

Further Notes on the Seabirds of the Solitary Islands, New South Wales

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In an earlier report (Lane 1972), the previously recorded but scanty ornithological data on the Solitary Islands Group (see map, p. 59) was summarized and details were given of visits in 1969 and 1971.

An account of subsequent visits to six of these islands with Messrs A. K. Morris, J. Winter and G. Saals, with particular emphasis on the previously unreported islands in the group, follows. Mr A. Floyd accompanied us on the first day. The islands were visited as follows:
on 27 April 1974

North Solitary Island (northern part only)
North Rock
North-west Solitary Island

on 28 April 1974

South-west Solitary Island
Split Solitary Island
South Solitary Island (northern part only)

The time spent on the islands was brief due to the sea distances which had to be traversed—about 100 km in all—and the weather conditions at the time. On the first day rain squalls frequently reduced visibility to a few hundred metres. Compass direction was necessary at times when all landmarks were obscured by rain.

The longest visit was 1.5 hours on North Solitary to enable a thorough check of burrows in marked areas. This information was needed for a study being conducted by Morris and was one of the main reasons for the operation. Twenty nestlings were banded.

In my previous report (p. 182), from information given to me, I indicated that North-west Rock, North Rock, Stack Rock and Black Rock were 'very barren and devoid of, or almost devoid of soil or vegetation'. This certainly applies to North-west Rock which lies about 1.5 km north-north-west of North Solitary Island, and to Black Rock which is about 1 km north-west of South

Solitary Island. Both are small, lack any vegetation, and are very exposed to rough weather during which large waves would undoubtedly cover them. Although used at times as roosting places, it is most unlikely that any nesting would ever be attempted on them. As we circumnavigated North-west Rock a tattler, almost certainly a Wandering Tattler *Tringa incana*, was seen feeding around the edge.

However, North Rock, about 3 km north-east of the village of Red Rock, is well covered with low vegetation and has enough depth of soil for shearwater breeding. Red Rock is a local geographic feature on the mainland after which the village and the Nature Reserve surrounding it has been named. From 12:20 to 12:50, 25 nestling Wedge-tailed Shearwaters were banded on North Rock and some 70 empty burrows examined. An adjacent small, rocky 'satellite' island had little soil and some grass. Only two shallow burrows were located, one of which contained a nestling; a second nestling was found under a rock shelf; both nestlings were banded. A White-faced Heron *Ardea novaehollandiae*, two Sooty Oystercatchers *Haematopus fuliginosus*, three Turnstones *Arenaria interpres* and some Crested Terns *Sterna bergii* were recorded.

Stack Rock, about 3 km south of Woolgoolga, also has vegetation cover. It was not visited by us but Mr P. E. Roberts (pers. comm.) informed me that it is accessible at low tide by wading. He has been on it twice but found no sign of burrows or other seabird breeding.

North-west Solitary Island consists of a narrow ridge about 20 m high, with grasses and other low vegetation covering very shallow, rocky soil. Generally it is unsuitable for burrowing and in

some 45 minutes from about 13:30 to 14:15, only 16 nestling Wedge-tailed Shearwaters were banded, mostly on the western side. Other birds seen were a Reef Heron *Egretta sacra*, two Sooty Oystercatchers, five Turnstones, Crested Terns and a Grey Fantail *Rhipidura fuliginosa*.

South Solitary Island consists of three separated parts. A lighthouse and dwellings are situated on the largest southern portion. A small, rather rocky islet on the eastern side is known as 'Archie', and the third, the northern islet, is known as 'Birdie', no doubt because gulls and terns regularly breed there. A landing was made onto this islet which is separated from the main island by a deep gulch some 15-20 m wide. 'Birdie' is steeply sloping except for the precipitous drop into the gulch. Shallow, rocky soil supports a thick, low vegetation cover of herbaceous plants and vines. There is little grass and mostly the soil is too shallow and rocky for burrows and despite considerable searching, none was found. Two recently-used nesting sites of Wedge-tailed Shearwaters were situated under rock ledges near the top of the islet; a week prior to our visit, Winter had found two well-feathered nestling shearwaters in occupation. The remains of a Wedge-tailed Shearwater's egg was found on the surface near the top of the islet. On the western side below the vegetation level, a Little Penguin *Eudyptula minor* was found in a narrow, deep cavity in the rock. The site appeared well used, probably for breeding purposes. A White-faced Heron, a Golden-headed Fantail-Warbler *Cisticola exilis* and a Pipit *Anthus australis* were also recorded.

No evidence of breeding by Silver Gulls *Larus novaehollandiae* or Crested Terns *Sterna bergii* was found during our visit although both species are known to have bred on the island. They were reported breeding there in 1971, and on 16 January 1975 G. Holmes and P. E. Roberts (pers. comm.) recorded 'a few hundred pairs' of each species mostly with large chicks.

Dead nestling shearwaters were found on the surface of most of the islands visited. Consistent heavy rain during the nesting season apparently had caused many burrows to become saturated and filled or partly filled with water, forcing nestlings into exposed positions at the burrow entrance or on to the surface. In almost every case, those found dead were down-covered or had wing feathers just emerging; they had been dead

for some time. On North Rock and South-west Solitary most burrows were in sandy soil, were deeper and, although wet, contained a higher ratio of live nestlings, one in four and one in three respectively, while the ratio was about one in ten on Split Solitary and the same (one in ten) on North Solitary. Empty burrows did not necessarily indicate breeding failure. There was ample evidence to show that young had recently departed from some burrows.

Except at North Solitary, the landings were difficult and in one instance necessitated swimming onto the rocks in very turbulent water and the reverse when leaving. In fact, except for John Winter's skill in handling the launch in such conditions, the landings on all but North Solitary would have necessitated swimming.

Sooty Shearwaters *P. griseus* were found in burrows on South Solitary Island by I. Wilson in November 1974 but no eggs were located that season. In December 1969, this species was also found 'on the surface at night' on nearby Mutton Bird Island at Coffs Harbour (Lane 1970); at the same time Short-tailed Shearwaters *P. tenuirostris* were heard calling from burrows but were not located. However, although neither of these two species has been found breeding on the Solitary Islands, it is possible that they may do so in the future.

References

- Lane, S. G. (1970), 'Possible Colonization of Mutton Bird Island, NSW, by Short-tailed Shearwaters', *Emu* 7:141.
Lane, S. G. (1972), 'Breeding Seabirds of the Solitary Islands, NSW', *Emu* 72:182-184.

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