

# SEABIRD ISLANDS

# No. 220

## Tryon Island, Great Barrier Reef, Queensland

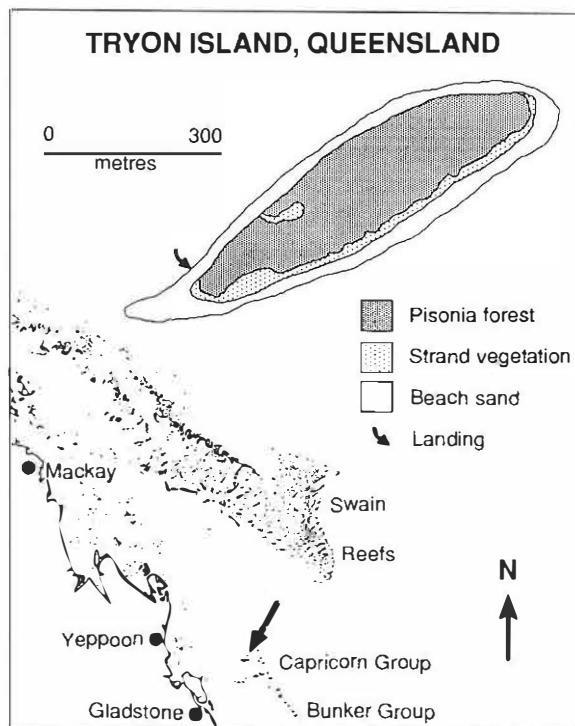
**Location:** 23°15'S, 151°47'E; 83 kilometres north-east of Gladstone, Queensland. It is in the Capricorn Group of islands.

**Status:** Declared a National Park in 1982.

**Description:** 10 ha; 725 m × 170 m (measured above high tide). An elongated coral cay aligned in a south-west to north-east direction. An 8 m high (above high tide) dune rises along the southern side. Changes in the shape of the cay since 1969 are documented by Flood<sup>6</sup>. The vegetation is described by Cribb<sup>7</sup>. Most of the cay is covered by a *Pisonia grandis* forest. Other trees present are *Ficus obliqua*, *F. opposita*, *Celtis paniculata*, *Pipturus argentea*, *Cordia subcordata*, *Casuarina equisetifolia*, *Tournefortia argentea*, *Pandanus tectorius* and *Scaevola sericea*. *Wallastonia biflora* and *Abutilon asiaticum* dominate clearings in the forest and among trees in the strand zone. A total of 47 plant species have been recorded<sup>3,5,8</sup>.

**Landing:** Access to the island is at high tide across the reef flat, preferably at the western end.

**Ornithological History:** Birds were recorded by the following visitors: Campbell and White<sup>2</sup> and Barrett<sup>1</sup> in October 1910; Gilbert<sup>7</sup> and MacGillivray<sup>13</sup> in November 1925; MacGillivray<sup>14</sup> and Napier<sup>16</sup> in November 1927; MacGillivray<sup>15</sup> in May 1930 and December 1931 (unpublished notes); Cooper<sup>4</sup> in December 1946; Jahnke<sup>11</sup> in August 1977 and McLean in July 1978<sup>11</sup>. M. Vanek studied shearwaters in the early 1980s. Hulsman surveyed seabirds in December 1982, January 1983, December 1983 and February 1984. S. G. Lane surveyed birds in January 1984 and banded seabirds in December 1986. S. Domm recorded birds on seven occasions between 16 January 1983 and 21 February 1985. T. Walker recorded birds on 10 March 1983, on seven occasions between 4 January 1984 and 2 December 1984, and on nine occasions between 15 December 1985 and 21



March 1987. D. Paton and other Marine Park staff recorded birds on several occasions between 1987 and 1990.

### Breeding Seabirds and Status

*Puffinus pacificus* Wedge-tailed Shearwater — Adults arrive at the cay and commence nesting in October. Last fledglings depart in May or June. Burrows occur everywhere except where the ground has been compacted by campers or excavated by turtles. There were an estimated 11 600 and 7 100 breeding pairs in February 1983 and February 1984 respectively<sup>9,10</sup>.

*Egretta sacra* Eastern Reef Egret — Breeding occurred in 1910<sup>1,2</sup> and 1925<sup>7,13</sup>. Nesting has been recorded from August to December. Up to 90

egrets have been counted but numbers of nests are low. About eight nests were estimated in 1977<sup>11</sup>. Nests are in trees or on the ground under *Pandanus* roots.

