INTERIM GUIDELINES FOR OPERATIONS SERRURIER ISLAND NATURE RESERVE

JULY 1990

Compiled by G.A. Oliver

CONTENTS

	CONTINUE
1.0	DESCRIPTION
1.2 1.3 1.4 1.5	LOCATION AND TENURE TOPOGRAPHY, SOILS AND CLIMATE FLORA AND FAUNA CONSERVATION SIGNIFICANCE PAST HISTORY EXISTING USE
2.0	GENERAL MANAGEMENT OBJECTIVES
3.0	FIRE PROTECTION
3.3	INTRODUCTION FIRE PROTECTION OBJECTIVES FIRE PROTECTION STRATEGIES FIRE PROTECTION ACTIONS
4.0	INTRODUCED PLANTS AND ANIMALS
4.2	INTRODUCTION MANAGEMENT OBJECTIVES POLICIES AND STRATEGIES ACTIONS FOR CONTROL
5.0	RECREATION MANAGEMENT
5.3 5.3	INTRODUCTION MANAGEMENT OBJECTIVES POLICIES AND STRATEGIES ACTIONS
6.0	PROTECTION OF ARCHAEOLOGICAL AND HISTORIC SITES
6.2	INTRODUCTION MANAGEMENT OBJECTIVES POLICIES AND STRATEGIES

APPENDICES

- 1. SERRURIER ISLAND VEGETATION LIST
- 2. SERRURIER ISLAND FAUNA LIST
- 3. CAMPING ADVERTISEMENTS SERRURIER ISLAND
- 4. WORKS PROGRAMME 1990/91
- 5. WORKS PROGRAMME 1991/92
- 6. CONDITIONS OF USE FOR SURVEY STATIONS IN THE DAMPIER ARCHIPELAGO WOODSIDE

LIST OF FIGURES

FIGURE 1. HABITAT DISTRIBUTION SERRURIER ISLAND

FIGURE 2. SERRURIER ISLAND BIRD NESTING LOCALITIES

FIGURE 3. SERRURIER ISLAND VEGETATION UNITS

1.0 DESCRIPTION

1.1 LOCATION AND TENURE

Serrurier Island is situated 42.4km west of Onslow and 67.5km north east of Exmouth. The nearest point on the mainland is Locker Point, 19km to the south.

The Island extends south south-east for 5.1km between latitudes 21° 35 20 and 21° 37 48 S and covers an area of 350.9ha. It is 1.2km across at its widest point and 150m at its narrowest point. The island rises to a high point of 20m on the northern end.

Serrurier Island is a C class Nature Reserve, number 33834, vested in the N.P.N.C.A. for the purpose of conservation of flora and fauna.

The reserve was created on the 23.3.76 following the Environmental Protection Authority's recommendation that the island became an A class reserve for the purpose of conservation of flora and fauna and that it be vested in the WA Wildlife Authority. At the time of vesting current mineral leases precluded the granting of A class status.

Two standard survey marks are located on Serrurier Island – MM/f/649 on the northern end and NM/f/650 on the southern end. Both were established in 1972. No special tenure exists for these survey marks.

Serrurier island lies within petroleum exploration permit TP/6 operated by BHP Petroleum Pty Ltd.

Currently no mineral leases exist on Serrurier Island.

A stratigraphic test well was drilled on Serrurier Island by WAPET in 1966 to a depth of 2158.3 m. The well proved dry and was plugged and abandoned. Its location at 21° 37′ 15 S and 114° 41′ 17 E (Figure 3) is on the narrowest part of the island and outside of the Wedgetailed Shearwater rookeries. Subsequent movement of dune sands and revegetation has masked most evidence of this operation.

Serrurier Island and the adjacent islands of Round, Flat Table and Bessieres have been recommended by the marine park working group to be incorporated into a marine park.

1.2 TOPOGRAPHY, SOILS AND CLIMATE

Serrurier Island lies on the Wandage Ridge (Van de Graaff at al, 1982), a section of the gently sloping Rowley Shelf. The majority of the island comprises light grey unconsolidated and poorly consolidated calcarenite (Van de Graaff et al, 1982). These sands are probably of

. . . 6

holocene age and are stabilized by the islands vegetation.

Consolidated calcarenite and calcirundite formed from coralgal reef deposits and shallow marine and minor aeolian sediments are present on the emerged shoreline of much of the island (Van de Graaff et al, 1982).

The island is surrounded by a vast limestone pavement supporting algal and coral communities (Figure 1) and is believed to be recently emerged < 10,000 years (T. Allen, personal communication).

