

## SEABIRD ISLANDS

No. 199

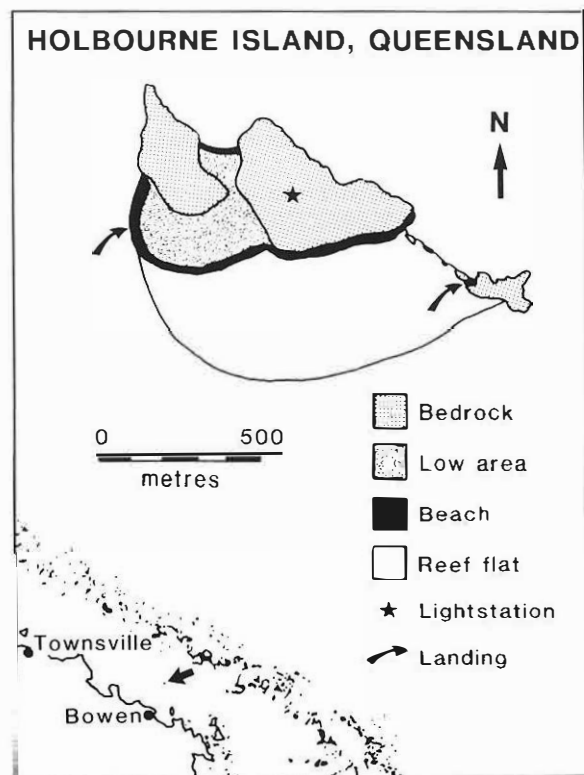
## Holbourne Island, Great Barrier Reef, Queensland

**Location:** 19°44'S., 148°22'E.; an isolated island in the lagoon of the central Great Barrier Reef, 33 kilometres north-north-east of Bowen, Queensland.

**Status:** Queensland National Park, with a 0.16 ha Commonwealth Lightstation Reserve.

**Description:** The main island is 29 ha in area and about 1 km in length. It consists of two granite outcrops with ridged low areas between and to the south-west. Soil (slope wash) deposits occur around the base of the outcrops but most of the low area is calcareous and consists of raised phosphatic beach rock, coral shingle and sand. Sand and boulder beaches are present. An automatic lightstation is present on the higher eastern peak which rises to 111 m.

To the south of the island there is a well-developed fringing reef up to 500 m wide. The reef connects the island at the south-east to vegetated rocks with an area of 2.5 ha. The geomorphology has been detailed<sup>2,3,4,5</sup>.



Over 90 species of plants occur. Most of the island is clothed with blady grass *Imperata cylindrica* var. *major* and there is *Eucalyptus papuana* woodland on the western hill. Weeds, shrubs, low trees and thickets of *Ficus* (three species) and other woody species are scattered over the island. Stunted *Pisonia grandis* trees (2–5 m high) dominate a strip behind the western beach and are scattered elsewhere on the calcareous lowlands. The south-western flat has a central grove of mixed trees to 9 m height surrounding a mine gully. *Casuarina* is notably absent.

The south-eastern nesting rocks are vegetated with *Portulaca oleracea*, *Canavalia rosea*, *Boerhavia tetrandra*, *Tribulus cistoides*, *Sesuvium portulacastrum*, *Ipomea pes-caprae*, *Amaranthus viridis*, *Passiflora foetida*, *Tridax procumbens* and grasses including *Eleusine indica*, *Setaria australiensis* and *Lepturus repens*. Stunted *Ficus platypoda* trees and a single *Pisonia grandis* shrub are present at the western end.

**Landing:** Onto the main island at the western or northern beach. Onto the south-eastern rocks at the western end across the reef at high tide or by walking from the island at low tide.

**Ornithological History:** W. A. Haswell visited in August or September 1879 and was “specially impressed by the great numbers of birds flying over and making a great din”<sup>4</sup>. Saint-Smith<sup>5</sup> visited in 1918 and stated “Except during the breeding season, when they migrate to some unknown destination, the island is still the nightly haunt of flocks of sea birds, which feed on the Great Barrier Reef in the day time.” Marshall *et al.*<sup>4</sup> visited in September 1923 and noted “very few birds on the island”. Edgell reported a Least Frigatebird *Fregata ariel* in flight in 1926<sup>1</sup>. Wheeler and Watson reported Silver Gulls nesting in 1960<sup>7</sup>. T. A. Walker surveyed birds on 9 November 1985, 24 December 1985, 25–26 December 1986<sup>6</sup>, 13–14 June 1987 and 23 July 1988.

### Breeding Seabirds and Status

*Larus novaehollandiae* Silver Gull — No details are given for the breeding report in 1960<sup>7</sup>. In June 1987 the south-eastern rocks had at least 44 occupied nests (mainly eggs, few chicks) and 45 empty nests (old and new). Most nests were spread over the western end but a few were on the eastern point. Fewer nests were present in July 1988. From 70–90 adults were present during winter visits. Gulls were rare or absent in summer.

*Sterna sumatrana* Black-naped Tern — Nesting occurred on bare rock or sand at the western side of the south-eastern rocks. In December 1985 there were 260–300 birds and at least 75 nests visible with eggs and small chicks<sup>6</sup>. In December 1986 there were 300 birds and at least 18 nests with eggs and small chicks.

*Sterna anaethetus* Bridled Tern — Nesting occurs on the western half of the south-eastern rocks in summer. In late 1985 there were over 700 birds and in late 1986 there were 300 present. In both seasons only a few nests (eggs) were located. In June 1987 two birds were seen nesting, one on the northern and one on the western face of the rocks amongst nesting gulls. A breeding bird was observed in July 1988.

*Sterna bergii* Crested Tern — In December 1985 a recently broken egg was present on the south-eastern rocks. Up to 25 birds were present on most visits.

### Factors Affecting Status

Tern remains were present at feeding stations of White-bellied Sea-Eagles *Haliaeetus leucogaster*. Ospreys *Pandion haliaetus* and Brown Falcons *Falco berigora* and also present. Some tern nesting occurs close to high water where it can be disrupted by rough seas.

Part of the south-western lowland was mined for phosphate rock early this century<sup>4,5</sup>. It is not known what species were responsible for the guano deposits but seabird colonies may have deserted the island as a result of mining operations. The great numbers of birds noted in 1879<sup>4</sup> are now gone. A cover of white excrement is present on the south-eastern rocks and on the eastern cliff face of the main island where at least 2 000 Brown Boobies roost at night (winter observations). These boobies may be descendants of a large guano-producing colony.



● Holbourne Island (looking west) with south-eastern rocks at left.

Photo: T. A. Walker

### Other Seabirds Recorded

<i>Sula leucogaster</i>	Brown Booby (>2 000)
<i>Ardea novaehollandiae</i>	White-faced Heron (rare)
<i>Egretta sacra</i>	Eastern Reef Egret (probably nest)
<i>Haematopus longirostris</i>	Pied Oystercatcher
<i>Haematopus fuliginosus</i>	Sooty Oystercatcher
<i>Sterna dougalli</i>	Roseate Tern (possibly nest)
<i>Anous stolidus</i>	Common Noddy (270 on 26 dec. 85)

### Banding

Nil.

### Bibliography

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