

BERNIER AND DORRE ISLANDS MANAGEMENT PLAN FOR CONSERVATION OF FAUNA

Bernier and Dorre Islands are situated at the north-western edge of Shark Bay and are about 30 miles west of the mainland. Their area totals approximately 26,000 acres. They are a very important fauna sanctuary, being the only sure haven for a number of mammals, particularly the Banded Hare Wallaby (*Lagostrophus fasciatus*), the Western Hare Wallaby (*Lagorchestes hirsutus*), the Boodie (*Bettongia lesueri*), and the Little Marl or Little Barred Bandicoot (*Perameles bougainvillei*). All these marsupials once occurred on the mainland of Western Australia but are now either extinct or nearly extinct there. They are now found commonly nowhere else in the world but on Bernier and Dorre Islands. In addition to the marsupials two native hopping mice occur. The Shark Bay Mouse (*Pseudomys praeconis*) has been found only on Bernier Island. It was known from Peron Peninsular but has not been collected there since 1858 so it is probably restricted to Bernier at this time. The Ashy-Grey Mouse (*Pseudomys albocinereus*) is known from widely scattered sandplain areas in the south-west. Two species of bats are also found on the Islands.

The islands harbour a number of bird species. Nesting species include Wedge-tailed Eagle, White-breasted Sea Eagle and the Osprey as well as distinctive forms of two species of Wren.

The history and biology of these islands were the subject of Fauna Bulletin No. 2 (Ride et al, 1962; Government Printer, Western Australia) which documented the results of an expedition to the islands in 1959. The recommendations made by members of the expedition (p. 120) are as follows:

"That Bernier and Dorre both remain natural reserves for the preservation of fauna and flora; that no part of them be utilized for any other purpose because of the danger of the unwitting introduction of alien species or fire; that no jetty or pier be built from them which, in allowing decked craft to moor alongside, might facilitate transference of alien species (such as rats) from vessels to the wharf; that parties of visitors to the islands be strictly supervised to prevent accidents with fires; that dogs be prohibited; that firearms be prohibited except by special permission of the Chief Warden of Fauna; that a major effort be made to acquaint the fishermen of the bay with the great value of the reserves and the danger of lighting fires on them; and finally, that the goat population on Bernier Island be exterminated without delay."

Since this expedition three major parties have been organised to shoot goats on Bernier Island. These have resulted in 336 goats being killed as follows: March 1962, 71 goats; May 1963, 5 goats; August, 1967, 196 goats; April 1969, 64 goats. After the last trip the population was estimated

at less than 100 but aerial surveys will be made to verify this.

Over the years there has been some pressure to allow the islands to be developed for tourist purposes. However, the public do not appear to use the islands much at the moment. There is a large amount of fishing carried out adjacent to the Islands but this is dependent on boats. Any future sport fishing can be based on high speed craft operating from Carnarvon. The arid nature of the islands and the dense, scrubby vegetation makes them unsuitable for walking or sightseeing. The highly poisonous mulga snake (*Notechis australis*) occurs on both islands.

Aims of the Management Plan

1. To preserve for all time the islands as sanctuaries for the native fauna and flora.
2. To prevent any interference with the animals, plants or soil which might cause the degradation of the area.
3. To prohibit any human activity which is not consistent with the above.

To implement this plan Dorre Island has been made a prohibited area while people are allowed on Bernier Island for day visits. This will allow scientists to measure any disturbance caused by human use against an untouched area. Dorre was picked as the prohibited area because some disturbance to Bernier had already occurred following the introduction of feral goats.

The notice declaring Bernier Island a "LIMITED ACCESS AREA" and Dorre Island a "PROHIBITED AREA" was published in the "Government Gazette" on 3rd July, 1970.

In relation to Bernier Island this restriction means that persons landing on the island must not camp overnight, erect any structure, disturb or injure any plants or animals, disturb the soil, be accompanied by any domestic animals, light fires, carry firearms, carry spears or spear-guns or carry out any other activity contrary to the normal regulations governing fauna sanctuaries.

As a "Prohibited Area" Dorre Island is closed to all persons without specific approval from the Department of Fisheries and Fauna. Under the management plan:

- (a) Goats on Bernier Island will be eradicated or reduced to an insignificant level as far as is practicable.
- (b) Research will be carried out into the biology of the native mammals, the regeneration and maintenance of the plants, especially following the lessened grazing by goats, the movements of the sand dune, on Bernier Island, the effects of human activity on Bernier Island compared with Dorre Island and any other factors affecting the maintenance of the reserves and the persistence of the fauna thereon.