The climate can be described as arid sub-tropical. It is characterised by hot summers and mild winters. Rainfall is influenced by northern systems of tropical origin, which produce rain mainly between January and March, and also by the southern systems which may bring lighter rains from May to July. Rainfall is sporadic and varies widely from year to year.

Nearest climatic figures are compiled at Onslow where the average rainfall is 267mm with 23 rain days. Average maximum temperature is 35.7 degrees Celsius in February and average minimum in 11.8 degrees in July (Climate Averages WA, 1975).

No fluvial patterns have developed on the Island.

1.3 FLORA AND FAUNA

Forty species of plants belonging to 17 families have been recorded on Serrurier Island (Appendix 1). One introduced plant, *Cenchrus ciliaris* is present on the island. No rare or endangered species have been recorded.

Seven vegetation units are present on Serrurier Island (Figure 3.) The dominant vegetation unit is Mixed Grassland with occasional Acacia coriacea and Rhagodia preissii.

Low shrublands occupy approximately 20% of the island's surface and are mostly open. The exception is an area of 20ha in the centre of the island on which Atriplex bunburyana has formed a closed shrubland. This area is highly favoured for nesting by Wedge-tailed Shearwaters.

The fore dune system which surrounds the entire island is dominated by Spinifex longifulius. Atriplex isatididae and Rhagodia preissii are occasional species in this area whilst Launea sarmentosa and Angianthus cunninghamii are very common on the lower margins of the fore dune.

The south western tip of Serrurier Island supports a Triodia pungens grassland. This species has not been recorded from any other location on the island.

Exiting fauna records comprise eight terrestrial reptiles, 37 bird species and one introduced mammal Felis catus. Skeletal material belonging to the False Killer Whale Pseudorca crassidens has been recorded on the island (Appendix 2).

The Osprey, White-breasted Sea-eagle, Beach Stone-curlew, Caspian Tern, Silver Gull, Wedge-tailed Shearwater and Richards Pipit are know to breed on Serrurier Island. The location of Wedge-tailed Shearwater and Osprey nesting areas are displayed in Figure 2.

1.4 CONSERVATION SIGNIFICANCE

The Wedge-tailed Shearwater occurs on the West coast of Australia from Bedout Island in the north to Geographe Bay in the south. The bulk of the birds however can be found along the rim of islands from the North-West Cape to Legendre Island in the Dampier Archipelago (Seventy and Whittel, 1976). Breeding colonies range from Carnac Island in the south to Sable Island in the Forestier Archipelago where the birds reach the north-eastern limit of their breeding range (Serventy and Whittel, 1976).

The major nesting site for the bird appears to be the Murion Islands where Long and Long (1989) estimate that a minimum number of 100,000 and perhaps as many as 500,000 birds take up occupancy annually.

Tingay (1985) estimated that Serrurier island supports a Wedge-tailed Shearwater nesting colony of some 6000 pairs. This corresponds to about 20% of the nesting population on the Rowley Shelf between Turbidgi Point and Cape Preston and makes Serrurier Island a significant breeding location for the Wedge-tailed Shearwater in Western Australia.

The island is an important nesting area for at least five other species of seabirds. Ospreys, in particular nest here in high density. Thirteen Osprey nests are present on the island and as many as ten of these have been recorded as active in one season (Morris, 1985).

Serrurier Island was recognised by the EPA (1975) to be an important turtle breeding site.

A count of overnight exit trails conducted by CALM on the morning of the 12th of February 1990 during a falling tide, realised 134 nesting attempts. A total count of all pairs of tracks present on the beaches of Serrurier Island at this same time realised 1400. These figures indicate that Serrurier Island supports one of the largest turtle rookeries in the Pilbara.

1.5 PAST HISTORY

No evidence of aboriginal occupation has been found on Serrurier Island by officers of CALM. The Department of Aboriginal sites W.A. Museum, has not however surveyed the island and the possibility remains that sites exist on the island.

WAPET drilled a stratigraphic well on the island in 1966. This well proved dry and was plugged and abandoned.

Mineral leases were previously present over the island however no exploratory mining ever occurred on these leases.

The island has been used as a base camp for commercial and recreational fishing and diving trips for many years. Its safe anchorages, clear water and proximity to excellent fishing and diving reefs make it a favoured location. Its wilderness value has also been used in advertising brochures to entice tourists to journey there (Appendix 3).

