

## SEABIRD ISLANDS

No. 127

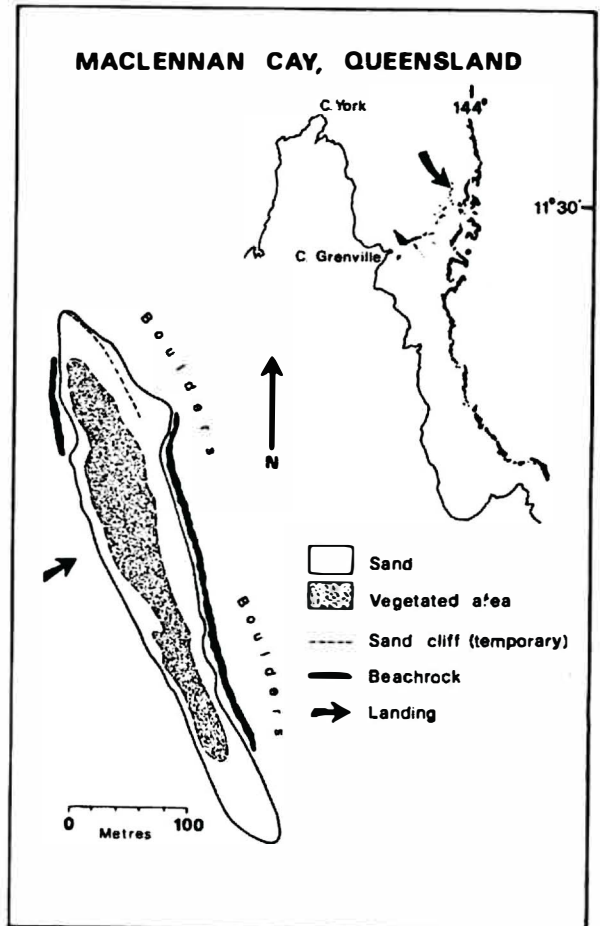
## MacLennan Cay, Great Barrier Reef, Queensland

**Location:** 11°22'S., 143°48'E.; about 78 km north-east of Cape Grenville and 32 km north-west of Raine Island, Qld.

**Status:** Vacant Crown Land; Fauna Sanctuary\*.

**Description:** 2.4 ha; 453 m long by 76 m, rising to 1.05 m above High Water Spring. An elongated, narrow cay situated at the western end of a small coral reef inside the outer Great Barrier Reefs. Large numbers of coralline boulders, some almost three metres high, lie on the reef flat, mostly on the eastern side of the cay. The cay is composed of coarse coral sand and reef debris. There is some beachrock on the eastern side. Above the coral sand and shingle beach is a central vegetated zone with three plant species — a tussock grass *Lepturus repens*, a herb *Portulaca oleracea* and a low shrub *Boerhavia diffusa*. The vegetation is of variable density and does not exceed 0.5 m high. The cay can be classified as a "vegetated sand cay" according to R. W. Fairbridge<sup>1</sup> or a "grass cay" according to K. A. Hindwood *et al.*<sup>2</sup>.

**Landing:** Onto the beach at high water, from the western side in the lee of the cay and reef. Because of the isolation of the area and incomplete charting of reefs in the vicinity, local knowledge is essential and landings should not be attempted in rough weather.



\* In May 1981, the Queensland Government passed the "Raine Island Research Act of 1981", which reserved Pandora Cay, MacLennan Cay and Raine Island as islands in an area for scientific studies. The status of the cay is being changed from Vacant Crown Land to Scientific Purposes Area, to which access will be controlled by the Raine Island Corporation

**Ornithological History:** The only previously recorded visit is that of C. J. Limpus on 30 November 1978<sup>3</sup>. He recorded Brown Boobies breeding and six other species of seabirds — Least Frigatebird, Silver Gull, Black-naped Tern, Bridled Tern, Crested Tern and Common Noddy.

