

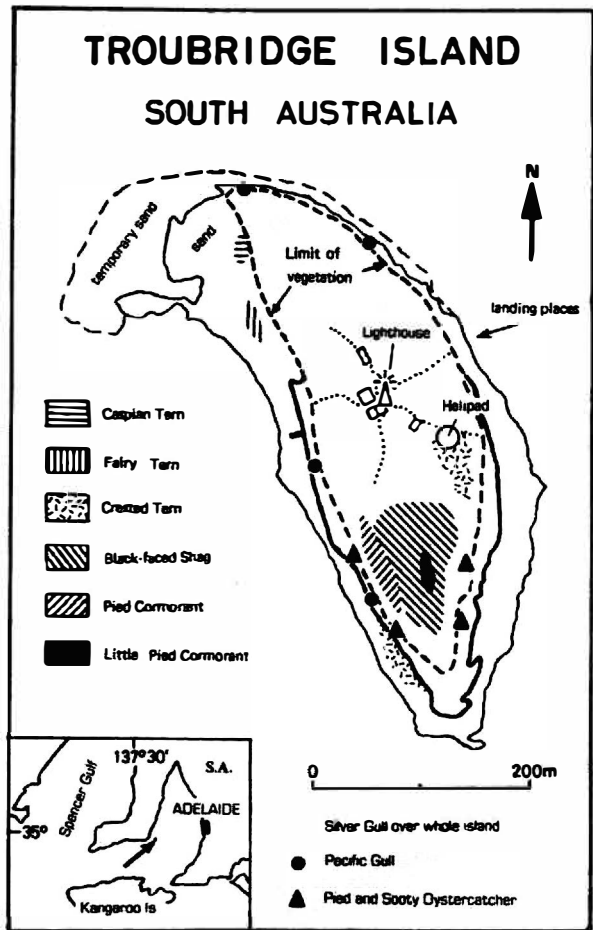
**SEABIRD ISLANDS**

**Troubridge Island, South Australia**

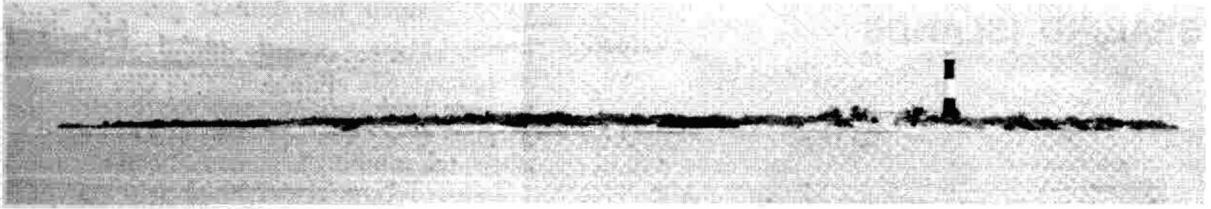
**Location:** 35°07'S., 137°49'E.; six kilometres off-shore in St Vincent Gulf, Yorke Peninsula, S.A.  
**Status:** Crown Land; National Parks & Wildlife Service Conservation Park.

**Description:** 8 ha (1985); some 575 m long by 150 m wide, rising to 12 m high. The island slopes gently from west to east with a pronounced drop westward from the crest near the western side. When discovered and named by Matthew Flinders in 1803, apparently Troubridge Island was an unvegetated shoal. Over the years it has developed into an island composed of sand and decomposed seaweeds on which vegetation has taken hold. On the eastern and north-eastern side, where erosion by wave action is taking place, layers of decaying seaweeds are visible as strata in the sandbank. At present the island is slowly moving, estimated at 0.3 m per year, from east to west and north-west (R. Symons—pers. comm.). Extensive sand flats are exposed at low water, increasing the area to about 32 ha.

The island was only a small sandbank in February 1856 when a lighthouse was commissioned<sup>8</sup>. Near the lighthouse there are two substantial cottages, one a double unit and one a single, each with a large rainwater tank. About 40 m south a powerhouse contains diesel-operated electricity equipment, and beyond that is a helipad. A workshop building is situated about 40 m to the north of the cottages for the lightkeepers,



which were first built on piles to escape inundation by high tides and storms. In 1916 White<sup>9</sup> mentioned that the island was "half a mile long"



• *Troubridge Island (looking west).*

(c804 m), and in the same year Morgan<sup>4</sup> recorded it to be "833 x 292 yards" (761 m x 267 m).