Applications for camping permits on the island have been sought from CALM by two tourist operators in the Onslow region. Both have been denied. Two proposals for tourist resorts on Serrurier Island have also come before the Under Secretary for Lands - one in 1967 and another in 1983. Neither proposals were approved.

Shelling is another activity which has occurred on Serrurier Island. R.F. Deer in a report to the Chief Warden of Fauna, following a visit to Serrurier Island in 1969, notes the presence of shell collectors whom had chartered a vessel from Onslow.

K.J. Marshall (1985) reported that Serrurier Island was regularly shelled each year. He reported that the main shell families sought were Conidae and Stromidae and that these were collected by diving.

1.6 EXISTING USE

The island continues to be used for camping, primarily as a land base for fishing, shelling and diving activities in the surrounding waters. One commercial charter vessel now operates from Onslow, but larger vessels on charter from Perth have been observed at Serrurier Island and charter vessels from Exmouth are known to visit the island.

Existing survey marks on the island are used from time to time particularly by companies involved with exploration for oil and gas.

Western Mining Corporation maintain two quadrants on Serrurier Island which are used as control points for the

company's monitoring of Wedge-tailed Shearwater numbers on Airlie Island. The company's environmental consultants visit the island approximately four times a year.

2.0 GENERAL MANAGEMENT OBJECTIVES

To protect and conserve native flora and fauna and their habitats.

To protect and conserve physical, cultural and scenic resources.

To develop public awareness of the natural resources of the island and the need to provide for their protection.

To provide for the proper recreational and educational use of the island.

3.0 FIRE PROTECTION

3.1 INTRODUCTION

Wildfires from lightning strikes and camp-fire escapes are a likely event on Serrurier Island.

As no natural firebreaks are present a fire could be expected to burn out a large proportion of the island.

Frequent fires would contribute to degradation of native vegetation and soil erosion.

The Department's ability to suppress a fire on Serrurier Island is severely limited. The minimum response time for personnel and equipment to arrive at the Island would be seven hours and this would be dependant on favourable weather conditions. Given even a moderate rate of spread, a fire would probably have completely burnt out the island before fire fighting equipment could be mobilized to site.

Presently there is no documentation on the fire history of Serrurier Island.

In light of the absence of information on the role of fire on the ecology of arid sub-tropical islands, a no-planned burn regime will be implemented.

3.2 FIRE PROTECTION OBJECTIVES

To protect the environmental and community values on the island from damage or destruction from wildfire.

To reduce the risk of fires starting on the island from human activities.

To promote public education and awareness of fire risks.

3.3 FIRE PROTECTION STRATEGIES

- Liaison.
- Visitor protection and safety.

3.4 FIRE PROTECTION ACTIONS

The fire prevention actions required to meet the objectives are:

LIAISON

The Dampier Port Authority and WAPET will be asked to pass on any information received in relation to fires on Serrurier Island.

VISITOR PROTECTION AND SAFETY

Open fires are not allowed on the reserves. Signs will be deployed to inform the public of this rule. Visitors may use portable stoves.

Public education and awareness of fire risks is promoted through CALM publications, information signs and through personal contact between the public and CALM regional staff.

4.0 INTRODUCED PLANTS AND ANIMALS

4.1 INTRODUCTION

Buffel grass (*Cenchrus ciliaris*) is widespread on Serrurier Island. The date and source of its introduction is unknown, however drilling (1966) and surveying (1972) activities may have been responsible.

A feral cat has been present on Serrurier Island since 1987. The animal is a large tabby and probably male. Evidence of predation on nesting silver gulls has been observed and predation on Wedge-tailed Shearwaters and island reptiles is highly likely. The cat evaded being shot on four occasions and two attempts at poisoning (4.5mg 1080 fresh baits). The cat is renowned for visiting camps on the island often in search of freshwater.

4.2 MANAGEMENT OBJECTIVES

To preserve the natural fauna and flora assemblages on the island.

To prevent the introduction of exotic flora and fauna.

To eradicate existing exotic fauna.

4.3 POLICIES AND STRATEGIES

Control techniques will conform with departmental policies and procedures.

4.4 ACTIONS FOR CONTROL

A control programme will be implemented if the presence of declared weeds is confirmed on the nature reserve. No action will be taken on buffel grass.

CALM camping and field gear will be thoroughly inspected and, where necessary cleaned with a high pressure air hose prior to transit. This will ensure that equipment is free of propagules and exotic fauna.

Where adequate notice of intent is provided to CALM by parties wishing to access survey marks then conditions of use will be set as for the Dampier Archipelago (see Appendix 6).

