

MANAGEMENT PROPOSALS FOR THE

MONTE BELLO ISLANDS

WESTERN AUSTRALIA

JUNE, 1982.

1. INTRODUCTION

The Monte Bello Islands comprise a group of over one hundred islands off the Pilbara coast of Western Australia, located between 20° 22' and 20° 32' south and between 115° 31' and 115° 36' east.

All but one of the islands are vacant State Crown land under the Land Act 1933, with the exception of two small portions leased to the Commonwealth for lighthouse purposes.

However, the islands are currently under the control of the Commonwealth by virtue of being a prohibited area under the Defence (Special Undertakings) Act, 1952 because the area was used for British nuclear tests in 1952 and 1956.

The Commonwealth has indicated that it will revoke the declaration as a prohibited area and return control to the State if it is assured that the State will appropriately manage the Islands.

This document presents the State's management proposals for the Monte Bello Islands. It is the result of close consultation and co-operation between relevant State and Commonwealth officials.

2. COMMONWEALTH REQUIREMENTS

The main concern of the Commonwealth in the management of the Islands arises from its need to exercise a duty of care toward the public against injury being incurred as a result of residual radioactivity on the Islands. In particular, the concern relates to the opportunities for visitors to expose themselves to danger, real or imagined, as a result of misuse or lengthy occupation of former nuclear test sites.

Therefore the Commonwealth has indicated its interest in the following :

- 2.1 details of the State's proposals to manage access to and occupation of the Islands;
- 2.2 proposals affecting the type and amount of human activity in the vicinity of former test sites;
- 2.3 regular monitoring of the condition and effectiveness of warning signs;
- 2.4 monitoring of remaining radioactivity;

and proposed that :

- 2.5 from a radiological safety viewpoint, it would be preferable for both Alpha and Trimouille Islands to be classified as "Wilderness Areas" to preclude permanent occupation of the immediate surroundings of the nuclear explosions on Alpha and Trimouille Islands, and onshore near where the explosion on HMS Plym was detonated. Provision of a buffer between former test sites and areas of human activity, such as would be created by their declaration as "Wilderness Areas," should be an objective of future management plans; and

- 2.6 Adequate provision be made in management plans to allow exploration, extraction and/or processing activities for hydrocarbons on Hermite Island to avoid any conflict from siting hydrocarbon facilities near former nuclear test sites on Alpha and Trimouille Islands. These two islands with Hermite Island are the largest in the Monte Bello group.

3. THE PROPOSAL FOR RESERVATION

In 1975, the Environmental Protection Authority (EPA) recommended to the State Government that :

- 3.1 Hermite Island be made a Class A reserve for the purpose of Conservation of Flora and Fauna, vested in the Western Australian Wildlife Authority, the Reserve to extend to low water mark;
- 3.2 the remainder of the Monte Bello Islands be made a Class A Reserve for the purpose of Recreation and the Conservation of Flora and Fauna, vested in the National Parks Authority, with power to lease, the Reserve to extend to low water mark.

To this, the EPA added a rider that where a proposed reserve was covered by an existing mining or petroleum tenement, then proclamation of the reserve status should await expiry of the tenement licence.

These recommendations were endorsed by State Cabinet on 9 February, 1976.

The State therefore, will reserve the Islands under the Land Act 1933 with the class, purposes and vestings contained in 3.1 and 3.2 (above) and at the same time proclaim the Islands Crown lands under the Petroleum Act, 1967, to allow the petroleum potential to be assessed.

In addition, Reserve 13517 (Campbell Island), "C" class, unvested for water for the Pearling Industry will be cancelled and Campbell Island will be included in the National Park.

4. THE PROPOSAL FOR RADIATION MONITORING

The Public Health Department through the Radiological Council and the State X-Ray Laboratory will undertake regular monitoring of both warning signs and radioactivity.

This would be on a biennial basis and the first visit commenced in 1981.

