

## Rocky Island, Gulf of Carpentaria, Queensland

**Location:** 16°19'S., 139°17'E.; 41 kilometres north-north-east of Mornington Island Settlement, Qld.

**Status:** Crown land; Queensland Fauna Sanctuary.

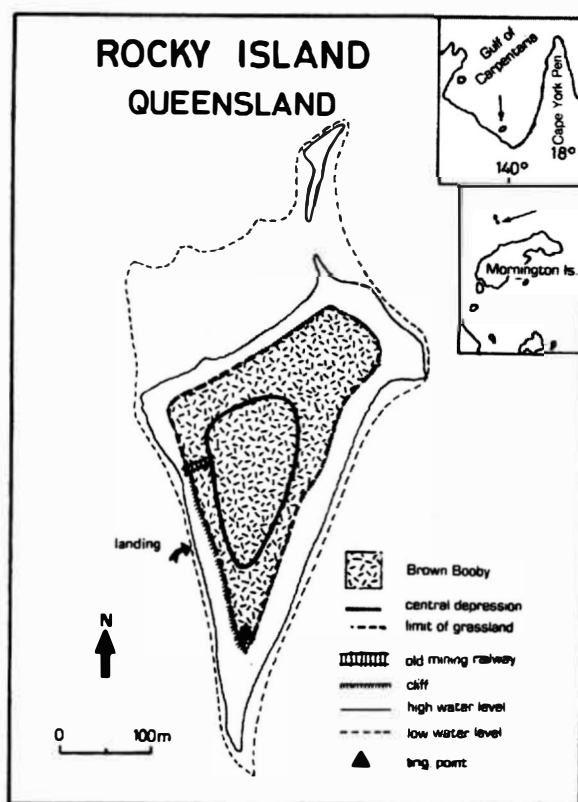
**Description:** 12.5 ha; 560 m by 350 m, rising to 10 m at the most southerly point. A rocky, vegetated plateau fans out to the north of this point in which there is a shallow depression, probably excavated during phosphate mining operations between 1927 and 1929. The western shoreline is a steep shingle beach backed by a broken conglomerate cliff 2 to 5 m high. The eastern and northern beaches are coralline sand and slope down to shallow, rocky reef platforms that extend up to 200 m from the high tide mark. Most of the plateau is covered by a low herb and grassland consisting of *Eleusine indica*, *Dactyloctenium radulans*, *Brachiaria subquadripata*, *Amaranthus interruptus* and *Chamaesyce atoto* with a few plants of *Tribulus terrestris* along the eastern shore and *Sesbania* aff. *aculeata* in the central depression.

**Landing:** Onto the beach on the western shore or, at high tide, onto the northern beaches.

**Ornithological History:** Visited by R. K. Carruthers in 1965 (pers. comm.). No further landings have been recorded until 9-11 July 1982 by S. T. Garnett, G. M. Crowley, N. Goudberg and I. B. Carruthers.

### Breeding Seabirds and Status

*Pelecanus conspicillatus* Australian Pelican—Two addled eggs were found at the northern end of



the island on 10 July 1982 but no live birds were seen. On 9 February 1983, 30 were seen from the air in the central depression; they appeared to be nesting.

*Sula leucogaster* Brown Booby—In 1965 there were between 20 000 and 30 000 birds present (R. K. Carruthers pers. comm.). In 1982 nesting

occurred on almost all areas of consolidated substrate but was concentrated towards the centre of the island. About 2 800 nests were counted with eggs and young at all stages of development. In 270 nests surveyed systematically there were 86 eggs, 78 naked young, 101 downy chicks and 106 juveniles. Sixteen nests contained 1 egg, 26 nests 2 eggs, 1 nest 3 eggs; eighteen nests contained 1 naked young, 2 nests with 2 and 15 nests with 1 and 1 egg. Similar numbers of nesting boobies were seen on aerial surveys in December 1981, February and August 1982 and February 1983.

*Fregata ariel* Least Frigatebird—Reported breeding in 1965 (R. K. Carruthers pers. comm.) but has not bred on the island since a cyclone passed over it in 1974 (C. Felton pers. comm.).

*Sterna anaethetus* Bridled Tern—Reported breeding among rocks on the southern shore in 1965 (R. K. Carruthers pers. comm.) but no evidence in 1982.

*Sterna bergii* Crested Tern—Two addled eggs were found at the base of the northern promontory on 10 July 1982. A pair was observed in display flight, seen from the air, in February 1982 but no colony was visible on the ground.

#### Factors Affecting Status

The northern and eastern shores are major nesting beaches for Green Turtles *Chelonia mydas* (carapace length 105.8 cm  $\pm$  4.9, n=20) which also bask on the beaches and reef flats<sup>1</sup>. Under the rocks of the plateau and within crevasses in the cliff live large numbers of rats *Rattus rattus*, apparently originating from the miners. Rats may have caused the disappearance of Bridled Terns but as the rats have now been established for over 50 years, they are unlikely to affect the status of the remaining breeding seabirds. The island provides shelter for fishing boats and the surrounding waters are likely to become increasingly popular for game fishing, but visits ashore are currently infrequent. Visits from Mornington Island to collect turtles are infrequent. In recent years cyclones have undoubtedly caused the greatest changes in status.

#### OTHER VERTEBRATES

The gecko *Heteronotia binoei* and an undescribed legless lizard *Lerista* aff. *orientalis* occur among the rocks.



• Rocky Island from the air.

Photo: S. T. Garnett

#### Other Seabirds Recorded

<i>Egretta sacra</i>	Eastern Reef Egret
<i>Larus novaehollandiae</i>	Silver Gull
<i>Sterna bengalensis</i>	Lesser Crested Tern

#### Banding

*Sula leucogaster*—527 chicks, 86 juveniles, 47 immatures (11 July 82). Two recoveries (immatures when banded) 400 km NW (30 mths) and 380 km NW (17 mths).

#### Bibliography

- Garnett, S. T., G. M. Crowley and N. Goudberg (1985). Observations of non-nesting emergence of Green Turtles in the Gulf of Carpentaria. *Copeia* 1985: 262-264.

#### Acknowledgements

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