Strict quarantine procedures will be enforced on any commercial or industrial operations which may take place on the island.

Shooting, baiting and trapping attempts will continue on Serrurier Island in an effort to eradicate the resident cat.

5.0 RECREATION MANAGEMENT

5.1 INTRODUCTION

Both recreational and commercial camping have been occurring on the island for many years. M. Fox, skipper of the "Blue Surveyor", based at Onslow, conducts on average three overnight trips per year to Serrurier Island.

The groups generally comprise ten people who camp without tents or tarps on the island. Open fires fuelled by drift wood (and some transported wood) are used. Local residents from Onslow and Pannawonica are also reported to visit the island regularly.

Camping on Serrurier Island appears to be confined to beach areas on either side of the narrow isthmus.

The observable impact as a result of this camping appears minimal. Rubbish, particularly tin cans and bottles tend to accumulate around the camping areas and some loss of vegetation has been observed.

This camping is inconsistent with the function of a nature reserve but is difficult to police due to the island's distance from Karratha.

The greatest risks imposed by recreational activities on Serrurier Island include disruption to turtle and seabird nesting - particularly Wedge-tailed Shearwaters, wildfire, dune erosion and the introduction of exotic flora and fauna.

5.2 MANAGEMENT OBJECTIVES

To allow for public recreational use of Serrurier Island that does not diminish the values of the island.

5.3 POLICIES AND STRATEGIES

Recreational camping will be permitted for up to five nights in designated camping areas between May and September.

Camping fees will not be collected as the cost of collection will undoubtedly out-weigh the financial benefit to the department.

Commercial concessions may be granted to tour operators to camp on Serrurier Island for up to five nights at designated camp sites. The granting of concessions will conform with policy statement no. 18 section 1.2.

No facilities will be provided at these sites. It is not intended to encourage camping which could lead to degradation of the fragile coastal environment.

Access to Wedge-tailed Shearwater rookeries will be discouraged.

A third panel displaying "camping May-Sept only", and "no ground fire" decals, in additional to positive decals, will be added to the existing Serrurier Island nature reserve signs.

Three 600 x 400 vertical panel island boundary signs will be erected on Serrurier Island. These will delineate the WTS rookeries and ask the public to remain outside of these areas.

Form CLM149 and Form CLM154 will be forwarded to tourist operators who request permission to camp on Serrurier Island. Approval for commercial camping will take the form of written permission, will include a list of appropriate conditions and will not be given until forms CLM 149 and 154 are completed and returned. A charge of \$200 will apply.

CALM officers vested with the appropriate authority will visit the island to oversee visitor use, ensure tourist operators comply with conditions, monitor degradation and maintain signage.

6.0 PROTECTION OF ARCHAEOLOGICAL AND HISTORIC SITES

6.1 INTRODUCTION

No evidence of aboriginal occupation has been found on Serrurier Island by officers of CALM. The Department of Aboriginal Sites W.A. Museum, has not however surveyed the island and the possibility that sites exist on the island remains.

6.2 MANAGEMENT OBJECTIVES

To locate and protect any aboriginal sites on Serrurier Island and to comply with the aboriginal heritage act.

6.3 POLICIES AND STRATEGIES

If any evidence of aboriginal occupation is found by CALM officers they will record the information and forward an Aboriginal Site Recording Form to the Department of Aboriginal Sites, West Australian Museum.

CALM will inform the museum when visits are to take place to Serrurier Island and provide transport for interested museum representatives.

REFERENCES

A. & S.R. Tingay Pty Ltd., 1985. <u>Wedge-tailed Shearwater</u> (<u>Puffinus pacificus</u>) <u>Nesting Colonies in the Onslow</u> <u>Region of Western Australia</u>. Unpublished Report to Western Mining Corporation Ltd.

Department of Science and Consumer Affairs Bureau of Meteorology, 1975. <u>Climatic Averages Western Australia</u> (Metric Edition). Australian Government Publishing Service, Canberra.

Environmental Protection Authority, 1975. <u>Conservation</u>
Reserves for Western Australia as Recommended by the
Environmental Protection Authority 1975.

LeProvost, Seminiuk & Chalmer, 1989. West Australian Petroleum Pty Limited Exploration Permit TP/3 Part 1 Roller No. 1 Notice of Intent. A Report to West Australian Petroleum Pty Ltd.

Long, P.J & Long V.L., 1989. <u>Environmental Impact Study of a Proposed Seismic Survey of the Muiron Islands Western Australia</u>. A report to Lasmo Oil Company Australia Limited.

