islands in the Monte Bellos will become a National Park with vesting wholly or jointly in the National Parks Authority of Western Australia. This plan, as amended, will become the scheme of operations for the Reserve and if approved by the Minister for Fisheries and Wildlife will become the working plan for the Reserve.

#### II DESCRIPTION

The flora and fauna of Hermite Island have already been described in Departmental Report No. 9 (Burbidge 1971) which should be read in conjunction with this Draft Plan.

Briefly, Hermite Island is a very irregularly shaped, low limestone island, with an extensive shallow cover of loose sand. The dominant vegetation is hummock grass of *Triodia pungens* and *T. wiseana* with a few shrubs and soft grasses on deeper soils.

Hermite Island once contained populations of two species of indigenous marsupial, the Spectacled Hare-wallaby (Lagorchestes conspicillatus) and Golden Bandicoot (Isoodon auratus). The former became extinct sometime between 1912 and 1950 and the latter disappeared just prior to 1912. Water Rats (Hydromys chrysogaster) still frequent the mangroves and beaches. Two species of exotic mammal have become established - the cat (Felis catus) and the Black Rat (Rattus rattus).

Nineteen species of land birds and 26 species of sea and shore birds have been recorded from the Monte Bellos, including Hermite Island. Two notable land birds have become extinct - the Black-and-white Wren (Malurus leucopterus) and the Spinifex-bird (Eremiornis carteri).

Reptiles are plentiful and 21 species have been recorded from the Archipelago. A notable species is the legless lizard Aprasia rostrata which is believed to be restricted to Hermite Island.

## III LAND TENURE AND PAST USAGE

Hermite Island is vacant Crown land under the Lact Act 1933. Since 1957, following the use of the area for Atomic Weapons Research in 1952 and 1956, the islands and their surrounds have been controlled by the Commonwealth Government under the Defense (Special Undertakings) Act 1952. No nuclear devices were exploded on Hermite Island but the island was used as an operations base and the ruins of various structures remain.

A recent report of the Australian Ionizing Radiation Advisory Council (Cooper and Hartley 1979) stated that external radiation exposure levels on Hermite Island are not significantly above background levels and that occupation of, or visitation to, the island does not constitute a health hazard.

Hermite Island is included in Petroleum Tenement EP62, held by West Australian Petroleum Pty. Ltd. (WAPET).

#### IV MANAGEMENT OBJECTIVES

The objectives of management of the proposed Hermite Island Nature Reserve are:

- (a) To protect the natural environment from disturbance which would reduce its value to nature conservation.
- (b) To reintroduce mammal species which formerly inhabited the island.
- (c) To eradicate or control exotic animals.
- (d) To allow scientific study of the island ecosystem.
- (e) To liaise with the National Parks Authority and other relevant organisations concerning the management of the Monte Bellos as a whole.

#### V MANAGEMENT

During the currency of this plan the Department of Fisheries and Wildlife will, in liaison with relevant authorities, carry out cat control measures and reintroduce Spectacled Harewallabies and Golden Bandicoots from populations on Barrow

I land Nature Reserve. Control of the Black Rat will be undertaken if populations build up.

The Reserve will not be classified under Section 12A of the Wildlife Conservation Act. Use of and access to the Nature Reserve will be controlled by application of Wildlife Conservation Regulations 42 to 46. These regulations prohibit camping, the taking of flora and fauna, the lighting of fires and disturbing the environment in any way unless a permit is held. Thus, the normal regulations applying to all Nature Reserves will apply to Hermite Island.

Because of the location of the area only irregular visits by Departmental staff will be possible. Close liaison will be maintained with the National Parks Authority and WAPET concerning patrols and the reporting of possible breaches of the law.

Further research into cat distribution and into methods of control will be needed before control measures are instituted.

#### VI TERM

Unless superseded the term of this Management Plan shall be ten years.

#### REFERENCES

- Burbidge, A.A. 1971. The fauna and flora of the Monte Bello Islands. Dept. Fish. Fauna. West. Aust. Report No. 9.
- Cooper, M.B. and Hartley, B.M. 1979. Residual radioactive contamination of the Monte Bello Islands from Nuclear Weapons Tests conducted in 1952 and 1956. Australian Atomic Energy Commission.