## GOAT ERADICATION— BERNIER ISLAND



In June this year a party of Gurkha soldiers from a battalion on exercise in Western Australia assisted the Department with a goat-shooting expedition to Bernier Island Reserve in Shark Bay.

Bernier Island is the home of the Boodie or Lestueur's Rat-kangaroo (Betongia lesueur), the Banded Hare wallaby (Lagostrophus fasciatus), the Western Hare-wallaby (Lagorchestes hirsutus), the Little Marl or Little Barred-bandicoot (Peramales bougainville), the Ashy-grey Mouse (Pseudomys albocinereus), the Shark Bay Mouse (Pseudomys praeconis), the Little Bat (Eptesicus pumilus) and the Lesser Long-eared Bat (Nyctophilus geoffroyi). Of these, the four marsupials are very rare, and, with the exception of the Boodie which is also found on Barrow Island, are possibly extinct everywhere but on Bernier Island and neighbouring Dorre Island. Because of the vital importance of preserving these species, both islands are classified as "A" Class Reserves and vested in the Western Australian Wild Life Authority.



Shrub showing grazing damage—Bernier Island. Removal of foliage destroys shelter for marsupials

Goats were introduced to the island in 1899 when about half-a-dozen, including one male, were brought from the mainland and it is possible that more goats were taken to the island in 1908 when a hospital for Aborigines was established. The goat population has flourished to such an extent that approximately 500 have had to be destroyed in the last ten years. The low, spreading vegetation on the island provides the marsupials with shelter during the day, and goats grazing on this vegetation upset the natural ecology of the island and threaten the very existence of the unique fauna. In addition, destruction of the vegetation causes sand blow-outs: the unconsolidated dunes have spread in recent years and cropping of the goat population is periodically necessary to prevent the situation deteriorating further.



Cliffs and rocky terrain of west side of Bernier Island

Several previous visits to the island have decreased the number of goats, but it seems almost impossible to eliminate them completely. The rocky coastal terrain and the dense vegetation make spotting the goats very difficult in the first instance; in these conditions even the mainly white goats have a frustrating habit of disappearing completely. It is possible to walk past a goat at a distance of ten yards and not notice it. Despite the difficulties it is now thought that from an estimated population of well over two hundred (196 were shot) in 1966, the numbers have now been reduced to below twenty-five.

In 1970, Lt. Col. J. L. Chapple, M.B.E., of the 2nd King Edward's VII Own Gurkha Rifles, stationed in Singapore, requested permission to visit the island in an attempt to sight the Banded Hare-wallaby. Due to the battalion's commitments this visit was not possible, but the Department conceived the idea of requesting the Gurkhas to help in the goat eradication exercise, and when the battalion was stationed in Perth this year, the suggestion was again raised. The idea was met with enthusiasm by the Gurkha battalion commander because the exercise would be valuable training for his men in terrain to which they were unaccustomed. The Gurkha soldiers themselves were naturally keen because goat meat is part of their staple diet in Nepal.



Searching for goats. Note sand blow-outs caused by over-grazing

On Monday, 21 June, 1971, a party of 15 soldiers under Major D. J. Agar, accompanied by two members of the Australian Special Air Service Regiment from Campbell Barracks, Swanbourne, and two representatives of the Department, were taken to the island on the fishing vessel "Nelma". During an aerial reconnaissance the previous day twenty-five goats had been seen, and from previous experience this indicated that probably at least double that number were on the island. A base camp was established at Red Cliff Bay on the south-eastern coast of the island and almost immediately a small party set out hunting for goats. None were seen the first day, but plans were made



Setting out for the northern end of the island

for organised parties to search systematically on subsequent days. The soldiers worked in groups of two to four and on the third and fourth days were assisted by a spotter plane which directed the searchers to goats where possible.

On the Thursday the "Nelma" took a party of twelve soldiers to the north end of the island. Walking in line across the island this party shot 11 goats which was the most successful day's take. It was estimated that each soldier covered close on eighteen miles searching for and chasing goats on this day; they arrived back at base camp at 10 p.m. The following day the expedition broke camp and returned to Carnarvon on the "Nelma".

During the four days the expedition shot a total of twenty-two goats, four of which were eaten at camp. Three kids were also captured; two were given away and one taken back to Singapore with a view to it becoming the battalion mascot. An aerial survey one month after the trip suggests that less than twenty-five goats now remain on the island. The operation can therefore be considered to have been a success because the reduced numbers should not have a significant effect on the flora and fauna of the reserve for some years.

The Department is very grateful for the assistance and co-operation of Major Agar and the Gurkha battalion throughout the expedition.



Bringing home the supper! A six mile walk through typical vegetation