

SEABIRD ISLANDS

No. 54

Eclipse Island, Western Australia

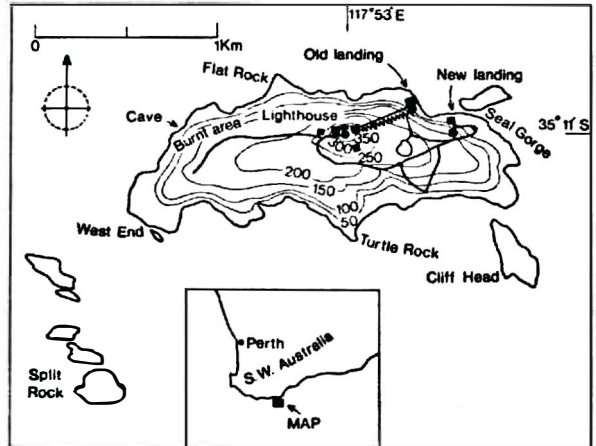
Location: 35°11' S., 117°53' E.; due south of Albany, Western Australia; 14 km south-west from Bald Head at the entrance to King George Sound.

Status: A Commonwealth owned island.

Description: 160 ha; irregularly shaped, some 2.2 km long by about 1 km at the widest and rising to 108 m. It is a granite island mostly covered in thick scrub with *Melaleuca lanceolata* predominating. A compact low cover is found particularly along the western ridge comprising mainly *Leucopogon revolutus*, *Verticordia plumosa*, *Andersonia sprengeioides*, *Hibbertia cuneiformis*, *Boronia alata*, *Calocephalus brownii* and *Chori-laena quercifolia*. In some places in the steeper northern slopes some *Casuarina* sp. occurs. In 1968 a severe wildfire burned an extensive area on the north-west side of the island. Much of the south-west side is rocky and has a covering of short, cushion-like vegetation predominantly *Verticordia plumosa*. Cliff Head and the islands off the western end are bare rock. A predominant introduced plant is a South African Arum Lily *Zantedeschia aethiopica*. Otherwise the open ground is well covered with Pigface *Carpobrotus aequilaterus*.

A manned light station was established in 1925 on the highest point, but recently it has been converted to an automatic operation. Early in 1975 all easily removed equipment was dismantled and some restoration work was done on the main bulldozed track leading from the landing place to the light station. This work was done to encourage revegetation and reduce the run-off and consequent soil erosion problems. All machinery at the landing site was demolished.

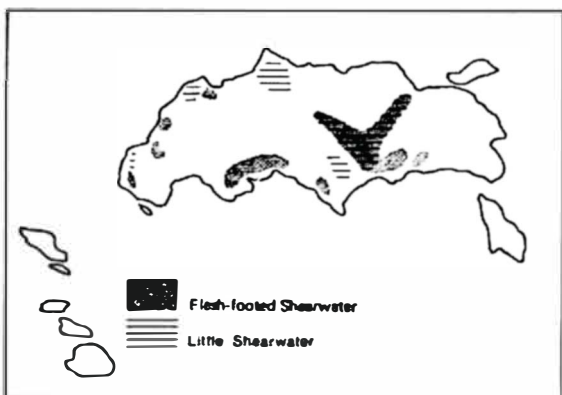
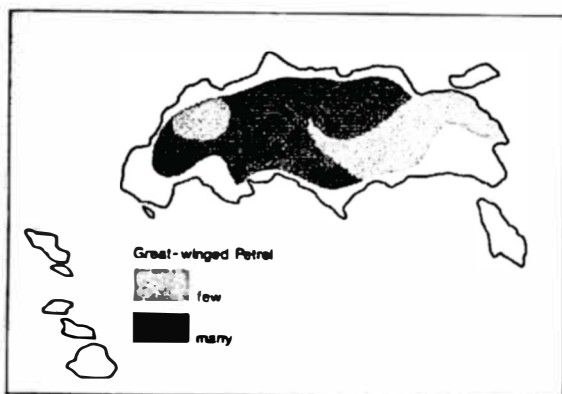
Landing: On to shelving rocks at the site of the old landing area at the north-east side of the island or into Seal Gorge in calm seas.



Ornithological History: The earliest record of breeding seabirds from the island was apparently in January 1938 when A. Blythe, the lighthouse keeper at the time, forwarded specimens of the Little Shearwater to the Western Australian Museum². Then his successor, A. V. Newman, recorded details of that species for three years². In his paper, L. Glauert² also recorded the Great-winged Petrel and the Flesh-footed Shearwater as breeding species. Subsequently J. Warham³, after his visits in July and September 1954, gave general details of the birds found on the island. Warham⁵ described the breeding of the Great-winged Petrel, with additional comments⁶ following another visit in January-February 1956. Warham^{4, 7} also provided observations on the breeding of Little and Flesh-footed Shearwaters. P. J. Fullagar and G. F. van Tets¹ gave a recent account following their visit in August 1973.

