

SEABIRD ISLANDS

No. 212

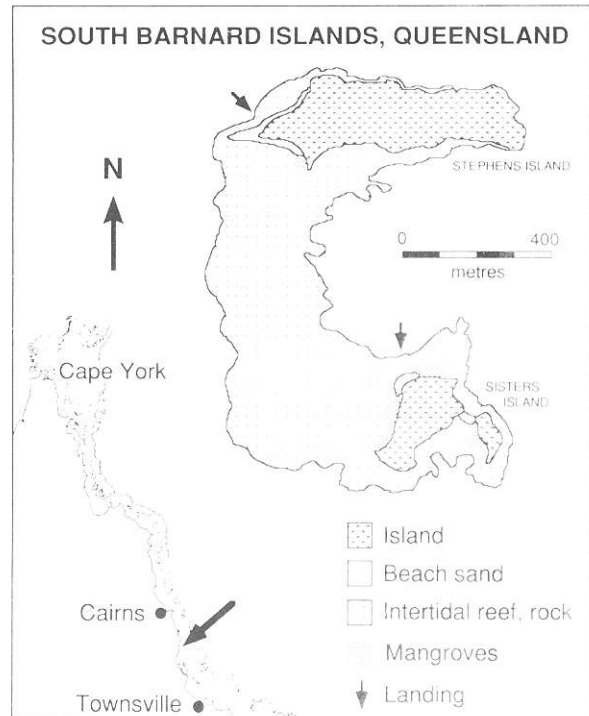
South Barnard Islands, Great Barrier Reef, Queensland

Location: 17°44'S, 146°10'E; six kilometres east of the north Queensland coast and 26 km south-east of Innisfail.

Status: National Park.

Other Names: The South Barnard Group consists of Sisters Island and Stephens Island.

Description: SISTERS ISLAND, 2.5 ha, excluding a small islet to the east, is 300 m long, about 150 m at the widest and rises to 20 m. The main island has a dense low rainforest with narrow mangrove margins in places. The eastern islet, 0.3 ha, is rocky and is separated by 40 m of tidal sand and rock. This islet is the nesting site for four species of terns and is vegetated mainly with the grasses *Sporobolus virginicus*, *Clerodendrum inerme*, *Ipomea pes-capre* and *Tridax procumbens* and abundant and temporary pools support *Cyperus* reeds. A grove of *Pandanus tectorius* and *Terminalia* trees is present and *Pemphis acidula* trees separate the beach from low mangroves on the western side. Other species present in 1989 were *Morinda citrifolia* (<1 m), *Cocos nucifera* (a seedling), *Lepturus repens*, *Dianella caerulea*, *Crotalaria* sp., *Passiflora foetida*, *Salvia plebeia*, *Euphorbia hirta*, *Sesuvium portulacastrum*, *Emilia sonchifolia*, *Crinum pedunculatum*, *Abutilon asiaticum*, *Imperata cylindrica*, *Vitex* sp., *Scaevola sericea*, *Colubrina asiatica*, *Commelina* sp., *Portulaca oleracea*, *P. australis*, *Sonchus oleraceus*, *Guettardia speciosa*, *Sophora tomentosa*, *Boerhavia* sp., *Eleusine indica*, *Calophyllum inophyllum* (2 seedlings), four unidentified species of herbs and an unidentified grass. Bridled Terns nest on the main island among fringe vegetation which includes *Ochrosia elliptica*, *Caesalpinia*



bonduc, *Thespesia populnea*, *Erythrina* sp., *Wollastonia biflora*, *Hibiscus tiliaceus*, *Asplenium australasicum*, *Terminalia* sp., *Casuarina equisetifolia*, *Cordia subcordata*, *Ipomea indica*, *Solanum torvum*, *Pleomele angustifolia*, *Vigna marina*, *Lantana camara*, *Schefflera acinophylla*, *Canavalia rosea*, *Diospyros* sp., *Plumbago zeylanica*, *Ficus opposita*, *Ficus* spp., *Pisonia aculeata*, *Ipomea cairica*, *Thaurea involuta*, *Hoya australis*, *Ipomea macrantha*, *Platyceerium* sp., *Eucalyptus* sp., *Discorea alata* and species already listed for the eastern islet.

STEPHENS ISLAND, 12 ha, is 630 m long, 250 m wide and rises to 46 m. It is surrounded by cliffs except for a low sand area at the western end. The vegetation resembles that at Sisters Island but the forest is larger and more diverse. *Tournefortia argentea*, *Premna serratifolia*, *Achyranthes aspera*, *Xanthium spinosum* and *Cassytha* sp. were present on the strand at Stephens Island but not at Sisters Island.

