# POSSIBLE TOURIST USAGE OF BERNIER ISLAND.

AA.Birbidge Agenda Hem 301

# INTRODUCTION.

Bernier Island, which is of 4430 hectares, lies about 48 km to the west of Carnarvon and forms the north western boundary of Shark Bay. Together with Dorre Island it forms part of Reserve Number A 24869 set aside for the "Conservation of Fauna" and vested in the Western Australian Wild life Authority on December 6th 1957. Bernier Island was originally declared a reserve for native game under the Game Act in 1919. The islands are not included within any Shire District.

Bernier and Dorre Islands have long been recognised as outstanding areas for wildlife, both because of the unique species which occur there and because of their long history of association with explorers and scientists who have made records of the wildlife. The biology of the islands has been documented by Ride et al (1962). More recent work has extended the number of species of reptiles and birds known from the islands.

Over the years there have been a number of schemes put forward for the development of one or both of the islands for tourism. These have culminated in a series of requests from the Shire of Carnarvon for developments to be allowed on Bernier Island.

This report was commissioned by the West Australian Wild Life Authority in order to examine the ramifications of tourist development on Bernier Island.

#### IMPORMATION.

Considerable information is available on the biological value of the island. In order to obtain information on proposals for development I travelled to Carnarvon and met representatives of the Shire Council and the Carnarvon Tourist Bureau on 15.12.72. Information has also been obtained from the Western Australian Tourist Development Authority and from the Local Government Department.

#### THE PROPOSAL.

The Carnarvon Shire Council proposals revolve around the provision of an airstrip to enable fishing parties to visit the island without having to make a fairly long and often rough sea crossing. The council members emphasised that the provision of an airstrip would also be an important factor for safety in the area in case of boat accidents, etc.

The Council representatives said that apart from the airstrip the only developments needed at this stage would be tracks and a vehicle to take people to fishing spots. They envisaged that there would be a council employee to look after the island, take people to fishing spots and hire out small boats and out board motors. They agreed that the development should be at the north end of the island. Fishing trips would be on a one day basis, no provision of living quarters would be necessary.

Council representatives considered that the development should be allowed to proceed this far and then both parties could evaluate it before any decision was made to proceed further.

### DISCUSSION.

The consideration of the proposal to allow tourist development on Bernier Island revolves around a number of points.

- 1. Benefits to the State and to the Town of Carnaryon.
- 2. Benefits to Fauna Conservation.
- 3. Possible detrimental effects on the Fauna.
- 4. Costs to both the Shire of Carnarvon and the Department of Fisheries and Fauna.
- 1. Benefits to the State and the Town of Carmarvon.

The town of Carnarvon derives a considerable amount of revenue from tourism. Tourist attractions in or near the town at present include the Tracking Station, banana plantations, the prawning factory, Lake McLeod salt works, the Kennedy Ranges and, probably most of all, the pleasant winter climate. One thing which Carnarvon lacks is good swimming beaches and these can be found on Bernier Island, Another attraction in the area is the sport fishing but at the moment this is not well developed due to the lack of beaches or rocky headlands and the necessity of fishing from the town jetty or boats. More sport fishing is centred in the southern parts of Shark Bay at Denham. However, Carnarvon is more accessible than Denham because of better roads and air services. During last season two charter boats were available for fishing trips.

Trips to Bernier Island would probably be sold as a package including air fare to and from the island and transport and/or boat hire on the island. There are several air charter firms in Carnarvon which could benefit.

It seems likely that if an airstrip is put in it will also be used for other purposes if permitted. This would include use by:

- a) Nor-West Whaling Company and other Prawn Boat Operators for transporting spares, crews, etc. I understand that Nor-West would be prepared to contribute to the cost of a strip.
- b) General sightseeing and swimming parties.
- c) Naturalists wanting to see the animal life.

# 2. Benefits to Fauna Conservation.

Bernier and Dorre Islands comprise one of the most important Wildlife Sanctuaries in Australia and probably in the World. The provision of a ranger would be fairly high in the priorities of the Department of Fisheries and Fauna for extra staff. Bernier Island will continue to be used by fishermen and other visitors travelling by boat whether or not an airstrip is put in. Dorre Island has been declared a prohibited area under the Fauna Conservation Act but although the Department has a Warden stationed in Carnarvon this prohibition is difficult to police.

If a ranger was provided for Bernier Island his presence would improve the effective control of people visiting the island as well as providing more information on the island's wildlife. If this ranger was equipped with a boat he would be able to carry out the policing of Dorre Island as well.

It would probably be easier to control people visiting the island by aircraft than by boat because landing would be at one place only and checks for pets, firearms, etc could be the responsibility of the charter company. The provision of an airstrip and facilities would make biological study of the fauna of the island considerably easier. It would also make easier the control of the goats which occur there.