Breeding Seabirds and Status

Eudyptula minor Little Penguin — There has been no assessment of numbers, but observations suggest that maybe fewer than 100 pairs occur^{1,3}.



Pterodroma macroptera Great-winged Petrel — This petrel nests over much of the island. Nest sites are mostly well scattered, either in shallow burrows or more frequently using only the cover provided by the small isolated clumps of scrub. Such wind-shorn clumps often shelter several surface nests to which access is gained from the perimeter of the bush. The highest density noted has been near the western end of the island (23 occupied sites in 400 square metres). Very few petrels nest in the severely burnt areas and in the short dense regrowth of *Melaleuca* either side of the road on the lower levels east of the lighthouse. Some concentration of sites has been noted on the talus slopes around the lighthouse hill, particularly on the southern side. In the past some petrels have been found at sites very close to the living quarters and even against the walls of the very noisy electric power generation plant building!

The breeding population of Eclipse Island would probably be in the order of 10 000-15 000 pairs¹.



● View of Eclipse Island from the mainland (looking south).

Photo: S. G. Lane

Puffinus carneipes Flesh-footed Shearwater — There has been no assessment of numbers, but a guess would be about 6 000 to 8 000 pairs.

Puffinus assimilis Little Shearwater — Scattered and essentially isolated burrow sites are probably uncommon. The tendency seems to be for groups of Little Shearwaters to be associated together or for extensive dense colonies to be formed in particular locations. Notable sites are those to the north-west of the island. Suitability of terrain for burrowing is clearly an important factor. Most burrows are in gritty soils or amongst loose rocks between and behind which these shearwaters can excavate. There is nearly always an open vegetation cover, though dense, tall *Melaleuca* may form a high canopy. Probably fewer than 2 000 pairs breed on the island¹.

Larus novaehollandiae Silver Gull — A small colony nested on the rocks south-west of the island in 1954. Twenty-five birds each sitting on a nest were seen¹.

Factors Affecting Status

There has been no documented evidence of serious effects on any of the seabird populations during the period of manned occupancy of the light station. There must have been some disruption to some colonies, particularly those of the Flesh-footed Shearwater, during building operations and in the provision of bulldozed tracks.

These areas may now recover. Several birds of prey have been recorded on the island, but their impact on seabirds is unknown.



● *Melaleuca trees and ground cover of Zantedeschia.* (Aug. 1973).



● *View from the rock on the south-west side towards the lighthouse. Dense low Melaleuca in the foreground, taller on lower slopes of the hill.* (Aug. 1973).

OTHER VERTEBRATES

Vertebrates on the island include the Rabbit *Oryctolagus cuniculus* and a small breeding colony of the Australian Sea-lion *Neophoca cinerea*. The rabbit is not numerous and appears to be in little conflict with the breeding avifauna. The history of its introduction is apparently undocumented. Lizards are numerous and four species have been noted: Marbled Gecko *Phyllodactylus marmoratus*, King's Skink *Egernia kingii*, Salmon-bellied Skink *Egernia nitida* and Yellow-bellied Skink *Hemiergis peronii*.

Other Seabirds Recorded

<i>Pelagodroma marina</i>	White-faced Storm-petrel.
<i>Phaethon rubricauda</i>	Red-tailed Tropicbird.
<i>Haematopus fuliginosus</i>	Sooty Oystercatcher.
<i>Larus pacificus</i>	Pacific Gull.

Banding

First banding (J. Warham) 28.1.56.

Pterodroma macroptera—26 nestlings and 18 adults. No recoveries.

Puffinus carneipes—5 nestlings and 495 adults. No recoveries away from the island. Nine recoveries on the island up to 3 seasons later.

Puffinus assimilis—15 adults. No recoveries.

Bibliography

1. Fullagar, P. J., and G. F. van Tets (1976). 'Bird notes from a winter visit to Eclipse Island, Western Australia', *West. Aust. Nat.* 13: 136-147.

2. Glauert, L. (1946). 'The Little Shearwater's Year', *Emu* 46: 187-192.
3. Warham, J. (1955). 'The birds of Eclipse Island', *Emu* 55: 164-169.
4. Warham, J. (1955). 'Observations on the Little Shearwater at the nest', *West. Aust. Nat.* 5: 31-40.
5. Warham, J. (1956). 'The breeding of the Great-winged Petrel, *Pterodroma macroptera*', *Ibis* 98: 171-185.
6. Warham, J. (1957). 'Additional notes on the Great-winged Petrel, *Pterodroma macroptera*', *Ibis* 99: 511-512.
7. Warham, J. (1958). 'The nesting of the Shearwater, *Puffinus carneipes*', *Auk* 75: 1-14.

Acknowledgements

I wish to thank the Australian National Parks and Wildlife Service for information concerning the recent developments on the island.

Dated compiled:
1 December 1977

P. J. Fullagar,
Division of Wildlife Research,
CSIRO,
P.O. Box 84, Lyneham, A.C.T.