

## Bald Island Survey

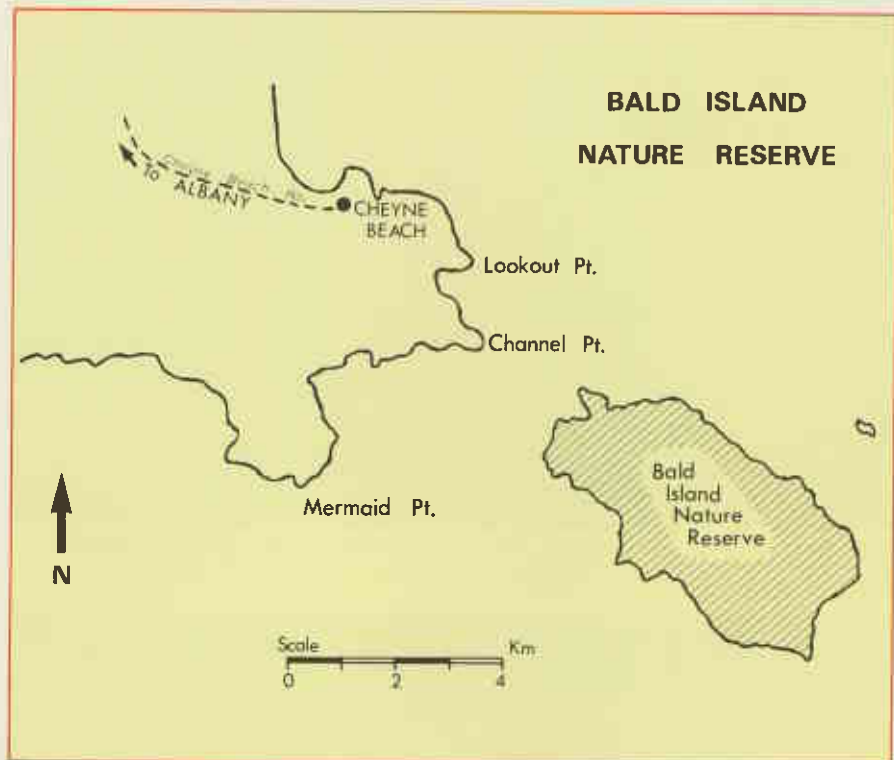
During February 1980 members of a University of Western Australia research team were accompanied by officers of the Department of Fisheries and Wildlife to Bald Island Nature Reserve No. 25869 which is situated 20 kilometres east of Two Peoples Bay on the south coast of Western Australia.

This uninhabited island (768.9 hectares in area) is actually within 2 kilometres of the mainland coast, as can be seen from the map, but it is relatively unchanged by human visitors, as it has no beaches on which a boat can easily land. The survey team used a rubber dinghy to gain access. Bald Island Nature Reserve was gazetted on March 3, 1961 principally because it was the only island apart from Rottnest on which the 'Quokka' *Setonix brachyurus* occurs. It was vested in the Western Australian Wildlife Authority on January 1, 1964 (Government Gazette February 7, 1964) and reclassified to 'Class A' on October 1973. It is the presence of the Quokka that attracted the University of Western Australia research team's interest in the Island. The team was seeking to check Quokkas for the presence of *Salmonella* bacteria and compare the results with these previously obtained from Quokkas on Rottnest Island.

The only sign of human interference on the island is an extremely old stack of firewood on the north-eastern side. At first the team thought that the firewood was evidence of the early sealing operations that took place on the island, but afterwards it was determined that the wood had been deposited at a much later date from a passing vessel.

Some evidence of small fires in the distant past has been found but most of the island appears not to have been burnt for a very long time.

There is no sign of any environmental damage to the island.



▼ Quokka (*Setonix brachyurus*)—Until the 1930s, the quokka was a common animal in the wetter areas of south-west Western Australia where it was often shot for 'sport'. Now they are only abundant on Bald Island (where this photograph was taken) and on Rottnest Island. (Photo: R. Smith)





▲ Vegetation of the island centre. The foreground is dominated by Swordsedge (*Lepidosperma*) and *Rhagodia baccata* with a background of *Melaleuca pubescens* and areas of rocky outcrops. (Photo R. Smith)



▲ Gully on the north-east of the island vegetated with *Melaleuca pubescens*, *Rhagodia baccata*, *Threlkeldia diffusa*, and *Parietaria debilis* over a grassland of *Poa* species and *Scirpus nodosus*. This is the typical nesting area of the Great-winged Petrel. (Photo R. Smith)

▼ Great-winged Petrel (*Pterodroma macroptera*) is present in large numbers on Bald Island where it commences to lay its eggs during May each year. (Photo: R. Smith)



The island is composed of hard granite-gneiss with a thin covering of grey sand. There are a few limestone hilltops, but the steep sides of the hilly terrain showed no signs of erosion.

The island is well vegetated with excellent specimens of Moonah Paper Bark *Melaleuca pubescens*, Rottnest Island Pine *Callistris preissii* and Bald Island Marlock *Eucalyptus lehmanni* of an impressive size. The ground is covered with deep litter reflecting the long period since a fire.

The team used hand nets to capture the Quokkas which proved commonplace throughout the Island regardless of vegetation type.

A total of fourteen animals were captured and then released after swabs were taken to check for the presence of Salmonella bacteria. The animals proved to be in a generally good condition compared with those on Rottnest Island. The island abounds in birdlife with the ground being riddled with burrows of the Great-winged Petrel (*Pterodroma macroptera*) and large numbers of these birds arrived each night. The Little Penguin

(*Eudyptula minor*) is also common throughout the island.

Birds of ten other species were also observed although they were not present in such large numbers. A total of 27 bird species, 21 of them land birds, have previously been reported as occurring on the island (Smith G.T. "The Birds of Bald Island" *W.A. Naturalist* 14:17-19).

The team observed numerous King's Skinks (*Egernia kingii*) particularly near water edges and the presence of a smaller skink, that the party was unable to catch and identify, was also noted.

The number of reptile species on Bald Island is impoverished compared with the adjacent mainland. However, previous reports indicate that five species—a gecko and four skinks—do exist on the island. (Storr G.M. "Notes on Bald Island and the adjacent mainland" *W.A. Naturalist* 9:187-196)

The island is a haven for seals despite its early sealing history. Fairly large numbers of Fur Seals (*Arctocephalus forsteri*) and specimens of the Australian Sea Lion (*Neophoca cinerea*) can usually be observed there.



▲ Specimen of Moonah paperbark (*Melaleuca pubescens*) showing the great height and age of this species on the island. (Photo: R. Smith)



▲ Little Penguin (*Eudyptula minor*) is a common species on the island. (Photo: R. Smith)

▼ Fur seals (*Arctocephalus forsteri*), two of the twenty nine animals sighted on the Island. (Photo: R. Smith)