The cay is now being visited regularly by Qld NPWS officers, to monitor changes in its seabird populations and other features, in association with similar work on Pandora Cay and Raine Island.

Visits have been made as follows: 26 June 1980, afternoon and night — D. H. C. Seton and G. R. Tomes; 19 June 1981 and 31 July 1982, afternoon and night — B. R. King and G. R. Tomes. The cay was mapped, vegetation surveyed and seabirds observed and banded.

### Breeding Seabirds and Status

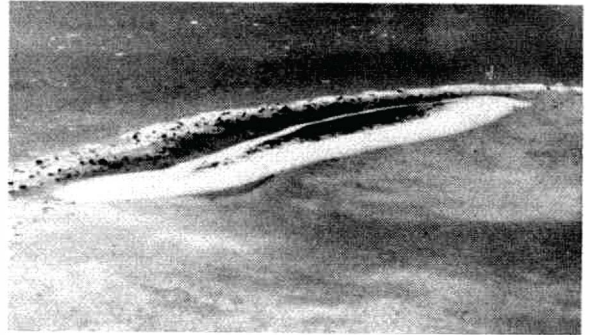
*Sula leucogaster* Brown Booby — Breeding apparently occurs throughout the year with the greatest numbers in summer. In June and July visits the number of nests ranged from 104 to 270; in November 1978 there were 919 nests. Nests are built on the ground between clumps of vegetation, and occur all over the island interspersed with nests of other species. Up to 2 000 birds roost on the cay.

*Sterna fuscata* Sooty Tern — Breeds in large numbers in mid-year; in June 1980 there were estimated to be 1 000 nests and 5 000 birds present; in June 1981 there were about 200 nests and 150 "runner" chicks, with more than 1 000 birds roosting at night. Nests are scrapes in the sand amongst the vegetation and are distributed throughout the vegetated area.

*Anous stolidus* Common Noddy — Present all year and breeding in mid-year. The colony consists of up to 300 nests. The nests are placed on clumps of vegetation, mostly grass tussocks, and are lined mainly with pieces of bleached coral. Nesting occurs in loose groups throughout the vegetated area.

### Factors Affecting Status

Visits by humans to the cay are very few, therefore disturbance to nesting seabirds is uncommon. Over-flights by aircraft, which cause a large but brief disturbance to sitting birds, are believed to be few because of the cay's isolation. Silver Gulls predate unattended eggs and chicks. Some disturbance and loss of nests would occur during the nesting of the Green Turtles *Chelonia mydas* from October to April, as all parts of the



• MacLennan Cay, April 1980 (looking east).

cay are accessible to them. Changes in the size, shape and position of the cay may occur due to erosion and accretion of sand.

### Other Seabirds Recorded

|                              |                     |
|------------------------------|---------------------|
| <i>Fregata ariel</i>         | Least Frigatebird   |
| <i>Larus novaehollandiae</i> | Silver Gull         |
| <i>Sterna sumatrana</i>      | Black-naped Tern    |
| <i>Sterna bergii</i>         | Crested Tern        |
| <i>Sterna bengalensis</i>    | Lesser Crested Tern |

### Banding

Period: June 1980 to June 1982.  
*Sula leucogaster* — 40 adults; 30 chicks.  
*Sterna fuscata* — 75 chicks.

### Bibliography

1. Fairbridge, R. W. (1950), 'Recent and Pleistocene coral reefs of Australia', *J. Geol.* 58: 330-401.
2. Hindwood, K. A., K. Keith and D. L. Serventy (1963), 'Birds of the south-west Coral Sea', *Tech. Pap. Div. Wildl. Res. CSIRO, Aust.* No. 3 (44pp.).
3. Limpus, C. J. (1980), 'Birds of MacLennan Cay, Great Barrier Reef', *Corella* 4: 58-59.

### Acknowledgements

We are grateful for the support of the World Wildlife Fund (Australia), the Raine Island Corporation, and the Queensland National Parks and Wildlife Service.

Date compiled: 20 March 1983

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