The programme of monitoring will include :

- 4.1 External γ monitoring of known areas of contamination;
- 4.2 Progressive survey of other areas where low level contamination is known to have occurred.

- 4.3 Collection of a limited number of soil and terrestrial and marine biota near contaminated areas to check for radionuclides.
- 4.4 Visual inspection of all signs and repair when necessary and possible.

It is anticipated that such a programme would take 3 - 4 days including travel time from Dampier and would be conducted by scientists from the State X-Ray Laboratory. Some assistance may be required from time to time from the Australian Radiation Laboratory in the assessment of samples.

Transport to the Islands may be arranged through the Navy or through Customs and Excise Department or by private contract.

The results of the monitoring will be sent to the Commonwealth.

5. THE PROPOSAL FOR LAND MANAGEMENT OF THE ISLANDS

It is proposed that Hermite Island to low water mark be vested in the Western Australian Wildlife Authority for Conservation of Flora and Fauna and the remainder of the Islands to low water mark, be vested in the National Parks Authority for Recreation and the Conservation of Flora and Fauna. Therefore there are some differences between management strategies for Hermite Island and the remainder of the Monte Bello group.

It must be accepted that many difficulties exist with management of the Islands because of their remoteness and limitations to both personnel and funding of the managing authorities. Anything less than constant monitoring of the islands could not guarantee complete control of human access. Current data indicate that, provided there is no prolonged occupation of radio-active locations, the risk to human health is low. Under these circumstances, with authorisation being required for all visits by relevant State authorities under the management provisions in paragraphs 5.1 and 5.2 and Appendices A and B, it is considered that unauthorised entry is of no more concern than it is at present.

5.1 Hermite Island

Specific management proposals for Hermite Island are given in Appendix A which is a Draft Management Plan prepared by the Department of Fisheries and Wildlife. The usual procedure adopted by the Western Australian Wildlife Authority in relation to management plans for Nature Reserves, after the Reserve has been created, is to release the Draft Management Plan for public comment and submissions, revise as necessary then submit to the Hon. Minister for Fisheries and Wildlife for approval.

Hermite Island will be declared Crown land under the Petroleum Act, 1967 simultaneously with reservation under the Land Act, 1933. The Draft Management Plan should not be seen as excluding petroleum exploration or the possible use of the Island as a potential site for hydrocarbon extraction installations, or at some stage either as an intermediary installation for piping gas or oil to the mainland or as an exploration base.

5.1 (Cont'd)

Conditions under which such activities could take place will be defined in the usual manner of consultation between the Under Secretary for Mines and the Western Australian Wildlife Authority.

5.2 Remainder of the Monte Bello Islands

Specific management proposals for the remainder of the Monte Bello Islands are given in Appendix B which is a Working Plan prepared by the National Parks Authority. The usual procedure adopted by the National Parks Authority in relation to a Working Plan for National Parks after reservation has been effected and the Working Plan, endorsed by the Authority, is to submit it to the Hon. Minister for Conservation and the Environment for approval.

The proposed National Park will also be declared Crown land under the Petroleum Act, 1967 and the Working Plan should not be seen as excluding petroleum exploration or the possible use of any island as a potential site for hydrocarbon extraction installations or at some stage either as an intermediary installation for piping gas or oil to the mainland or ^{as} an exploration base.

Conditions under which such activities could take place will be defined in the usual manner of consultation between the Under Secretary for Mines and the National Parks Authority.

6. THE PROPOSAL FOR MANAGEMENT OF MARINE WATERS AROUND THE ISLANDS

6.1 The Marine Reserve

It is proposed to declare a Reserve under the Fisheries Act 1905 (as amended) vested in the Minister for Fisheries and Wildlife with boundaries to be defined by the Minister.

The reserve would include the main areas of immediate fallout products from the Alpha and Trimouille Islands' explosions, and contain the remains of HMS Plym.

The declaration of this Reserve would not be seen as either inhibiting or excluding petroleum exploration and/or extraction. Conditions under which such activities could take place will be defined through consultation between the concerned State bodies.