Vegetation on Troubridge Island consists mainly of a number of coastal sandhill species, the most dominant being African Boxthorn *Lycium ferocissimum* which makes up the greater part of the ground cover. Nitre Bush *Nitraria billardierei* and Grey Saltbush. *Atriplex cinerea* are well represented. Other species present include Boobyalla *Myporum insulare*, Angular Pig-face *Carpobrotus rossei*, a *Rhagodia* sp. and Spiny Rolling Grass *Spinifex hirsuta*. Exotics include Tamarisk *Tamarisk* sp., *Albizzia* sp., and garden flowers; a white flowering daisy is quite widespread away from the cottages. The present vegetation, particularly some of the boxthorns in a partly buried state, seem to indicate that the level of the island is continuing to rise as a result of windblown sand being caught and held among the growing plants.

**Landing:** Onto the sandflats on the eastern side in calm weather, then wading ashore. Local knowledge is helpful to negotiate the shallow waters.

**Ornithological History:** The earliest visit by ornithologists appears to be that by A. M. Morgan<sup>4</sup> and S. A. White<sup>5</sup> who spent a few hours on each occasion on the island on 8 January and 28 April 1916. Although White<sup>5</sup> recorded seeing Black-faced Shags, Pied Cormorants, Pied Oystercatchers, "many species of Terns and Dotterels and other sea birds" he gave no record of any species breeding. However, he mentioned that many Crested Terns in immature plumage were seen. Over 40 years had elapsed before the next ornithological visit. Recorded visits since then have been as follows. C. L. McPherson (6-9 May

1975); G. F. van Tets (15 January 1972); D. H. cote (3 weeks in December 1961); M. Bonnin (4 January 1965); M. H. Waterman (about ten visits between December 1966 and December 1975); C. F. van Tets (15 January 1972); D. H. Close (20 December 1972); D. J. Vincent (March 1977); D. J. Vincent, P. Vincent and J. Cox (December 1979); L. Underwood (20 February 1981); A. C. Robinson (25 September 1981); K. M. Stephens (27 May 1982); R. Symons (took up residence 22 January 1983); K. Treloar (6 April 1983); A. F. C. Lashmar, J. F. Berggy and C. I. Baxter (11-13 February 1985). M. H. Waterman made a further visit 26-29 December 1985.

#### Breeding Seabirds and Status

*Eudyptula minor* Little Penguin — Breeds in numbers with burrows all over the island, particularly under boxthorns. Probably present to breed from July to December. On 25 September 1981, Robinson<sup>7</sup> found "nesting burrows over the whole vegetated portion of the island" and estimated a density of one burrow/25 m<sup>2</sup> over 5.25 ha, giving 2 100 burrows. In February 1985 a few late moulting birds were present in burrows. Many young were present under boxthorn bushes on 28 December 1985 (M. H. Waterman pers. comm.).

*Leucocarbo fuscescens* Black-faced Shag — Robinson<sup>7</sup> reported a large rookery with a density of one nest/25 m<sup>2</sup> over 1.5 ha, therefore about 600 breeding pairs, in a depression on the south-eastern end of the island; the nests were unoccupied during his visit (September 1981). This species presumably nests in mid-winter as in its other island colonies<sup>1</sup>. In February 1985, 4 000+ birds were roosting daily on the north-western sandbank at low tide.

*Phalacrocorax varius* Pied Cormorant — Breeds chiefly on the southern part of the island from



• Troubridge Island from the air (looking north); the mainland is in the background.

Photo: K. Robinson

February to May with nests mainly on boxthorn bushes. They sometimes nest on the northern end<sup>4</sup>. On 6 April 1983, L. Underwood (pers. comm.) recorded 100+ nests with eggs and young to about 0.75 grown. On 12 February 1985 about 200+ pairs had just commenced nesting.

