

SEABIRD ISLANDS

No. 168

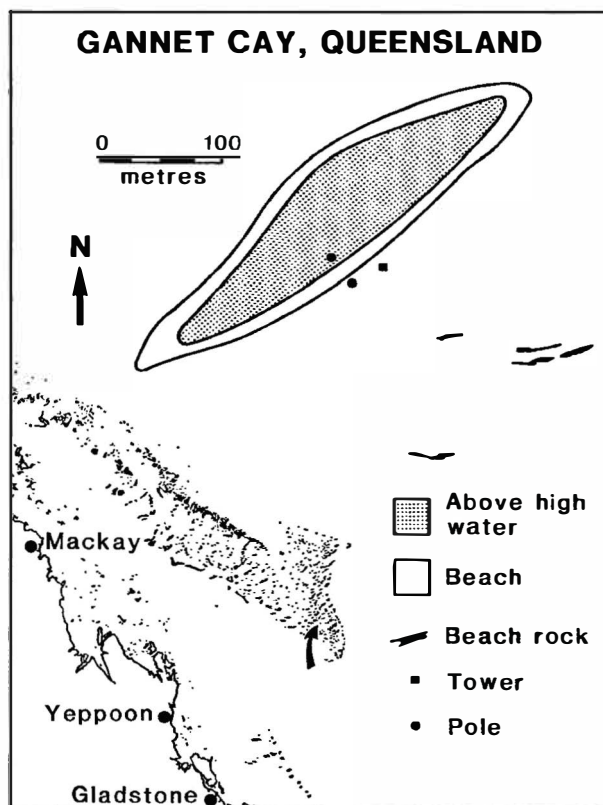
Gannet Cay, Great Barrier Reef, Queensland

Location: 21°59' S., 152°28' E.; centrally situated in the Swain Reefs complex at the southern end of the Great Barrier Reef (GBRMPA reef code 21-566). The nearest mainland is about 180 kilometres west-south-west at Perforated Point (Port Clinton) and the nearest town is about 210 kilometres south-west at Yeppoon, Qld.

Status: Vacant Crown Land; Queensland Fauna Sanctuary.

Other Name: Poulson Cay is the name given by Gillett and McNeill² and referred to by some previous authors.

Description: 1.7 ha; 340 m x 75 m, with an elevation of less than 2 m (measurements above high water). This sand cay is sited at the north-western side of a platform reef of 1.3 km maximum diameter. A tower with an automatic meteorological station is situated beside the cay mid-way along on the south-eastern side. Beach-rock is exposed in areas previously covered by the cay 150 m to the south of the present position. Erosion and deposition of sand have caused large alterations in the position and shape of the cay over the last twenty years. These changes are described by Flood and Heatwole¹. Only about 20% of the island (above high water, 1984) still covers an area on the reef that was





• *Masked and Brown Boobies nesting on Gannet Cay (April 1986).*

Photo: T. A. Walker

previously covered in 1964. A meteorological station was constructed near the centre of the cay in 1973 but by 1979 the foundations were undermined by erosion. The present station was installed on the cay in 1979 but is now exposed on the reef flat.

Changes in vegetation have been discussed by Flood and Heatwole¹. In 1967 and 1972 the cay was heavily vegetated with five or six species of herbs and grasses but now only a few scattered plants of *Boerhavia diffusa* and *Coronopus integrifolius* remain. The decline in the flora is probably associated with the physical instability of the cay and the passage of cyclones in 1976 and 1980.

Landing: Across the reef flat on the north-western side.

Ornithological History: Gillett and McNeill² first described the cay on 31 October 1960 at the same time recording the presence of three species of breeding and one species of non-breeding seabird. Coleman photographed nesting Brown and Masked Boobies in May 1976⁴. Limpus and Lyon⁴ visited on 5 November 1976 and censused nine species of seabirds, five of which were breeding. Unpublished surveys of birds were carried out by staff of Australian National Parks

and Wildlife Service³ in December 1979, April 1980, May 1981, December 1981 and December 1982. Moverley⁵ described winter bird populations in July 1983 and July 1984 including three species of breeding and four species of non-breeding seabirds. T. A. Walker and/or M. E. Jones surveyed the birds on 20 January 1985, 21 July 1985, 20 February 1986 and 6 April 1986.

Breeding Seabirds and Status

Sula dactylatra Masked Booby — Breeding occurs throughout the year and was recorded on all fourteen visits to the cay. There is not a clear breeding season although the highest numbers occurred in April and May (180-232 pairs). Between one and thirty-four pairs were breeding on visits between December and February.

Sula leucogaster Brown Booby — Breeding occurs throughout the year and was recorded on all visits with the exception of December 1981. The number of nesting pairs between January and May ranged from 248 to 542. In July and December there were less than twenty pairs and the November count was 360 pairs.

Larus novaehollandiae Silver Gull — Nesting was recorded in November 1976, July 1983 and July 1985. The maximum number of nests was ten. Gulls were present on all surveys but numbers were never greater than twenty.

Sterna anaethetus Bridled Tern — About 150 pairs nested under the vegetation during summer until 1980 when much of the plant cover was lost during a cyclone. Subsequently the species has not been reported on the island.

Anous stolidus Common Noddy — Over 300 pairs were nesting in November 1976 and December 1979. Following the loss of vegetation during the 1980 cyclone, 27 pairs nested in December 1981, but no further breeding has been recorded.

Factors Affecting Status

The surface of the cay is less than 2 m above high water and is therefore susceptible to overwash and erosion by the sea during severe storms. Bird mortality during such events can be accompanied by loss or death of vegetation thus altering the suitability of the cay as a nesting site for some species. Gulls predate unattended eggs of other species and this activity in-

creases when people visit the island. Human visitation to the cay is low but is becoming more frequent. Nesting birds also suffer disturbance from nesting sea turtles. Gannet Cay is significant as the major nesting site for boobies in the Swain Reefs region.

Other Seabirds Recorded

<i>Sula sula</i>	Red-footed Booby ³
<i>Sterna hirundo</i>	Common Tern ^{3, 5}
<i>Sterna dougallii</i>	Roseate Tern
<i>Sterna sumatrana</i>	Black-naped Tern
<i>Sterna fuscata</i>	Sooty Tern ³
<i>Sterna albifrons</i>	Little Tern
<i>Sterna bergii</i>	Crested Tern
<i>Sterna bengalensis</i>	Lesser Crested Tern
<i>Anous minutus</i>	Black Noddy

Banding

Commenced January 1985.

Sula dactylatra — 178 adults, 1 juvenile, 59 chicks.

Sula leucogaster 134 adults, 23 juveniles, 1 chick.

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Acknowledgements

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