The Management objectives of the Reserve will include the protection of various forms of marine life and the preclusion of all fishing and diving activities in the vicinity of areas of immediate fallout products from the Alpha and Trimouille Islands' explosions and the remains of HMS Plym.

6.2 Commercial Pearling Operations

A commercial pearling industry proposal by Morgan and Company Pty Ltd has been received by the State. The Company proposes to continue to artificially culture pearls on rafts anchored in Faraday Channel, between Hermite, and North and South Delta Islands. A licence under the Pearling Act 1912 - 1965 was granted to the Company on 25 November, 1980 by the Minister for Fisheries and Wildlife. The Department of Fisheries and Wildlife was unaware that the marine waters surrounding the islands still required Commonwealth approval for entry. Subsequently the Naval Officer Commanding West Australian Area gave interim conditional approval to the operation subject to :

- a. the State Government giving an assurance that it will manage the Islands such as to satisfy Commonwealth requirements (see paragraph 2);
- b. Commercial operations do not jeopardise the future management of the Islands as a National Park, Wildlife Reserve and Marine Reserve;
- c. the present commercial activities are not expanded.

The Company wishes to expand its operations and conduct experiments into pearl shell cultivation in an old tidal pond originally constructed in 1904 by a now non-existent company.

The State proposes to allow the Company to continue its operation within the current lease area under the conditions of the existing licence.

However, no approvals will be given for expansion before the National Park, Wildlife Reserve and Marine Reserve are declared.

In addition, the following matters require resolution before any additional approvals are granted :

- a. determination of the compatibility of expanded operations with the Reserves and their management;

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6.2 (Cont'd)

- b. the future of the hut constructed by the Company on Hermite Island;
- c. assessment of the impact of the small lagoon proposed for culture of pearl sprats on the Reserves.

7. CONCLUSION

With the management provisions detailed in this paper, the State considers that all the Commonwealth's concerns regarding its duty of care towards the Monte Bello Islands are satisfied and that control should be returned to Western Australia.

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DRAFT MANAGEMENT PLAN

HERMITE ISLAND

by

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1982

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1 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 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.

11 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.

* It is noted that Hermite Island will also be simultaneously declared Crown land under the Petroleum Act, 1967.

Hermite Island is vacant Crown land under the Land 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 Defence (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 was included in Petroleum Tenement EP 62, held by West Australian Petroleum Pty. Ltd. (WAPET) which expired in September, 1981. Two of the eight blocks comprising the licence have been renewed until September, 1986 as EPR 62. The remaining six blocks within which the Monte Bello group lies, have been held in abeyance pending resolution of the future management of the Islands.

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 Hare-wallabies and Golden Bandicoots from populations on Barrow Island Nature Reserve. Control of the Black Rat will be undertaken if populations build up.

It is intended to classify the Reserve as a Prohibited Area under Section 12A of the Wildlife Conservation Act. Such a classification would permit access only by special approval of the Western Australian Wildlife Authority.

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. & 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.

M O N T E B E L L O I S L A N D S

W O R K I N G P L A N

NATIONAL PARKS AUTHORITY

1982

MONTE BELLO . ISLANDS

WORKING PLAN

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MONTE BELLO ISLANDS

WORKING PLAN

INTRODUCTION

This working plan has been prepared by the National Parks Authority in anticipation of the Monte Bello Islands (except Hermite Island) being vested in the National Parks Authority of Western Australia.

Proposals in this document that relate to planning, use and control of the islands refer to the entire island group excluding Hermite Island, except where specified otherwise. It has been anticipated that Hermite Island will be vested in the Western Australian Wildlife Authority and managed by the Department of Fisheries and Wildlife (see Section 2.3).

