

SEABIRD ISLANDS

No. 42

Tollgate Islands, New South Wales

Location: 35°45' S., 150°16' E.; about 8 km south-east of the township of Batemans Bay, N.S.W.

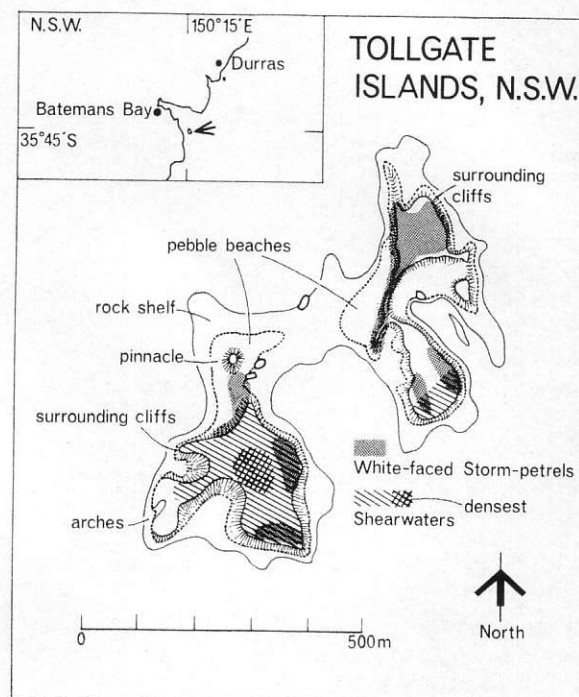
Status: Nature Reserve controlled by the National Parks and Wildlife Service (N.S.W.).

Description: The Tollgates comprise two islets, the northern one being of 12.9 ha; 480 m long and 250 m at the widest point. The southern islet is of 10.4 ha; 480 m long and 200 m across the widest point. At extreme low tide the islets are almost connected by a rocky reef and sand bank.

Structurally the islets are composed of highly folded and eroded lower Ordovician rocks, assigned to the Wadonga formation — consisting mainly of siliceous cherts with some lavas and agglomerates. There is an extensive underwater rock shelf and beach formation on the western sides.

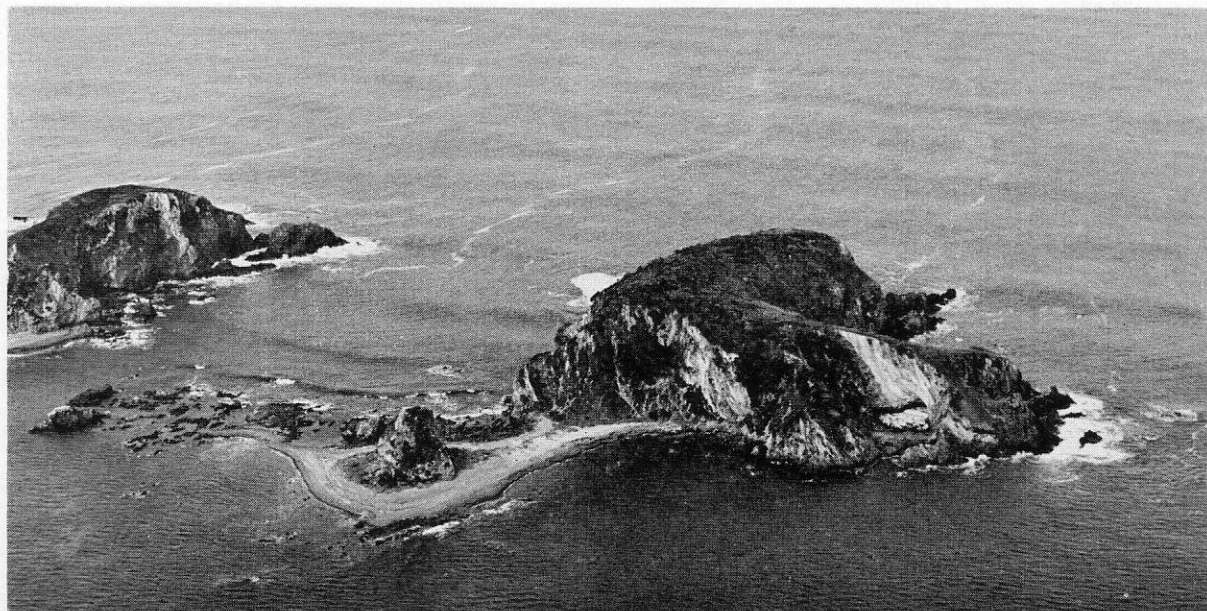
On both islets steep crumbly cliffs rise to plateaux some 50 m above sea-level. The low-land beach areas are bare except in the raised parts at the cliff bases which are sparsely covered with various herbs, including *Tetragonia tetragoniodes*, *Apium* sp., *Commelina cyanea*, *Steptania japonica*, *Polycarpon tetraphyllum*, *Lepidium hyssopifolium*, *Erigeron canadensis*, *Carpobrotus glaucescens* and *Disphyma australe* and various small shrubs including *Atriplex cinerea*, *Solanum nigrum* and *Rhagodia baccata*.

