

SEABIRD ISLANDS

No. 14

South Solitary Island, New South Wales

Location: 30° 12' S, 153° 16' E; 16 km north-east of Coffs Harbour, NSW.

Status: Under the control of the Australian Department of Transport (Lighthouse Service); entry permit required.

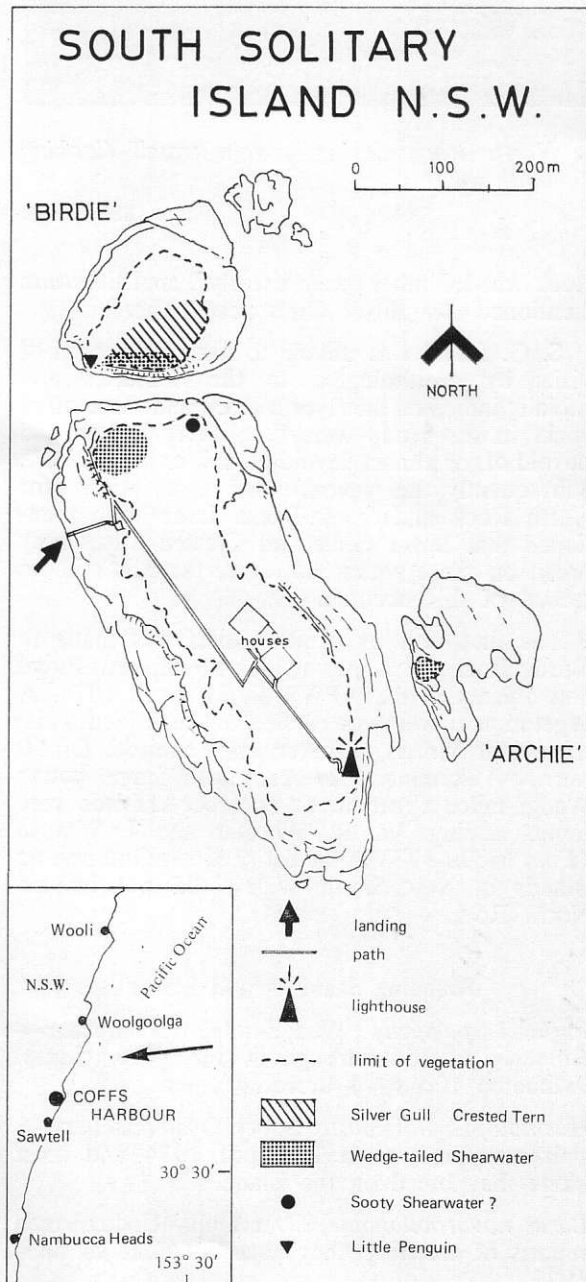
Description: 550 m by 250 m at the widest, the island rises steeply to a gently rounded top where a lighthouse is located on the highest part about 43 m above m.s.l. The sides are mostly precipitous or nearly so and the soil is shallow with vegetation consisting mainly of grasses including *Andropogon virginicus*, *Axonopus affinus*, *Cyanodon dactylon*, *Pseudoraphis paradoxa*, *Stenotaphrum secundatum* and *Zoisia macrantha*.

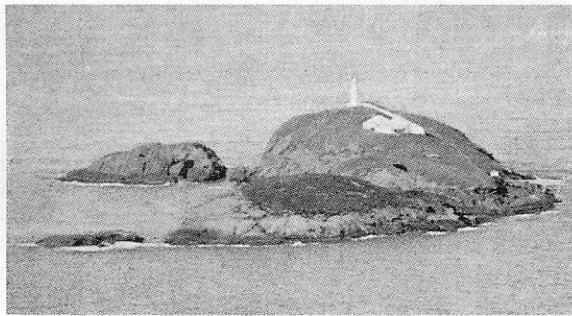
A bridged outcrop on the east side is known as 'Archie' or Arched Rock, while at the north end, separated by a sheer rift, is a small satellite named 'Birdie'. 'Birdie' is about 175 m in diameter and has very shallow soil; the vegetation comprises mainly low-growing, sprawling herbs such as *Commelina cyanea*, *Hydrocotyle acutiloba*, *Ipomoea cairica*, *Portulaca oleracea*, *Tetragonia tetragonioides* and *Vigna marina*. Other species include *Carpobrotus glaucenscens*, *Sesuvium portulacastrum*, *Pseudoraphis spinescens*, *Brachiaria foliosa* and *Eleusine indica*.