1. LOCATION

- 1.1 The Monte Bello Islands are a group of over 100 islands ranging in size from small rocky outcrops to 950 ha (Hermite Island). Trimouille Island (500 ha) is the second largest island. Some 15 islands are of significant size. The remainder are very small.
- 1.2 The islands are located between 20° 22' south and 20° 32' south and between 115° 31' east and 115° 36' east. That is about 20 km north of Barrow Island and 125 km east of Dampier (the nearest town). The nearest mainland is at Cape Preston some 80 km to the south-east. Onslow is about 135 km to the south-west.

2. TENURE AND CONTROL

- 2.1 The islands and their surrounding territorial sea have been controlled by the Commonwealth Government under the Defence (Special Undertakings) Act 1952 since 1957. Three experimental nuclear devices were detonated in the area during the 1950s, one explosion was aboard an obsolete ship - HMS Plym.
- 2.2 The Western Australian Government is negotiating with the Commonwealth Government for the return of administrative control to the State.
- 2.3 The Environmental Protection Authority has recommended (Conservation Reserves for Western Australia; Systems 4, 8, 9, 10, 11, 12) that :
- 2.3.1 "Hermite Island be made a Class A reserve for the purpose of the Conservation of Flora and Fauna, vested in the Western Australian Wildlife Authority, the reserve to extend to low water mark." (Recommendation 8.2.1).
- 2.3.2 "The remainder of the Monte Bello Islands be made a Class A reserve for the purpose of Recreation and the Conservation of Flora and Fauna, vested in the National Parks Board, with power to lease, the reserve to extend to low water mark." (Recommendation 8.2.2).

Both recommendations received endorsement by State Cabinet on 9 February, 1976.

- 2.4 The islands were encompassed by Petroleum Tenement licence EP 62, held by Western Australian Petroleum Pty. Ltd. (W.A.P.E.T). The licence expired in September, 1981. Two of the eight blocks comprising the licence have been renewed until September, 1986 as

EPR 62. The remaining six blocks within which the Monte Bello group lies have been held in abeyance pending resolution of the future management of the Islands.

- 2.5 Parts of the island group vested with the National Parks Authority can be leased for oil exploration and treatment facilities or harbour developments, as the need might arise.
- 2.6 For the purpose of rational management of the islands and of the enclosed sea, it is proposed to establish a marine reserve with boundaries to be determined by the Hon Minister for Fisheries and Wildlife.
- 2.7 Zoning of areas within the proposed Marine Reserve shall define an area about the wreck of HMS Plym off Trimouille Island, where all fishing and diving activities will be precluded.
- 2.8 An appropriate area to be defined by the Commonwealth Government about each on-shore atomic explosion site shall be retained freehold by the Commonwealth Government, or alternatively be leased by that Government from the National Parks Authority, for a period not less than 21 years, with the option to renegotiate the leaseholding should circumstances warrant or the lease expire.

Moreover, the control of public access into these defined areas shall be the prerogative of the Commonwealth Government.

- 2.9 By virtue of the remoteness of the islands and because atomic research has been undertaken in places, public access to the islands vested with the National Parks Authority will be allowed only by first obtaining a permit of Authority to Enter, in accordance with National Parks Authority Regulation 5. The Permit will be provided on application to the Director of National Parks, National Parks Authority, Hackett Drive, Nedlands,

2.9 (Cont'd)

or the office of the Northern Regional Superintendent of National Parks, State Government Office Block, Welcome Road, Karratha.

3. HISTORY AND USE TO DATE

3.1 The English ship Tryall was wrecked off the islands in 1622. The wreck has been located and studied by the Western Australian Museum. The islands were named in honour of Jean Lannes, Duc de Montebello by the French Baudin expedition in 1801. They were visited by King in 1818 and Stokes in 1840.

3.2 In 1952 the British Atomic Weapons Research Establishment exploded a nuclear device on board an obsolete naval ship, HMS Plym, anchored off main beach, Trimouille Island.

In 1955 the same establishment exploded two nuclear devices mounted on towers on Trimouille and Alpha Islands respectively.