The cliffs and plateau of the northern islet are dominated with a thick growth of the bush *Rhagodia baccata*, but where open spaces occur the main ground cover is *Tetragonia tetragoniodes* and *Carpobrotus glaucescens*. At the southern



end is a thick stand of *Acacia longifolia* var. *sophorae* and along the saddle an isolated occurrence of stunted *Casuarina stricta*.

The steep cliffs of the southern islet are covered with a dense ground cover of *Carpobrotus glaucescens*, *Disphyma australe*, *Tetragonia tetragoniodes* and *Commelina cyanea* together with various bushes including *Acacia longifolia*, *Leucopogon parviflorus*, *Westringia fruticosa*, *Olearia* sp. and thickets of stunted *Ficus rubiginosa*. Much of the vegetation is overgrown with a vine *Ipomoea* sp. About 70 per



● Aerial view of the Tollgate Islands — south islet and part of north islet (looking south-east).

Photo: Ederic Slater

cent of the plateau is covered with a thick growth of *Lomandra longifolia* and the remainder has a ground cover of herbs particularly *Carpobrotus glaucescens*, *Disphyma australe* and *Tetragonia tetragoniodes*, various bushes and odd small trees of *Banksia integrifolia*.

Landing: Landing can be accomplished with little trouble on beaches at the western side of either islet.

Ornithological History: The Islands were visited by A. F. Basset Hull in September 1911, accompanied by Henry Grant and H. Hamilton. Hull³ described the islets and recorded Little Penguins, White-faced Storm-petrels and Wedge-tailed Shearwaters. The Little Penguins were breeding, with eggs and chicks present; the other two species had burrows "in course of preparations". Hull also reported "quite a number of burrows, all untenanted, intermediate in size between those of the two Petrels named". He went on to say: "I am prepared to find that these belong to a

Prion breeding in December." However, this has not eventuated.

In his summary of breeding seabirds of the coastal islands of N.S.W., K. A. Hindwood² listed the three species mentioned by Hull but made no other comment on the islands. It appears that they were not visited again by ornithologists until November and December 1958. At that time S. J. J. F. Davies¹ found Short-tailed Shearwaters nesting on the south islet. The footnote to that paper indicated "the presence of breeding *P. tenuirostris* on the north islet". This resulted from a visit by Hindwood on 4/5 April 1959.

From 1958 onwards, the Tollgates have received many visits from bird banders and other interested ornithologists.

Breeding Seabirds and Status

Eudyptula minor Little Penguin — Occurs in hundreds in the low-lying areas and on all but the more precipitous of the cliffs. The extremes of egg-laying dates have not been accurately



● Aerial view of north islet, Tollgate Islands (looking south-east).

Photo: Ederic Slater

defined but June to September have been recorded. Birds can be found ashore in any month of the year. Estimated up to 5 000 breeding pairs.

Puffinus pacificus Wedge-tailed Shearwater — This species and the other shearwaters breed on the plateaux of both of the islets with the greater numbers concentrated on the southern islet. They also nest on the cliff sides. Present from September to early May; eggs are laid in late November, early December; hatching occurs in mid-January and most chicks depart in April. Estimated 1 200 breeding pairs.

Puffinus griseus Sooty Shearwater — The only breeding evidence was a dead fledgling picked up on the beach below the shearwater colony on the north islet on 8 May 1976. A few probably breed regularly on the islands.

Puffinus tenuirostris Short-tailed Shearwater — This species nests in the same areas as *P. pacificus* but it is much more numerous. The pattern of occurrence and breeding regime is similar. Estimated 6 500 breeding pairs.

Pelagodroma marina White-faced Storm-petrel — This species has been found nesting throughout both islets but large concentrations of nesting

birds occur only on the plateau and cliff-sides of the northern islet. Present from August to early March; eggs are laid in October; hatching occurs in December and chicks fledge during February. Estimated 7 000 to 8 000 breeding pairs.