### 3. Possible Detrimental Effects on Fauna.

Island faunas appear to be very susceptable to interference and many cases of this have been documented. Some well known overseas examples are found in the Galapagos and Seychelle Groups. Off Western Australia there are several cases of extinction of mammals or destruction of bird colonies because of direct or indirect human interference.

### Some examples are:

- 1. Monte Bello Islands. Populations of the Spectacled Hare Wallaby, Golden Bandicoot, Spinifex-bird and Black and White Wren have become extinct in this group. The mammals at any rate became extinct before the Nuclear Weapon tests of 1952 and 1956 and this was apparently due to the introduction of feral cats. (Burbidge, 1971)
- 2. Dirk Hartog Island. Some of the wallables which are now restricted to Bernier and Dorre Islands once occurred on Dirk Hartog Island but are now extinct there. Again this is apparently due to the introduction of cats (Burbidge and George, 1973)
- 5. Extensive breeding colonies of Sooty Terns and Common Noddies have disappeared from Rat Island in the Houtman Abrolhos due to the activities of fishermen (Serventy et al, 1971)

On the other hand developments have taken place on other islands, e.g. Rottnest and Barrow, without any major long term effect on the fauna. Airstrips have been placed on various islands including East Wallabi in the Abrolhos but these have not been constructed long enough for any effects to be evident.

In this case the possibility of any detrimental effect is offset to some extent by the fact that Dorre Island contains most (but not all) of the fauna occurring on Bernier.

4. Costs to the Shire of Carnarvon and the Department of Fisheries and Fauna.

The cost of any development falls into categories.

a) Initial Cost of building the airstrip.

An airstrip on the island would have to meet DCA requirements if charter operations involving paying passengers are to be carried out. These requirements would be a minimum length of 2500 feet and

a width of 50 feet with an area 50 feet either side of this level and smooth and an area of 25 feet either side again cleared of scrub. Prevailing winds at Carnarvon are from the south east to south west so the strip would be aligned along the long axis of the island. If a strip is built the actual location would have to be worked out on the spot at a later date. It is difficult to estimate the actual cost of constructing a strip but a similar one on East Wallabi Island cost \$8,000 in 1970. The cost to the Shire if it was to utilise its own equipment and staff would probably be considerably less.

# b) Initial cost of housing and equipping a ranger.

House, bore, pump, lighting plant

The cost of this item would depend on the standard of housing and the amount of equipment involved. There are no buildings on the island at the moment so a start would have to be made from scratch. Costs would be well above mainland ones because of transport difficulties. Costs might be somewhat as follows:

\$ 25,000

		~
	Boat (251)	20,000
	Tractor and Implements	5,000
	Trail Bike	1,000
	H F USB Radio	1,200
	Sundries	2,000
	•	\$ 54,200
*		
c) An	nual Running Costs.	
	House depreciation & maintenance	\$ 1,000
	Salary and allowances	6,000
	Boat running and depreciation	5,000
	Vehicles running and depreciation	2,000
	Sundries	1,000
÷		\$ 15,000

The source of this finance can only be a matter of conjecture in this report. One possible contributor is the Tourist Development Authority but they will normally only support projects carried out by Shire Councils on areas vested in that Council (This is on a \$2 for \$1 basis). The TDA does not normally support projects carried out by State Government Departments or Instrumentalities.

I would presume that the Carnarvon Shire Council could not spend money on Bernier Island unless it was within the boundaries of that Shire District. This is not the case at the moment. It is, I believe, a matter for the Shire of Carnarvon whether or not they wish to expend funds on this project if it proceeds.

The Department of Fisheries and Fauna has over the past few years been unable to expend significantly its expenditure on fauna conservation from the State Treasury. Recent approaches have been made to the Commonwealth for financial assistance in various areas including the management and control of wildlife sanctuaries. Were this money forthcoming the provision of a ranger on Bernier Island would no doubt be one of the items considered. The Department would probably not be able to expend money directly on a tourist development as this does not come within its charter, and many conservation projects are not proceeding due to lack of funds.

The Department's participation in this scheme, if it proceeds, would depend on finance being made available. No finance is available from current expenditure.

#### RECOMMENDATIONS.

- I recommend that the Western Australian Wild Life Authority give permission for the building of an airstrip on Bernier Island on the following conditions.
- 1. That the airstrip meet Department of Civil Aviation requirements for the operation of charter passenger flights utilising single engine aircraft.
- 2. That the cost of building the strip be born by the Shire of Carnarvon, not by the Department of Fisheries and Fauna.
- 3. That the airstrip be built at a site mutually agreed by the Western Australian Wild Life Authority and the Shire.
- 4. That the airstrip not be built until a ranger has taken up residence (or at least until there is assurance that the ranger will be in residence within six months).
- 5. That except in emergency the airstrip be used only by approved charter companies as agreed by the Shire and the Department.