3.3 Levels of radiation at various points on the islands have been surveyed several times since the tests were carried out. The report of the Australian Ionizing Radiation Advisory Council on the findings of the last survey (undertaken jointly by the Australian Radiation Laboratory and the State Department of Public Health in October, 1978) concluded that "it is difficult to imagine that a casual visitor could now come to any harm."

3.4 The report recommended that :

3.4.1 Considerations of radiological safety do not preclude return of the Monte Bello Islands to the administrative control of the Western Australian Government, nor the designation as a National Park. If there are no other reasons to the contrary the islands should be so returned."
(Recommendation 1.)

- 3.4.2 Durable markers and appropriate signboards be erected at relevant sites. Suggested wording and appropriate locations are given in the report. (Recommendations 2, 3 and 4).
- 3.4.3 No fences are necessary. (Recommendation 5).
- 3.4.4 As far as practical, residual structures and debris should be removed. (Recommendation 6).
- 3.5 In accordance with Recommendation 6 (Section 2.4.4 above), Australian Armed Forces Personnel buried residual structures in May, 1979. Warning signs were erected in eight languages
- 3.6 Automatic lighthouses are established on North-West Island and Trimouille Island. They are maintained by the (Commonwealth) Department of Transport.
- 3.7 The islands are visited fairly regularly by fishermen and boating enthusiasts for recreational purposes, but future access will need to be by permit, except at times when shelter is necessary. Most visitors are thought to come from Dampier and Onslow. From time to time professional fishermen find storm shelter among the islands. They may go ashore. When cyclones threaten the area, the Stevenson Passage is used as a safe anchorage for boats servicing the oil field on Barrow Island.
- 3.8 There is a shack on Ah Chong Island. It is reputedly seldom used.
- 3.9 Navigation among the islands is difficult and dangerous because of numerous submerged reefs.

4. RESOURCES AND ATTRACTIONS

4.1 Climate. The nearest meteorological station is on Barrow Island from where records are available from 1965.

4.1.1 The islands are in an area of low unreliable rainfall. The average rainfall is probably 250 to 300 mm per annum but very wide variations can be expected from year to year. Rain mostly results from cyclones and occasional thunderstorms and mostly falls between November and April.

4.1.2 Temperatures on Barrow Island are somewhat milder than on the adjacent mainland. The Monte Vellos can be expected to be similar. Thus summer maximums can be expected to be between 32°C and 40°C. Winter minimums probably rarely fall below 13°C.

4.2 Geology. The geology of the islands has been described in Smith, 1965. (Monte Bello Geological Reconnaissance. Unpublished report, W.A. Petroleum Pty. Ltd.)

4.2.1 The islands are composed of Pleistocene Coastal Limestones formed by the consolidation of calcareous sands. The limestone is typically buff or red coloured, highly calcareous, ferruginous and cross bedded.

4.2.2 The islands tend to be low lying, the highest relief points not exceeding 40 m. These topographic heights are travertinised dunes.

4.2.3 On some islands the ground consists of loose sandy soil derived from the limestone with consolidated dunes and sandhills inland. Examples are Trimouille and North-West Islands.

- 4.2.4 On others the ground is rocky with outcrops and hills of limestone and few areas of sandy soil. Examples are Hermite and Alpha Islands. The very small islands are mostly rocky outcrops.
- 4.2.5 There is no standing fresh water on the islands.
- 4.3 Flora. The flora of the islands is described in Hill, F. L., 1955 (Notes on the Natural History of the Monte Bello Islands. Proc. Zool. Soc. Lond. 165 (2) : 113 - 124) and in Burbidge, A. A., 1971 (The Fauna and Flora of the Monte Bello Islands. Report No. 9, Department of Fisheries and Fauna, Western Australia.)
- 4.3.1 Five major habitats are recognised. These are :
crevices in rocks; sandy beaches; sand dunes;
inland areas and mangrove swamps.
- 4.3.2 Mangroves are common on rocky shores and in sheltered bays. They are scarce on sandy areas. Thus they are common on Hermite Island and scarce on Trimouille Island.
- The vegetation on inland areas varies with soil types. On sandy islands such as Trimouille tussock grasses are dominant with a few shrubs scattered throughout. On rocky Hermite Island, hummock grasslands are usual with shrubs occurring in valleys.
- 4.4 Fauna. Burbidge, 1971, (opp cit.) gives an account of the vertebrate fauna and summarises earlier surveys.
- 4.4.1 Two indigenous mammals are known to be extant, a bat and the water rat (Hydromys chrysogaster). The Spectacled Hare Wallaby (Lagorchestes conspicillatus) had become extinct by 1950. It was known from Hermite Island. Records from Trimouille probably refer to Hermite Island.