Marshall, K.J., 1985. <u>Shell Collecting Activities for Kimberley and Pilbara Regions</u>. Department of CALM Confidential Internal Report.

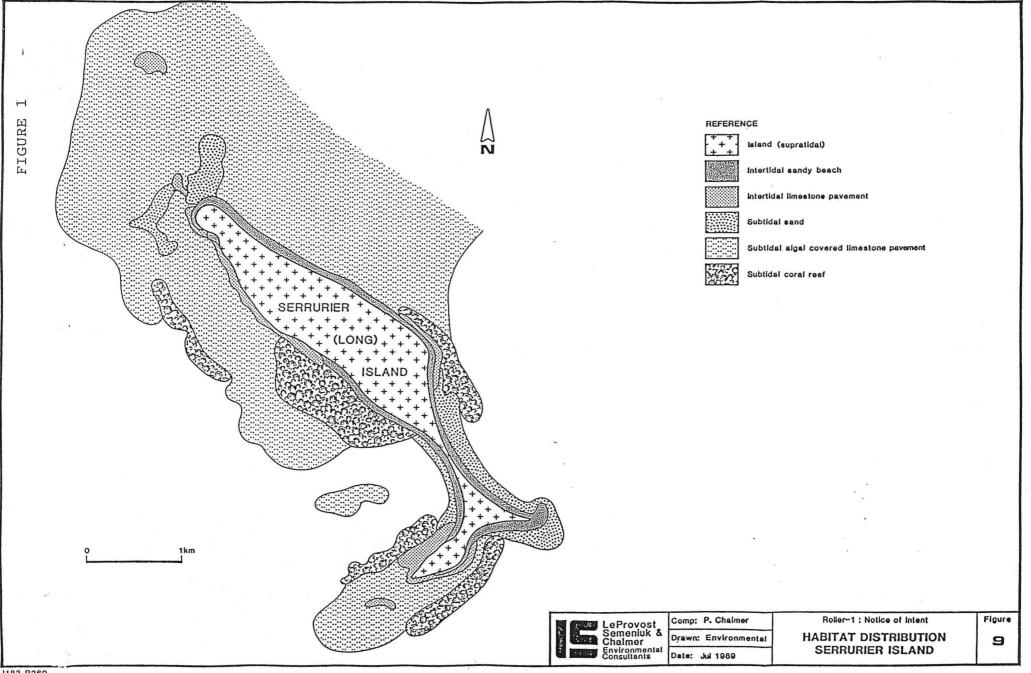
Morris, K.D., 1985. <u>Extracts from Serrurier Island Field Notebook</u>.

Pizzey, S., 1980. <u>A Field Guide to the Birds of Australia</u>. Williams, Collins Sons and Co. Ltd, Sydney.

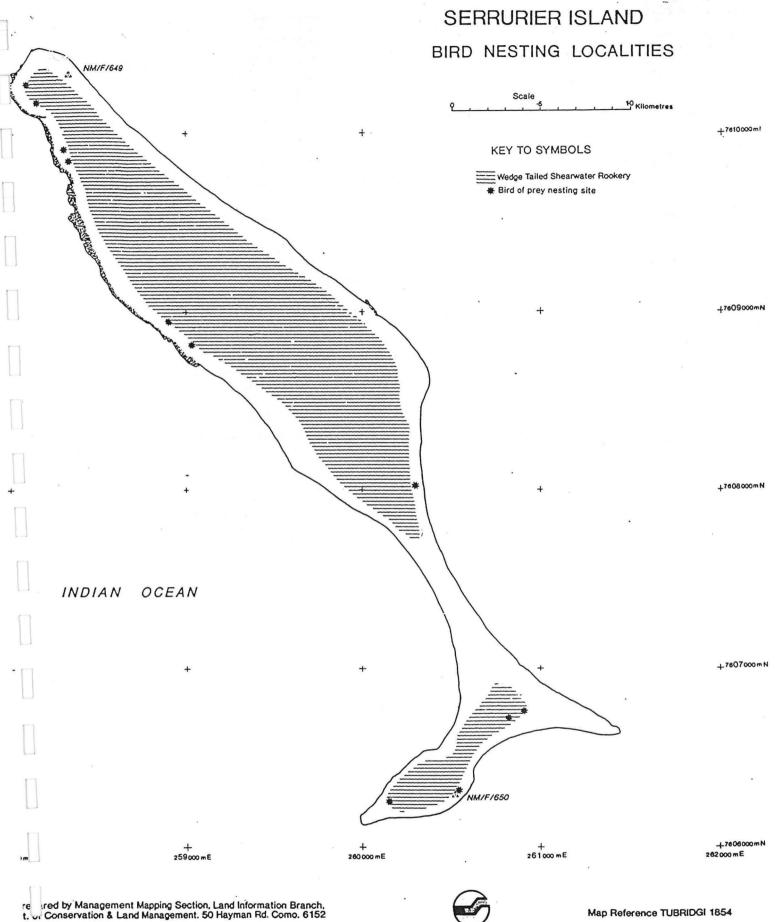
Serventy, D.L., & Whittell, H.M., 1976. <u>Birds of Western Australia</u>. University of Western Australia Press, Perth, W.A.

