

SEABIRD ISLANDS

No. 232

Riptide Cay, Great Barrier Reef, Queensland

Location: 21°14'S, 152°22'E situated in the northern sector of the Swain Reefs complex, at the southern end of the Great Barrier Reef. The Great Barrier Reef Marine Park Authority reef identification code is 21–172. It is about 247 kilometres north-east of Yeppoon and 285 kilometres east of Mackay, Queensland.

Status: National Park.

Description: Approximately 0.25 ha; measurements in 1976 were 110 m × 43 m at mean spring high tide level³. Shape in 1992 was elliptical. Highest point (1995) was 2.5 metres above the reef flat. The cay is located near the north-western tip of a small triangular-shaped reef about 1.3 km long with a maximum width of 1 km.

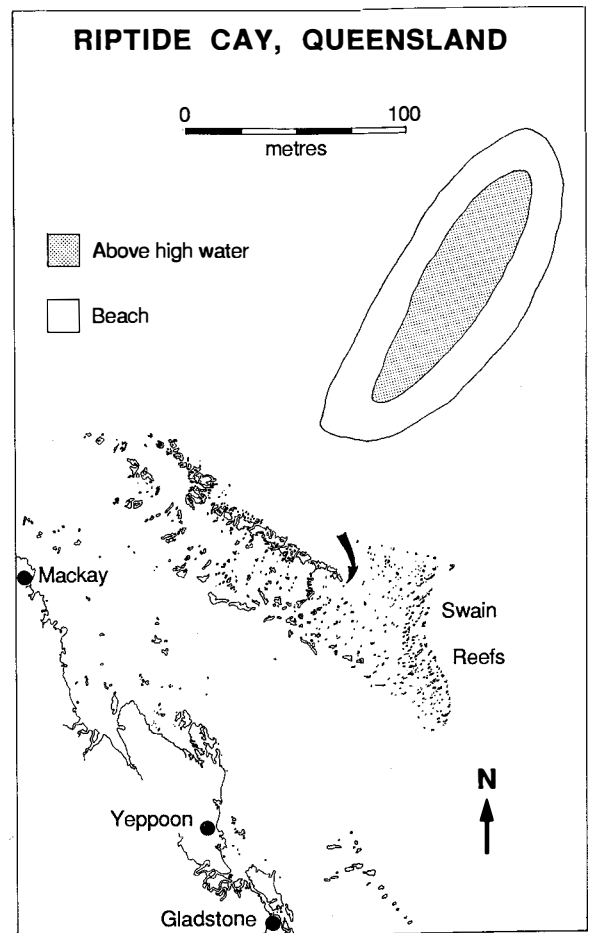
The cay consists largely of coral sand, with coral fragments of various size. No vegetation has ever been recorded on the cay, and its current status is bare.

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

Ornithological History: Limpus and Lyon visited the cay on 9 November 1976³ and were the first to make ornithological observations. They recorded Masked and Brown Boobies, and Crested Terns breeding. Heatwole visited the cay on 11 January 1985¹ and recorded only Brown Boobies nesting. Officers of the Queensland Department of Environment have subsequently made five trips to the cay, on 13 April 1989, 2 May 1992, 28 November 1992, 6 March 1994, and 19 July 1995. Both Brown and Masked Boobies were recorded breeding on each of these dates, and Crested Terns were also breeding in 1992. Aerial surveys were conducted on 27 December 1991 and 31 December 1992 (Limpus, pers. comm.), and aerial photographs were taken on 7 March 1996.

Breeding Seabirds and Status

Sula dactylatra Masked Booby — Breeding occurs throughout the year, and was recorded on all surveys except January 1985. There is no clear



seasonal pattern of breeding abundance, although elsewhere in the Swain Reefs there appears to be a slight winter breeding preference.² More than 40 breeding pairs were recorded in November 1992, with a total of 60 adults. A small number of breeding pairs was observed in December 1991, a single nesting pair was observed in December 1992, and approximately 85 nests were counted from aerial photographs taken in March 1996.

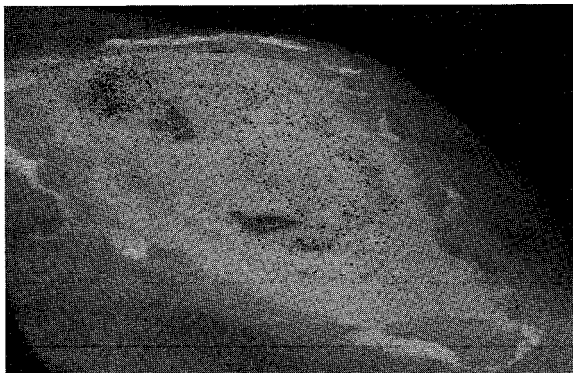
Sula leucogaster Brown Booby — Breeding occurs throughout the year and was recorded on all visits. Possibly a summer breeding preference². About 200 nests recorded in November 1992, with a total of 235 adults, and about 200 nests also counted on aerial photographs taken in March 1996.

Sterna bergii Crested Tern — recorded breeding in November 1976 and November 1992. The maximum numbers were about 600 breeding pairs in 1992, with a total of 1 380 adults, and about 580 nests counted from aerial photographs taken in March 1996.

Factors Affecting Status

The small size of the cay, its exposed location and low elevation (less than one metre above high water) make it susceptible to overwash by the sea during storms. There is currently no stabilizing vegetative cover, and none was recorded during the earlier visits in 1976³ or 1985¹.

The cay is remote and likely to receive less human visitation than the more southerly Swain Reefs' cays, although visitation to the region is increasing. If disturbed by human visitors, the eggs and chicks of breeding seabirds are more susceptible to predation by resident Silver Gulls. This problem is likely to be exacerbated on small cays without vegetation.



- Riptide Cay from the air, 7 March 1996. There were 588 Crested Tern nests in three groups, 85 Masked Booby nests and 200 Brown Booby nests at the time.

Photo: J. Olds

OTHER VERTEBRATES

Loggerhead Turtles *Caretta caretta* and lesser numbers of Green Turtles *Chelonia mydas* nest on the cay in low densities (Limpus, pers. comm.).

Other Seabirds Recorded

<i>Larus novaehollandiae</i>	Silver Gull (max. 15, Mar. 76, Mar. 94).
<i>Sterna dougallii</i>	Roseate Tern (max. 1 500, Mar. 94).
<i>Sterna sumatrana</i>	Black-naped Tern (max. 250, Nov. 76).
<i>Sterna albifrons</i>	Little Tern (180, Apr. 89).
<i>Sterna fuscata</i>	Sooty Tern (1 carcass, Mar. 94).
<i>Anous stolidus</i>	Common Noddy (max. 1 500-2 000, Mar. 94).

Bibliography

1. Flood, P. G. and Heatwole, H. (1986). Coral Cay instability and species-turnover of plants at Swain Reefs, Southern Great Barrier Reef, Australia. *J. Coast Res.* 2(4): 479-496.
2. Heatwole, H., O'Neil, P., Jones, M. and Preker, M. Long-term population trends for seabirds on the Swain Reefs, Great Barrier Reef. In prep.
3. Limpus, C. J. and Lyon, B. J. (1981). Seabirds breeding on the Swain Reefs, Queensland. *Corella* 5: 101-105.

ACKNOWLEDGMENTS

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