- 4.4.2 The Golden Bandicoot (Isoodon auratus) was on Hermite Island. It probably became extinct shortly before 1912. Feral cats and introduced Black Rats occur on a number of islands.
- 4.4.3 Nineteen species of land birds and twenty-six species of sea or shore birds have been recorded from the islands. There are differences between the birds recorded on the Monte Bello Islands and Barrow Island. Two species appear to have become extinct on the Monte Bello Islands in recent times. The islands are not used extensively as sea bird breeding areas.
- 4.4.4 Reptiles. Twenty-one species representing eight families of reptiles have been recorded from the islands, and a number of marine reptiles (Turtles and Sea Snakes) have been recorded in the adjacent seas. Turtles reputedly breed on some beaches. There are interesting differences in the reptile fauna between islands within the Monte Bello group and between the group and the adjacent but much larger Barrow Island.
- 4.4.5 Invertebrates. Burbidge does not discuss invertebrates but lists ten papers published between 1914 and 1955 which give accounts of invertebrates of the Monte Bello Islands.
- 4.5 The islands are particularly attractive to keen naturalists and as a base for marine recreation.
- 4.6 The marine activities that attract visitors include boating, fishing, diving and shelling. Boating at present is largely restricted to the use of boats as a means of transport to and from the mainland and between locations within the group. The waters around the islands are regarded as excellent for a wide range of fish and shellfish as well as for diving and shelling.

5. OBJECTIVES OF MANAGEMENT

5.1 The basic objectives of National Parks Management are :

- 5.1.1 protect the scenery, flora and fauna of National Parks from disfigurement, damage and destruction;
- 5.1.2 provide facilities for enjoyment in appropriate ways of the natural resources of National Parks by the public; and
- 5.1.3 to permit the natural environment to be maintained by nature and where necessary apply ecological management to correct the unnatural influences of man.

5.2 The objectives for development of the Monte Bello Islands as National Park would be :

- 5.2.1 to encourage the use of appropriate camping areas and discourage the use of inappropriate camping areas;
- 5.2.2 where the level of use warrants, to provide basic facilities for the maintenance of sanitary conditions at appropriate camping areas;
- 5.2.3 to educate the public in the responsible use of the islands so as to minimise human impact on the environment by park visitors;
- 5.2.4 to provide information to park visitors so that they can better understand and enjoy the natural resources in an appropriate way.

5.3 Specific management procedures would :

- 5.3.1 prohibit the importation of domestic animals to the islands;

- 5.3.2 examine means of eradicating the two exotic mammals, the cat and the black rat;
 - 5.3.3 survey the pattern and level of use and determine from environmental and practical viewpoints, which are appropriate for use. Information gained would be used to implement Sections 5.2.1, and 5.2.2;
 - 5.3.4 undertake further environmental studies, particularly on the requirements of species that may be rare or endangered on the islands and on the use of the islands as breeding sites for marine birds and reptiles. Information gained would be used in the implementation of Section 5.1.1, 5.2.3 and 5.2.4. It would also be relevant to the implementation of Section 5.3.3
- 5.4 Close liaison will be maintained with the Department of Fisheries and Wildlife so that planning and management of the islands to be vested in the Authority complements management procedures determined by that Department for Hermite Island.