Van De Graaf, W.J.E., Denman, P.D., Hooking, R.M., 1982. 1:250,000 Geological Series - Explanatory Notes. Onslow, Western Australia.

Watson, L., 1981. Whales of the World. Hutchinson & Co. Ltd London.

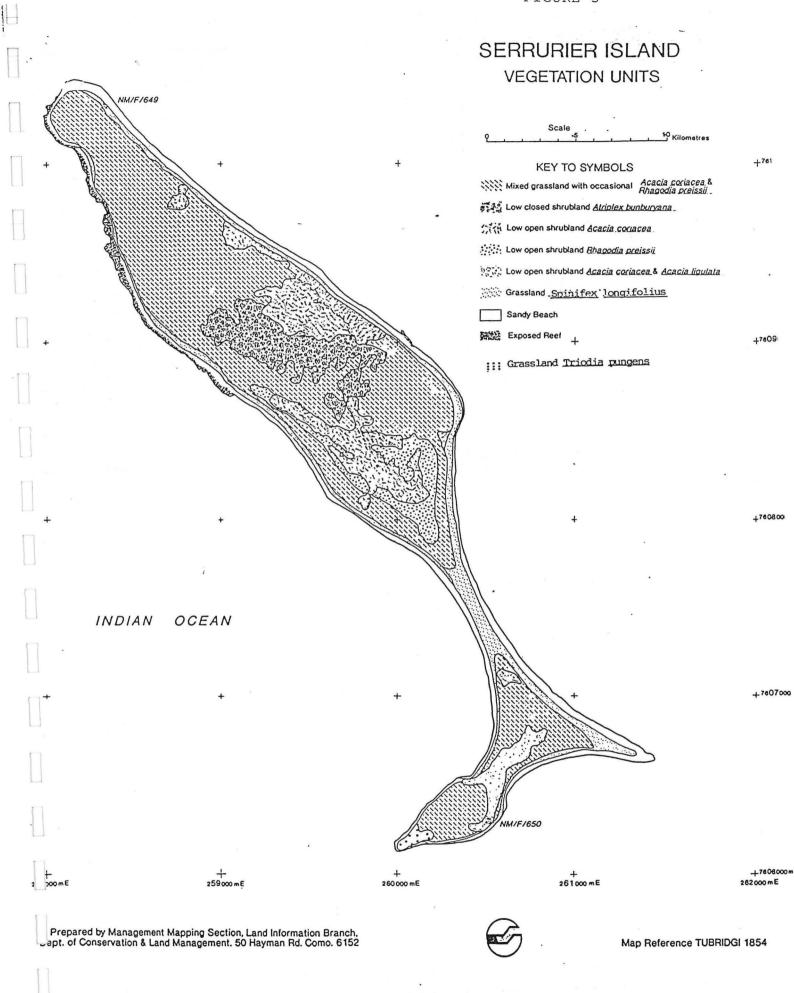


J183 R260





Map Reference TUBRIDGI 1854



APPENDIX 1

SERRURIER ISLAND VEGETATION LIST

POACEAE
Cenchrus ciliaris
Eragrostis elongata
Eulalia fulva
Setaria dielsii
Sporobulus virginiscus
Triodia pungens

CYPERACEAE Cyperus bulbosus

LILIACEAE Corynotheca flexuosissima

CHENOPODIACEAE
Atriplex bunburyana
A. isatidae
Rhagodia eremaea
R. preissii spp ovata
Salsola kali
Threlkeldia diffusa

AMARANTHACEAE Ptilotus villosiflorus

NYCTAGINACEAE Commicarpus australe Boerhavia schomburgkiana

AIZOACEAE Carpobrotus sp.