In addition to the lighthouse, there are other man-made constructions—lightkeepers' dwellings, concrete walkways and an elevated jetty.

Landing: From the supply vessels, landing is by wicker basket and a derrick on the jetty some 25 m above m.s.l. or from small craft, landing is onto rocks, and in either case, is difficult except in calm weather.

Ornithological History: Prior to 1974, the little ornithological information about South Solitary had been received from interested lightkeepers. In 1911, A. F. Basset Hull² received "... a number of eggs and the skin of an immature bird, undoubtedly the Wedge-tailed Petrel" from D. Gow, the lightkeeper on the island at the time.





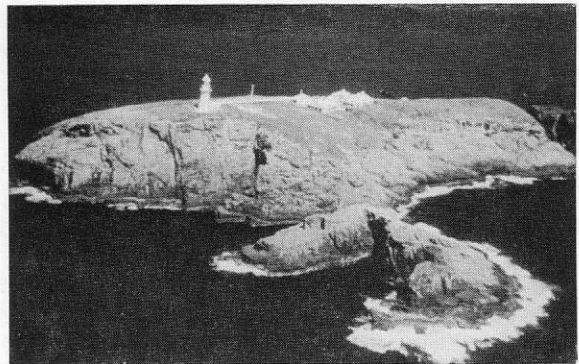
● South Solitary Island from the air (looking south).

Photo: North Coast Color Productions

Gow stated “. . . that he had made an extensive search over the island and could not find any other species breeding there.”² Then in 1958, another lightkeeper, W. Bevan, banded Silver Gulls which were breeding there. A third lightkeeper, R. Dyball, recorded Wedge-tailed Shearwaters breeding in 1966-67, and in addition to Silver Gulls and Crested Terns which were breeding on ‘Birdie’, he found Little Penguin nestlings in ‘three or four burrows’. He also found a few Short-tailed Shearwaters but the breeding status was not determined.

On 21 April 1974, Ranger J. Winter (NPWS) made a brief visit to ‘Birdie’ where he located two well-developed nestling Wedge-tailed Shearwaters in cavities under rocks. A week later, S. G. Lane and A. K. Morris visited the island with him but the young shearwaters were not in their ‘burrows’, apparently having departed in the intervening period⁴. However, there was other evidence of seabird breeding: an egg shell of a Wedge-tailed Shearwater was found on the surface and a Little Penguin was seen in a rock cavity which had every indication of a breeding ‘burrow’.

Later the same year, further information was received from two more lightkeepers, J. Byles and I. Wilson. In addition to the Wedge-tailed Shearwaters, gulls and terns, they found three Sooty Shearwaters in burrows in early November but subsequently were unable to confirm breeding status.



● Another view, from the air (looking west); ‘Archie’ is in the foreground and ‘Birdie’ at right, mostly out of the picture.

Photo: Eric Grebert's Photographic Centre

Breeding Seabirds and Status

Eudyptula minor Little Penguin—A few pairs reported breeding during the 1960s. Some may breed regularly on ‘Birdie’.

Puffinus pacificus Wedge-tailed Shearwater—The shallow soil makes this island generally unsuited to burrowing petrels. Some 50 pairs breed on the main island, a few on ‘Birdie’ and 15-20 pairs on ‘Archie’. Probably present to breed from early August to late April or early May. Estimated 75-100 breeding pairs.