6. APPROPRIATE PUBLIC USE

- 6.1 Appropriate activities in National Parks are those which are inspired by and derive their enjoyment from the natural character and resources of the park. Such activities must be consistent with the protection of the natural resources. (Management Policies, National Parks Authority of Western Australia, 1977.)
- 6.2 Appropriate activities on the Monte Bello Islands include camping and non-consumptive recreational activities such as nature study, walking and photography. It is also appropriate for visitors deriving their primary source of interest from the marine environment

- 6.3 Permanent structures such as cabins should not be permitted on the islands.
- 6.4 In view of the limited attractions of the islands themselves it can be anticipated that the use of the islands will be largely restricted to camping near the shores adjacent to suitable anchorages.

7. BLOCKS AND CLASSIFICATION

- 7.1 It is not necessary to divide the groups into management blocks. Management procedures and other control activities should be planned and implemented on an island by island basis.

- 7.2 Those islands on which no facilities areas are developed should be classified as Wilderness Areas.

Those islands on which facilities areas are developed should be classified as Natural Areas.

Those areas where facilities are developed should be classified as Facilities Areas.

8. STAFF AND CONTROL

- 8.1 In view of the lack of fresh water the risks of tropical cyclones, the low and intermittent visitation by members of the public, the establishment of a permanent Ranger would be exceedingly costly, difficult and, at this stage, unwarranted.

- 8.2 If some islands are vested in the National Parks Authority, surveys to determine the requirements for and (if needed) appropriate locations for facilities areas should be undertaken by Professional Staff of the Authority. Any subsequent work that is necessary can be undertaken by Mobile Rangers. The islands are within the area of responsibility of the Regional Superintendent Northern Region who would be responsible for implementing control and development programmes.

- 8.3 Liaison should be maintained with the Department of Fisheries and Wildlife with a view to maximising co-operation in technical and logistical aspects of the control of the islands. .
- 8.4 Liaison should be established with the management of W.A.P.E.T. who operate the Barrow Island oil field with a view to seeking logistical support for control of the Monte Bello Islands.
- 8.5 Liaison should also be sought with any exploration company who may, from time to time be engaged in mineral (especially oil) exploration on the Monte Bello Islands with a view to minimising any environmental impacts the projects may have on the islands and co-operation in controlling and managing the islands while exploration and possible subsequent extraction operations are undertaken.
- 8.6 The Commonwealth Department of Transport (which operates Automatic Lights on North-West and Trimouille Islands) should also be approached so that co-operation between that Department and the Authority is established.
- 8.7 Ongoing consultations will need to be held with various Commonwealth Departments in regard to controlling access to the atomic explosion sites, and to facilitate the Commonwealth's responsibility in regard to its "Duty of Care" to ensure full radiological protection for visitors.

9. SPECIAL CONSIDERATIONS

- 9.1 There are five special considerations which may influence the eventual management of the islands. These have been incorporated in to the plan but are worth reiterating as they may require modifications to the plan :

- 9.1.1 Residual radioactivity from the detonation of nuclear devices will continue to be monitored, and appropriate warning signs will be maintained as long as is necessary in liaison with the Public Health Department
- 9.1.2 The islands' harsh environment and remoteness preclude permanent and even regular temporary establishment of Ranger Staff. Visits by Authority Staff will necessarily be intermittent and brief. Plans for development should take this fully into account;
- 9.1.3 In view of the petroleum potential of the area oil exploration and associated activities can be expected. The islands are to be proclaimed Crown land under the Petroleum Act and co-operation with other instrumentalities and companies who may have interests on the islands is essential;
- 9.1.4 If Hermite Island is vested in the Western Australian Wildlife Authority to be managed by the Department of Fisheries and Wildlife, the National Parks Authority should maintain close liaison with that Department so as to maximise co-operation in the technical and logistical aspects of management of the islands.
- 9.1.5 This management plan should remain as far as possible flexible, so that procedures and practices can be modified in the light of management experience.