*Phalacrocorax melanoleucos* Little Pied Cormorant — Recorded breeding in December 1972<sup>1</sup>. On 6 April 1983, L. Underwood (pers. comm.) noted two nests among those of Pied Cormorants, but the contents were not recorded. Breeding in December and January 1984-1985 in a depression on the south-eastern end of the island; usually about 25-30 pairs (R. Symons—pers. comm.). One runner, not fully fledged was found on 13 February 1985.

*Haematopus longirostris* Pied Oystercatcher — About 10 pairs nest along the south-eastern and south-western sides of the island from September to January, with nests interspersed with those of the Sooty Oystercatcher. (R. Symons—pers. comm.).

*Haematopus fuliginosus* Sooty Oystercatcher — About 10 pairs breed from late-September to January, with nests interspersed among those of the Pied Oystercatcher, along the south-eastern and south-western sides of the island (R. Symons—pers. comm.).

*Larus novaehollandiae* Silver Gull — Robinson<sup>7</sup> in 1981 reported "A major breeding colony of this species with nests on the ground virtually all over the entire island but with a higher nest density round the edges of the vegetated area. Majority of nests in September contained eggs or newly hatched chicks. Nest density of the order of one/2m<sup>2</sup> over a third of the island and one/25m<sup>2</sup> over the remainder, giving a total population of approximately 10 000 pairs." In May 1982, nests were "numerous on the ground practically over the whole island"<sup>8</sup>. On 3 January 1958, most of the young had left, although three nests were noted, each with a young chick<sup>4</sup>. This species apparently breeds on Troubridge Island from May to January according to seasonal conditions.

*Larus pacificus* Pacific Gull—Four, occasionally five, pairs nest at scattered points on the perimeter of the island from September to November. The same general nest areas are used each year, usually with a clutch of two eggs (R. Symons—pers. comm.).

*Hydroprogne caspia* Caspian Tern — About twelve pairs were breeding on the sandspit at the north-western corner of the island on 20 December 1972<sup>1</sup>. Two large downy runners were present in February 1985. On 27 December 1985 about 60 pairs were breeding on the sandspit on the north-western corner, with nests containing young or eggs (M. H. Waterman—pers. comm.).

*Sterna nereis* Fairy Tern — About 40 pairs usually nest on banks of seaweed on the north-western side of the island from mid-December to end of January (R. Symons—pers. comm.). A small colony of about 20 pairs were starting to nest about 135 m west of the Caspian Tern colony on 27 December 1985 (M. H. Waterman—pers. comm.).

*Sternis bergii* Crested Tern — Breeds most years, with up to about 1 500 pairs nesting from November to February (D. Vincent—pers. comm.), mainly on the south-western side of the island just above normal high water mark. Two colonies, one of about 1 900 and the other of about 200 breeding pairs were nesting on the eastern and western sides respectively on 27 December 1985, the colonies contained chicks in an advan-

ced stage of development, those in the smaller colony being about two weeks in advance of the ones in the larger colony (M. H. Waterman pers. comm.).

### Factors Affecting Status

Access to the island is relatively easy so fishermen and boating parties visit the island. Some human interference was probable before the appointment of a resident caretaker in January 1983. The island is susceptible to damage and change by storms and abnormally high tides.

### OTHER VERTEBRATES

Marbled Gecko *Phyllodactylus marmoratus* and Stump-tailed Skink *Trachidosaurus rugosus* recorded. The Australian Sea-lion *Neophoca cinerea* is an occasional visitor.

### Other Seabirds Recorded

<i>Pelecanus conspicillatus</i>	Australian Pelican
<i>Phalacrocorax carbo</i>	Great Cormorant
<i>Cereopsis novaehollandiae</i>	Cape Barren Goose <sup>5</sup>
<i>Sterna anaethetus</i>	Bridled Tern (One recorded, perhaps a vagrant <sup>1</sup> ).

### Banding

Commenced 18 December 1966.

*Eudyptula minor*—290 chicks.

*Leucocarbo fuscescens*—6 adults.

*Hydroprogne caspia*—72 chicks.

*Sterna bergii*—5 416 chicks; recoveries reported widely from northern Spencer Gulf to southern Kangaroo Island, central Victoria and northern New South Wales<sup>1</sup>. One live recapture at banding place on 28 December 1985, 11 years after banding (M. H. Waterman—pers. comm.).

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