PORTULACACEAE Portulaca interrenea

MIMOSACEAE Acacia bivenosa A. coriacea A. ligulata A. sclerosperma

PAPILLIONACEAE Canavalia rosea Rhynchosia minima ZYGOPHYLLACEAE Tribulus occidentalis Zygophyllum aurantiacum

EUPHORBIACEAE
Euphorbia coghlani
E drummondii

E. drummondii
E. myrtoides

E. tannensis

MALVACEAE Sida fibularia

ASCLEPIDACEAE Sarcostemma australe

CONVOLVULACEAE Ipomea pes-caprae Cuscuta sp

GOODENIACEAE Scaevola crassifolia S. spinescens

ASTERACEAE
Angianthus cunninghamii
Flaveria austalasica
Launea sarmentosa
Senecio lautus

APPENDIX 2

SERRURIER ISLAND FAUNA LIST

REPTILES

<u>Chelonidae</u> Chelonia mydas

<u>Gekkonidae</u> Gehyra variegata Heteronotia binoei

<u>Agamidae</u> Gemmatophora gilberti

Scincidae
Ctenotus saxatilis
Lerista bipes
Morethia sp.
Spehenomorphus isolepis

BIRDS	Morris, AUG	'85 CALM	JUNE	' 89
<u>Procellariidae</u> Wedge-tailed Shearwater	*		*	
<u>Pelicanidae</u> Australian'Pelican	*		*	
<u>Phalacrocoracidae</u> Pied cormorant	*		*	
<u>Ardeidae</u> Eastern Reef Heron	*		*	
Pandionidae Australian Black Shoulde Australian Goshawk Brown Falcon Little Eagle	red Kite * * * *		*	
Nankeen Kestrel	*		*	
Osprey	*		*	
Spotted Harrier White-breasted Sea-eagle	*		*	
Phasianidae Brown Quail	*		*	
<u>Purhinidae</u> Beach Stone-curlew	*		*	
<u>Haematipididae</u> Pied Oystercatcher Sooty Oystercatcher	*		*	

BIRDS (continued)	Morris,AUG	′ 85	CALM	JUNE	' 89
<u>Charadriidae</u> Mongolian Sand-plover *					
Scolopacidae Grey-tailed Tattler Red-necked Stint Ruddy Turnstone Whimbrel	* * *			* * *	
Laridae Bridled Tern Caspian Tern Crested Tern Fairy Tern Lesser Crested Tern Roseate Tern Silver Gull Whiskered Tern	* * *			* * * * *	
<u>Columbidae</u> Bar-shouldered Dove	*			*	
<u>Cacatuidae</u> Little Corella	*			*	
<u>Cuculidae</u> Horsefield's Bronze Cuck	00 *				
<u>Hiruninidae</u> Tree Martin Welcome Swallow	*			*	
Motacillidae Richard's Pipit	*			*	
<u>Campephagidae</u> Black-faced Cuckoo-shrik	e *				
<u>Zosteropidae</u> Yellow White-eye	*			*	

MAMMALS

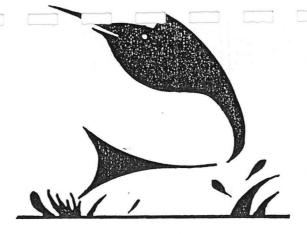
<u>Felidae</u> Feral cat (Felis catus) One cat has been present on the island since 1987.

False Killer Whale (Pseudorca crassidens) Identified from skeletal material.

About the Itinerary

7 NIGHT ALL INC. SEA-FARI

- **DAY 1** Arrive Onslow your accommodation is a fully equipped, air conditioned chalet and is available the morning you arrive.
- DAY 2 Depart at 8 a.m. for the islands aboard our own charter/fishing boat 'LYSANDER' and arrive at Long Island about midday where we will set up camp and then relax or fish and explore an island all to ourselves. (Please note the Lysander is at your disposal for the duration of your stay at the islands for fishing, diving, etc.)
- DAY 3 At Long Island, depart about 9 o'clock to explore the other islands and see how much fish we can really catch.
- DAY 4 Depart Long Island mid-afternoon for Onslow and your chalet at Tryal Lodge.
- DAY 5 After breakfast depart Onslow by Pilbara Action Tours air conditioned four wheel drive into the rugged West Pilbara where you will experience the remoteness and beauty of this land and the feeling that only yourselves exist. At the end of the day, just before sundown, make camp by a river pool or rugged rockhole.
- DAY 6 After breakfast we continue our journey into the Pilbara to find some ancient Aboriginal carvings and stop at a remote cattle station, and again just before sundown, make our camp.