Landing: At the north-western sand beach of Sisters Island at high tide; at the western sand beach of Stephens Island at mid to high tide. The islands are connected and partly surrounded by drying coral reef at low tide.

Ornithological History: No seabirds were mentioned in bird reports from June 1848 by MacGillivray² or from August 1875 by Masters³. Lesser Crested Tern nesting is reported by Lavery and Grimes¹ but details are not given. D. Cameron visited in early December of 1966, 1968, 1970, 1972 and in October 1973. A. Oldroyd visited 17 times between 1985 and 1989. T. Walker visited five times between 1987 and 1989. Other bird observations were reported by John Cornelius and marine park staff during 1985 and 1986.

Breeding Seabirds and Status

Haematopus fuliginosus Sooty Oystercatcher — A pair were nesting on the eastern islet of Sisters Island in September 1989 but the nest was not located. One or two pairs were usually present at Sisters Island.

Sterna dougallii Roseate Tern — Nesting occurs annually in November or December on sand or bare rock on the eastern Sisters Islet. The highest count was 120 nests containing 1–2 eggs, plus over 700 adults on 15 November 1985. Nests are often with those of Black-naped Terns and partly concealed among *Ipomea* vine or *Sesuvium*. Birds were absent from March to October.

Sterna sumatrana Black-naped Tern — Nesting occurs annually in summer on the eastern Sisters islet. Numbers vary widely from year to year but up to 80 nests containing 1–3 eggs have been recorded. Nests are scrapes, spread out in loose dispersed colonies on the higher rock, on the beach or in the grass. In some seasons 1 000 to 1 500 transient birds were observed. Birds were absent from March to October.

Sterna anaethetus Bridled Tern — Nesting occurs annually beneath vegetation and in some cases on exposed rock from mid-October to January. On 14 October 1989 none was present at the islands or nearby at sea during daylight but small numbers started to arrive after 1930 h and occupied sites beneath the grass and shrubs; by 11 November 1989 large numbers of eggs were being incubated. Nesting occurs primarily around the margins of the islands on cliffs and under *Imperata* grass but many eggs are laid on the ground deep inside the forest. Numbers of nests are impossible to count but over 2 000 adults were estimated at both Sisters and Stephens Islands with the latter potentially as high as 4 000. The last birds leave the area in March.

Sterna albifrons Little Tern — A pair nested on the western beach at Stephens Island in October 1973 but this species has been recorded rarely since then.

Sterna bergii Crested Tern — Small nesting colonies, perhaps 20 or so pairs, occurred in December of 1966 and 1970 on the eastern Sisters islet. Nesting was not confirmed in the 1980's although up to 350 birds were present in summer. A few birds were present throughout the year.

Sterna bengalensis Lesser Crested Tern — Summer nesting occurred in most years but colony size varied from a few pairs to many hundreds. Up to 2 000 birds were estimated present in December 1986 but the maximum nest count was 850 with eggs in December 1985. Birds were not seen from February to September.



• Eastern nesting islet of Sisters Island.

Photo: T. A. Walker

Factors Affecting Status

Terns probably nested on the western beach of Stephens Island before it became a popular camping and picnic site. Sisters Island is also visited for picnics so human disturbance of nesting terns could be significant. A beche-de-mer fishing settlement was present in the mid 1800s with many buildings for the Aboriginal work force. Bird hunting and egging was regular until the settlement was lost to a cyclone in 1890.

High tides flooded the nests of some Roseate Terns and Lesser Crested Terns in recent years and some Black-naped Tern nests were drowned by rainwater in rock pools. There is evidence of predation on Bridled Terns by White-bellied Sea-Eagles *Haliaeetus leucogaster*. Gulls were not observed at the isles but the Orange-footed Scrubfowl *Megapodius reinwardt* might take eggs of Bridled Terns.

Other Seabirds Recorded

<i>Sula leucogaster</i>	Brown Booby (1 dead)
<i>Phalacrocorax varius</i>	Pied Cormorant (2-3 often on rocks)
<i>Fregata ariel</i>	Least Frigatebird (rare above isles)
<i>Egretta sacra</i>	Eastern Reef Egret (1-10 common)
<i>Haematopus longirostris</i>	Pied Oystercatcher (rare)
<i>Sterna fuscata</i>	Sooty Tern (rare)
<i>Anous minutus</i>	Black Noddy (seen once)

Acknowledgments

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