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Thomas Cay, Great Barrier Reef, Queensland

Location: 21°39'S., 152°22'E.; centrally situated in the Swain Reefs complex at the southern end of the Great Barrier Reef. The Great Barrier Reef Marine Park Authority reef identification code is 21-497. The nearest mainland is 190 km west-south-west at Perforated Point and the nearest town is 235 km south-west at Yeppoon, Oueensland.

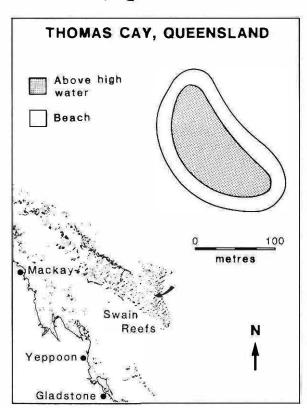
Status: Crown Land; Queensland Fauna Sanctuary.

Other Names: West Riversong Cay, Twin Cay.

Description: 1 ha; 170 m by 70 m, with an elevation of less than 2 m (measurements at high water). This sand cay is sited at the western side of a rounded triangular platform reef of 1 km diameter. Changes in the size and shape of the cay over 20 years are described by Flood and Heatwole². Only about 12% of the island (above high water, 1984) still covers an area on the reef that was previously covered in 1964. Grass and herbs were present in 1960 and in 1976 but these disappeared prior to 1980. The cay has remained bare of vegetation since².

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

Ornithological History: Gillett and McNeill³ described the cay on 1 November, 1960 at the same time recording the presence of two species of breeding and three species of non-breeding seabirds. On 7 November 1976 Limpus and Lyon⁴ reported eight species of seabirds two of which were breeding. Costello¹ observed small numbers of nesting Brown and Masked Boobies on 6 April 1977. Moverley⁵ described winter bird populations in July 1983 and July 1984 including four species of breeding and three species of non-breeding seabirds. P. Reid visited on 21 January 1984 and S. Domm visited on 20 November 1988. The present authors surveyed the birds on 25 January 1985 (MJ), 19 July 1985 (MJ), 17

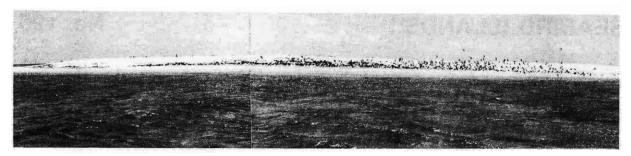


February 1986 (MJ & TW), 6 April 1986 (TW), 22 July 1987 (MJ & FS) and 27 January 1988 (MJ & FS).

Breeding Seabirds and Status

Sula dactylatra Masked Booby — Breeding occurs throughout the year and was recorded on all visits except for November 1988. There is no clear seasonal pattern of breeding abundance. The maximum of 25 breeding pairs was present in April 1986.

Sula leucogaster Brown Booby — Breeding occurs throughout the year and was recorded on all visits except for July 1987. Summer breeding numbers are much higher than in winter. The maximum was 95 nesting pairs in February 1986.



Seabirds on beach of Thomas Cay, April 1986.

Photo: T. A. Walker,

Larus novaehollandiae Silver Gull — ●ne or two pairs were nesting during all July visits and in April 1986. From two to 26 gulls were always present.

Sterna bergii Crested Tern — Breeding was recorded in July of 1983, 1984 and 1987, and in January 1985 and 1988. The maximum was 312 nesting pairs in 1985 (total of 2 100 adults).

Sterna bengalensis Lesser Crested Tern — The only breeding record is of 163 pairs in July 1987.

Factors Affecting Status

The surface of the cay is less than 2 m above high water and is susceptible to overwash and erosion by the sea during storms. Seawater overwash may be partly responsible for the absence of vegetation.

Gulls predate unattended eggs of the other species and their activity increases when people visit the island. Human visitation to the cay is low but is becoming more frequent. Breeding birds also suffer disturbance from nesting turtles in summer.

OTHER VERTEBRATES

Loggerhead Turtles Caretta caretta and a few Green Turtles Chelonia mydas nest.

Other Seabirds Recorded

Sterna hirundo ⁵	Common Tern
Sterna dougallii	Roseate Tern (max. 6 000,
	17 Feb. 86)
Sterna sumatrana	Black-naped Tern
Anous stolidus	Common Noddy (4 000-6 000,
	17 Feb. 86)
Anous minutus	Black Noddy

Banding

Commenced January 1985

Sula dactylatra — 30

Sula leucogaster — 75

Bibliography

- Costello, J. W. (1978). Birds in the Swain Reefs, Queensland. Aust. Bird Watcher 7: 205-208.
- Flood, P. G. and H. Heatwole, (1986). Coral cay instability and species-turnover of plants at Swain Reefs. southern Great Barrier Reef, Australia. J. Coastal. Res. 2: 479-496.
- Gillett, K. and F. McNeill, (1962). The Great Barrier Reef and Adjacent Isles, Coral Press, Sydney.
- 4. Limpus, C. J. and B. J. I.yon, (1981). Seabirds breeding on the Swain Reefs, Queensland. *Corella* 5: 101-105.
- Moverley, J. H. (1985). Winter bird observations for cays in the southern section of the Swain Reefs, Queensland. Sunbird 15: 73-79.

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