- 6. That conditions be placed on the use of the airstrip to prevent the carrying of animals or firearms on the aircraft.
- 7. That the Shire of Carnarvon meet 50% of the cost of equipping and paying the ranger but that he be an employee of the Department of Fisheries and Fauna.
- 8. That in return for this the Department agree that the ranger spends 50% of his time assisting with tourist use of the island.
- 9. That no development ever take place on Dorre Island.
- 10. That the situation be reviewed five years after the airstrip is constructed.

### BIBLIOGRAPHY.

- Burbidge, A.A. 1971. The fauna and flora of the Monte Bello Islands.

  Report No.9, Department of Fisheries and Fauna, Western

  Australia.
- Burbidge, A.A. and George, A.S. 1973. Report on a visit to Dirk Hartog Island with recommendations on the re-establishment of marsupials. Unpublished report, Department of Fisheries and Fauna.
- Serventy, D.L., Serventy, V. and Warham, J. 1971. The handbook of Australian Sea-Birds. A.H. and A.W. Reed, Sydney.
- Ride, W.D.L., Mees, G.F., Douglas, A.M., Royce, R.D., and Tyndale-Biscoe, C.H. 1962. The results of an expedition to Bernier and Dorre Islands, Shark Bay, Western Australia in July, 1959. Fauna Bulletin No.2, Fisheries Department, Western Australia.

# NOTES ON A MEETING AT THE CARNARVON SHIRE COUNCIL OFFICE ON 15TH DECEMBER, 1972.

#### PRESENT:

Mr.

Messrs	s G.	Meiklejohns		President
	G.	Whiteley	-	Shire Clerk
	₩.	Tuckey		Shire Councillor
	A.	Wood	***	Tourist Bureau
	***	Abbott	***	Building Inspector
	P.	Dawson	-	Councillor
	V.	Davies	440	Councillor
Dr.	A.A.	Burbidge	***	Department of Fisheries & Farma

Department of Fisheries & Fauna

The meeting opened at 1.30 p.m.

J. Neal

Mr. Meiklejohns opened the meeting by saying that the council were adament that an airstrip was needed on Bernier Island, and Council couldn't understand why permission was refused.

I responded emphasising the importance of the islands and summarising our experience with islands off W.A. I emphasised that the Department is not inherently against usage by people but fauna conservation must come first — this is the basis of the purpose and vesting of the reserve.

Mr. Tuckey spoke at length on his ideas for the island. He believed that a strip was necessary for:

- a) Safety in case of accidents like the one in 1971, or to assist with accidents on fishing boats etc.
- b) Tourist use. As before he emphasised that it was too far and too rough to take tourists fishing but if there was a strip they could arrange day trips.

He envisaged that there would be a council employee to look after the island and take people to fishing spots and possibly to hire out dighys and outboards.

He suggested that all that was needed at this stage was the strip and the ranger and then both parties would evaluate the effects of this before any decision was made to proceed any further.

He thought a couple of vehicles would be necessary on the island but visitors could ride bikes as on Rottnest:

I elaborated on the effect, both direct and indirect, people could have on islands. I suggested that if there was a ranger on the island he should be an employee of the Department. This was welcomed, but the idea of the Shire paying the wages was not so acceptable unless this person was also able to look after tourists, hire boats, etc. Mr. Tuckey said that perhaps two people would be needed.

I questioned whether the Shire could spend money on an area which was not under their control. Mr. Whiteley thought they could, but was unsure. Mr. Wood said that a TDA grant could only be spent on vested reserves. Mr. Tuckey thought that vesting was unnecessary — an agreement with the Department was sufficient.

All members said that they had no objection to Dorre remaining a prohibited area. They said that a ranger on Bernier would improve policing of this. At present a few people still went to Dorre. The main attraction was crayfish.

They accepted there could not be a 'strip on Dorre and they would not request one in future.

Mr. Abbott said that many people went south - into the prevailing wind to go fishing and that the Dorre area would continue to be used extensively.

They said that if development took place it should be at the north end of Bernier.

They realised that if development took place it would be slow and gradual. They accepted that a survey by experts would be necessary to site a strip.

Mr. Wood queried whether the expenditure of funds by the Shire would be worthwhile compared with other projects. He thought that this type of development would only cater for a minor proportion of the tourists.

They all thought that letting a contract out to a company would be a failure — Coral Bay still has not paid rates to the Shire.

Members said with the development of the Violet Creek area into a marina there would be added impetetus to the use of small boats in the Carnarvon area. They said a fair number of people already visited Bernier with no supervision and the provision of a strip and ranger would improve this situation.

The meeting closed at 3.00 p.m.