- DAY 7 After a visit to one of the Pilbara iron ore mining towns, our journey's end is Onslow and your chalet at Tryal Lodge.
- DAY 8 Farewell, we trust you have enjoyed your holiday and hope to see you again. We know you will tell your friends about us.

FISHING CHARTERS

ONSLOW, WEST AUSTRALIA

Phone . . . (091) 84 6058

Introducing



FISHING CHARLES

ONSLOW, WEST AUSTRALIA

for fishing and fun in the Sun

Unique 8 DAY ALL INCLUSIVE SEA-FARI HOLIDAY

PHONE (091) 84 6058

APPENDTX 4

WORKS PROGRAMME 1990/91

- Erect third panel to existing nature reserve sign. (Completed).
- 2. Erect three 600 x 400 mm vertical panel island boundary signs. (Under contruction).
- Visit island twice annually. (The island was visited by CALM officers four times in 1990/91).
- 4. Liaise with tourist operators. (Awaiting NPNCA advise).
- 5. Collect unrecorded flora. (No new records obtained on subsequent visits).
- 6. Gather information on the turtle rookery. (Track counts have been conducted).
- Set pit traps and collect any new reptile records for the island. (Two new reptile records obtained).
- 8. Continue eradication attempts of the resident cat. (Unsuccessful).
- 9. Review past aerial photography of the island to ascertain fire history. (Not completed).

APPENDIX 5

WORKS PROGRAMME 1991/92

- 1. Erect island boundary signs.
- 2. Visit island at least twice.
- 3. Liaise with tourist operators.
- 4. Gather further information on the turtle rookery.
- 5. Continue cat eradication attempt.

APPENDIX 6

CONDITIONS OF USE FOR SURVEY STATIONS IN THE DAMPIER ARCHIPELAGO - WOODSIDE

- (a) Most of the sites have been in operation for some time and the facilities well established.
 CALM agrees these sites remain as positioned, and Woodside undertakes to conform to the "Conditions of Use".
 - (b) Prior to the establishment of new sites on CALM lands, joint CALM/Woodside Offshore Petroleum site inspection would be required. These would take into account:
 - rare, endangered or geographically restricted flora and an assessment of Aboriginal Sites, if any, in the immediate vicinity of the proposed facility;
 - b) the need for the proposed site to be suitable to meet the technical and safety requirements of Woodside;
 - c) seabird nesting sites; and
 - d) safety requirements (including helicopter landing sites).
- 2. (a) A minimum of 2 weeks notice to be given to CALM, whenever possible, prior to the activation of an existing site.
 - (b) Notice should include whether the site will be manned, an indication of how long the site will be in use and of the frequency of helicopter visits.
 - (c) Subsequent visits by Woodside Offshore Petroleum personnel to an activated site during the period of activation would not require notification.
 - (d) If the CALM Regional Manager believes the primary and/or secondary sites are located in areas known or thought likely to be adjacent to active sea-bird rookeries and nest sites, CALM and Woodside will review (including possible site inspection) to decide upon the most appropriate action and to ensure any disturbances are minimised. This may include moving the positioning facilities between the primary and secondary sites if technically possible or relocating the rookeries and nest sites.

If given notice well in excess of two weeks, CALM could include some pre-activation inspections in normal island inspections.

]	3.	Con	ditions of Use
		(a)	No pets shall be taken to the island.
		(b)	Visual checks will be made on all equipment prior to transportation to ensure that it is free of exotic plant propagules and animals.
		(c)	Disturbance to flora shall be kept to a minimum.
		(d)	Particular care shall be taken to avoid walking over Wedge-tailed Shearwater burrows and in other areas where sea-birds are nesting.
		(e)	All reasonable precautions shall be taken to minimise disturbance to any animal, its habitat, nesting or spawning ground.
		(f)	No firearms shall be taken to the island.
— П-		(g)	No rubbish shall be left on the island.
П		(h)	Compliance with Aboriginal Heritage Act 1972.
		(i)	Commensurate with flying and safety requirements applicable at the time, helicopter approaches shall be from the sector which will minimise disturbance to seabird rookeries and nest sites.
	4.		ting supplementary stations will be treated as existing primary sites, and new supplementary ons will be treated as under the Initial Site Selection conditions.
			These conditions have been prepared with specific reference to Woodside Offshore Petroleum be applicable to all such survey stations.
		*	
			No. of the Control of

Н