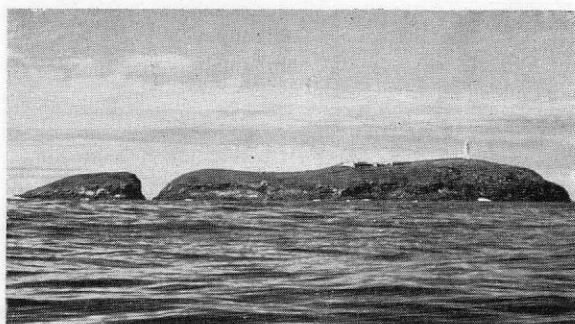
Larus novaehollandiae Silver Gull—Irrregular breeding occurs on ‘Birdie’, probably only when the terns are nesting. In January 1975, P. E. Roberts and N. G. Holmes recorded a “few hundred pairs breeding”. A few have nested occasionally on the main island.

Sterna bergii Crested Tern—These birds also breed irregularly on ‘Birdie’ and in January 1975 were in similar numbers to the gulls.

Factors Affecting Status

OTHER VERTEBRATES

The main island has been affected by the introduction of Rabbits *Oryctolagus cuniculus*, Goats *Capra hircus* and dogs, with the inevitable vegetation deterioration. However, goats are no longer on the island, the present dogs interfere rarely, if at all, and undoubtedly will be removed, probably this year when the lightkeepers are no longer resident on the island. At the last report



● South Solitary Island silhouette as seen from the mainland.

Photo: S. G. Lane

(1975), the rabbits had been exterminated apparently by myxomatosis.

Recently a legless lizard was found on the main island; it was identified as Burton's Snake Lizard *Lialis burtonis*.

Other Seabirds Recorded

Puffinus griseus Sooty Shearwater
Puffinus tenuirostris Short-tailed Shearwater

Banding

First banding—2 September 1958.

P. pacificus—9 adults banded. No recoveries but three banded on nearby Mutton Bird Island at Coffs Harbour were caught and later released after flying into the light at night.

L. novaehollandiae—1 adult; 104 nestlings. One recovery at banding place and five others up to 320 km.

Bibliography

1. Hindwood, K. A. (1948), 'Notes on the Sea-birds Breeding on the Coastal Islands of New South Wales', *Emu* 48:73-81.
2. Hull, A. F. Basset (1916), 'Avifauna of New South Wales Islands', Part 3, *Emu* 15:207-216.
3. Lane, S. G. (1972), 'Breeding Sea-birds of the Solitary Islands, N.S.W.', *Emu* 72:182-184.
4. Lane, S. G. (1975), 'Further Notes on the Sea-birds of the Solitary Islands', *Aust. Bird Bander* 13:56-57.

Acknowledgments

I wish to thank Messrs J. Byles, R. Dyball, A. Floyd, I. Wilson and J. Winter for details and assistance without which this compilation would not have been possible. The Secretary, Australian Bird-banding Scheme kindly provided banding data.

Date compiled:
10 May 1975.

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Wader Colour Marking Project

In order to determine the movements and migratory patterns of Palearctic and Australian waders by means of visual observations, a colour-marking program was initiated in New South Wales and Victoria in 1974. In addition to numbered CSIRO bands, birds were also colour marked on the plumage underparts using different colour dyes for each banding location.

Last year over 600 birds of 14 species were colour marked in this manner but as yet no sightings have been reported away from the banding sites.

This year the project is being continued. Any ornithologist observing a colour-marked wader is asked to contact either of the undermentioned, stating details of species, colour and location.

F. W. C. van Gessel, 4 Bennett Street, Hamilton,
N.S.W. 2303.

Dr D. F. Dorward, Department of Zoology,
Monash University, Clayton, Vic. 3168.

New Members

FOOTE, Mrs J., 2 Hiron Street, St Lucia, Qld.

MILLARD, M. T., 49 Loton Street, Woodlands, W.A.

SHANNON, Dr G., 3 Argus Close, Craigie, W.A.

THOMAS, M. D., 15/14 Fairway Close, Manly Vale,
N.S.W.

Corrigendum

The following alterations should be made to Vol. 13,
No. 2, June 1975 on page 28:
Line 4 (below Figure 2) — for 1 : 1.4 read 1.4 : 1.
Line 4 (below Figure 3) — for 750 mm read 770 mm.