*Haematopus fuliginosus* Sooty Oystercatcher — Recorded nesting in 1927<sup>14</sup>. There are no other breeding records and sightings of birds are few.

*Larus novaehollandiae* Silver Gull — Nesting was reported in 1925<sup>7,13</sup> and 1927<sup>14</sup>. In recent years nesting has been recorded from October to March<sup>17</sup>. There were 54 nests on the southern dune on 31 December 1983<sup>10</sup>. In February 1987, numbers of gulls ranged from 3 to 120. Nests were placed on the southern dune.

*Sterna dougallii* Roseate Tern — Small nesting colonies were noted in December 1931 and in February 1989 but breeding is rare. Birds have not been recorded in winter. A report by Napier<sup>16</sup> can be misconstrued<sup>12</sup> as describing nesting of Black-naped and Roseate Terns in 1927. MacGillivray<sup>14</sup> was present with Napier and did not record nesting by either species.

*Sterna sumatrana* Black-naped Tern — Up to 200 adult or immature birds have often been recorded on the western sand spit but there are few records of nesting. About 20 nests were present in February 1983<sup>9</sup> and in January 1984<sup>10</sup>, on the north-western edge of the forest (under trees) atop a metre-high cliff of cay rock exposed by beach erosion.

*Sterna anaethetus* Bridled Tern — Birds arrive to breed annually in October or November and last fledglings leave in early March. Prior to the 1980s breeding was recorded in 1925<sup>7,13</sup> and 1927<sup>14</sup> but birds were surprisingly absent in December 1946<sup>4</sup>. Nests occur under *Wollastonia biflora* at the north-eastern end of the island, in the strand forest along the south-eastern side of and in the grass and shrubs at the south-western end of the island. There were an estimated 200 pairs breeding during February 1983 and February 1984<sup>10</sup>.

*Sterna bergii* Crested Tern — A small colony was noted in December 1931. There are no other breeding records although the species is common throughout the year.

*Anous minutus* Black Noddy — MacGillivray<sup>14</sup> included Tryon as a nesting island in 1927. This may have been an error as no other visitors before or after have found signs of nesting. The presence of phosphate rock prompted Cribb<sup>5</sup> to suggest that noddies might have been responsible for guano deposition in the past. Up to 90 have been roosting in recent years.

### Factors Affecting Status

Extensively used camping sites on the north-western side of the cay have become alienated to shearwaters and terns. This area is the only suitable nesting site where Black-naped Tern colonies are protected from turtle trampling by a rock ledge. The outer zone of most of the cay is heavily disturbed by nesting turtles. Apart from Bridled Terns there are few records of ground nesting tern colonies and these had low reproductive success following disturbance by campers. The cay must be considered not well suited to nesting of Black-naped, Roseate or Crested Terns. Gulls and Bridled Terns nested amongst vegetation further away from the beach and turtle nesting.

The presence of campers is probably a deterrent to nesting by oystercatchers while some mortality of shearwaters results from human trampling of burrows. Numbers of gulls are influenced by the activities of people in making food scraps available<sup>18</sup>.

In areas covered by *Wollastonia* and other shrubbery the density of nesting Bridled Terns may be limited by interference from nocturnal



• Tryon Island from the air (looking south).

Photo: T. A. Walker

activities of shearwaters. White-bellied Sea-Eagles *Haliaeetus leucogaster* prey on shearwaters and to a lesser extent on terns and gulls.

### Other Seabirds Recorded

<i>Sula sula</i>	Red-footed Booby (1 record)
<i>Phalacrocorax sulcirostris</i>	Little Black Cormorant (1 record)
<i>Phalacrocorax melanoleucos</i>	Little Pied Cormorant (uncommon)
<i>Haematopus longirostris</i>	Pied Oystercatcher (max. 2)
<i>Sterna albirostris</i>	Little Tern (max. 58)
<i>Sterna bengalensis</i>	Lesser Crested Tern (max. 12)

### Banding

Two visits: 10–12 January 1984, 14 December 1986.

*Puffinus pacificus* — 14 adults.

*Sterna sumatrana* — 3 chicks.

*Sterna anaethetus* — 5 chicks.

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