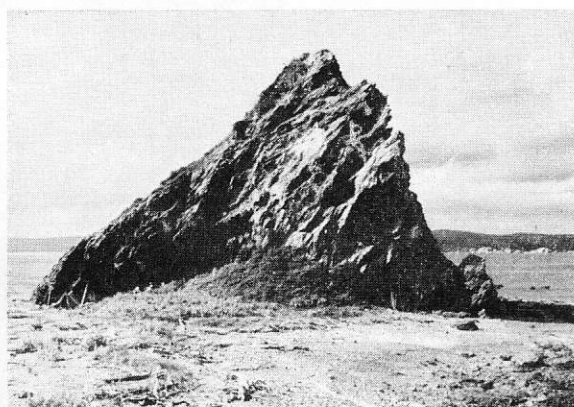
Egretta sacra Reef Heron — Up to two pairs occur and breed.

Haematopus fuliginosus Sooty Oystercatcher — Up to two pairs occur and breed.

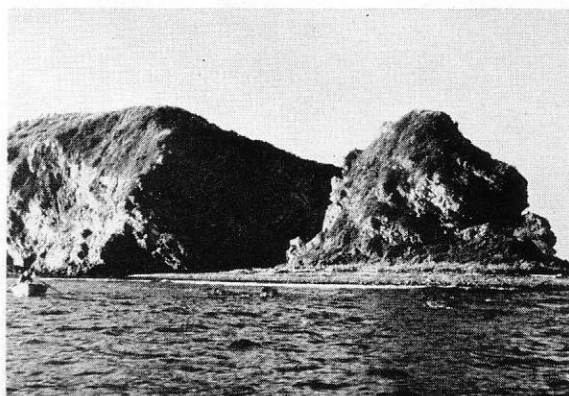
Factors Affecting Status

The growing use of Batemans Bay as a tourist resort and centre for small boat activity has led to an increase in the numbers of visitors to the islets. Due to erosion and possibly human trampling a small decrease in the number of breeding burrows of penguins and storm-petrels has occurred on the lower parts of the southern islet.

A pair of Peregrine Falcons *Falco peregrinus* occur and breed on the island. The remains of storm-petrels have been found often at the falcons' feeding stations on the islets. Other species of hawks such as the Osprey *Pandion haliaetus*, Whistling Kite *Haliastur sphenurus*, Brown Goshawk *Accipiter fasciatus* and White-



- "The Pinnacle" (looking north-west). The banders' camp is at the base.



- "The Pinnacle" and South Islet (looking south).

Photos: S. G. Lane

breasted Sea-eagle *Haliaeetus leucogaster* have been recorded visiting the Tollgates and doubtless prey on the avifauna when opportunity presents.

OTHER VERTEBRATES

A small lizard *Sphenomorphus tympanum* is common on both islets and is a possible predator.

Other Seabirds Recorded

Pachyptila desolata Antarctic Prion (derelict)
Phalacrocorax melanoleucos Little Pied Cormorant
Phalacrocorax carbo Black Cormorant
Phalacrocorax sulcirostris Little Black Cormorant
Ardea novaehollandiae White-faced Heron
Haematopus ostralegus Pied Oystercatcher
Larus novaehollandiae Silver Gull
Sterna striata White-fronted Tern
Sterna bergii Crested Tern

Banding

Period covered — 22 March 1958 to 30 June 1975.

E. minor — 13 nestlings and 3 adults banded. No recoveries.

P. pacificus — 133 nestlings and 62 adults banded. No recoveries at banding place; 1 recovery away from the islands — 170 km NNE.

P. tenuirostris — 149 nestlings and 639 adults banded. 7 recoveries on 7 occasions at banding place; 1 recovery away from the islands — 56 km SSW.

P. marina — 287 nestlings and 538 adults banded. 2 recoveries on 2 occasions at banding place; no recoveries away from the islands.

Bibliography

1. Davies, S. J. J. F. (1959). 'A Note on the Shearwaters Breeding on the Tollgates Islands, N.S.W.', *Emu* 59: 287-288.
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4. Hull, A. F. Basset (1922). 'The Islands of New South Wales and their Birds', *Aust. Mus. Mag.* 1: 139-146.
5. Wheeler, E. (1963). 'A Trip to the Tollgates', *Bird Bander* 1: 106-107.

Acknowledgements

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J. L. McKean and P. J. Fullagar,
C.S.I.R.O.,
Division of Wildlife Research,
P.O. Box 84, Lyneham, A.C.T.