

R.A.O.U. *Checklist* numbers of birds listed in the Mackay district, October 1959: 8, 10, 21, 25, 27, 29, 30, 33, 46, 61, 100, 115, 125, 133, 174, 179, 180, 183, 189, 202, 208, 211, 220, 224, 228, 229, 232, 237, 242, 254, 256, 260, 264, 269, 281, 282, 286, 319, 322, 324, 326, 329, 333, 338, 344, 347, 348, 349, 352, 360, 361, 362, 364, 365, 373, 375, 377, 393, 398, 408, 413, 415, 421, 424, 427, 431, 432, 443, 447, 453, 462, 475, 488, 494, 541, 543, 555, 558, 564, 565, 573, 579, 586, 591, 597, 605, 611, 613, 614, 641, 645, 646, 662, 673, 684, 692, 694, 700, 705.

Introduced species: Spotted Turtle-Dove (*Streptopelia chinensis*) and Spice Finch (*Lonchura punctulata*).

Buller's Shearwater on Cabbage Tree Island, New South Wales

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During the past 13 years we have been banding petrels on Cabbage Tree Island near the entrance to Port Stephens, central coastal New South Wales. Most of the birds banded have been Gould Petrels (*Pterodroma leucoptera*), but numbers of Wedge-tailed Shearwaters (*Puffinus pacificus*) have also been marked. We visited the island again on December 11, 1960, with the intention of selecting suitable subjects for a colour-film being prepared for the N.S.W. Fauna Protection Panel.

The main nesting area of the Gould Petrel is known as the "South Gully", as distinct from the "North Gully" where fewer birds breed. At the time of our visit the birds were on eggs laid in the usual places chosen by the species: under boulders and fallen palm-fronds, and in rock crevices.

Having in mind the recent discovery (Hindwood and D'Ombraïn 1960) of three species of nesting shearwaters on Broughton Island, about nine miles to the north, we decided to examine some of the many burrows to be found, either in bare ground among the trees and palms or among dense tussocks on the southern part of the island.

A burrow in a patch of loamy soil, about half-way to the top of the island, appeared to end abruptly until further investigation showed that it turned to the left and extended for nearly ten feet. A bird was in occupation and when handled it gave a savage nip. To our surprise it was not an all-dark shearwater as expected, but was slaty-grey above and white below. One of us (A.F.D.) had seen similar birds off the coast when game fishing some years ago. Details of plumage and measurements taken confirmed our opinion that the bird was a Buller's Shearwater (*Puffinus bulleri*),

previously recorded only twice from Australia—from beach-washed derelicts. Particulars of those two specimens have been given by Hindwood (1955).

The following data relate to the Buller's Shearwater found in a burrow on Cabbage Tree Island, N.S.W., on December 11, 1960. It might be mentioned that no egg was present in the burrow.

Length 438 mm; culmen 41 mm; tarsus 51 mm; middle toe and claw 63 mm (claws blunt); wing 288 mm; tail 130 mm; weight 13.5 oz. Colour of soft parts: nares, culminicorn, maxillary unguis, mandibular unguis, and top edge of lower mandible leaden-black; sides of upper and lower mandibles slaty-blue; inner tarsus and two inner toes pinkish, with a



Buller's Shearwater, Cabbage Tree Island, N.S.W., December 11, 1960
Photo by Athel D'Ombra

light purplish tinge; outer tarsus, outer toe, and outer part of middle toe blackish; webs fleshy, blackish on outer edges.

Buller's Shearwater, in common with several other southern shearwaters, migrates from its breeding grounds in New Zealand to the North Pacific. Possibly the bird found on Cabbage Tree Island joined up with the main stream of southbound Short-tailed Shearwaters (*Puffinus tenuirostris*) that pass along the New South Wales coast in September, and later. Its presence on Cabbage Tree Island suggests that a few birds may breed on some of the coastal islands off New

South Wales, as does the Sooty Shearwater (*P. griseus*), the common breeding shearwater in New Zealand; the latter has managed to establish small colonies on Lion Island and Broughton Island, N.S.W., and on Tasman Island (Keast and McGill 1948) and Courts Island (F. N. Robinson, unpublished data) in eastern Tasmanian waters.

ADDENDUM

After this article was written, a note was received from Mr. K. A. Hindwood saying that Mr. F. N. Robinson, C.S.I.R.O., Wildlife Survey Section, had captured a bird in a burrow (not breeding) on Montague Island, off Narooma, N.S.W., on October 10, 1960. From his description and the bill measurement, 41.8 mm, it could only have been *bulleri*. The bird was found in the burrow during the afternoon and a microphone was placed near the entrance at dusk, when the bird was still present, in order to record its calls. But the bird was silent, and when the burrow was re-examined at about three o'clock the following morning the bird had left.

REFERENCES

- Hindwood, K. A., 1955. Buller's Shearwater: a new bird for Australia. *Emu*, 55: 199-202.
 Hindwood, K. A., and D'Ombraïn, A. F., 1960. Breeding of the Short-tailed Shearwater (*Puffinus tenuirostris*) and other sea-birds on Broughton Island, N.S.W. *Emu*, 60: 147-154.
 Keast, J. A., and McGill, A. R., 1948. The Sooty Shearwater in Australia. *Emu*, 47: 199-202.

Calls of *Pardalotus substriatus*.—In a recent article: "Nesting of the Red-tipped Pardalotes", R. P. Cooper (*Emu*, 61:2) states that "generally *ornatus* utters the double note, while *substriatus* gives the triple note, but I had instances where the calls were reversed."

In the south-west of Western Australia, outside the recognized range of *ornatus*, the double note is frequently heard, perhaps more frequently than the more complicated note which I render as "Peter Willum."

Although I have given the matter attention I have been unable to discover whether the difference in calls is a sex character, an individual difference, or whether the calls are merely alternatives. In their *Birds of Western Australia* Serventy and Whittell refer to the call, "pick-wick," "be quick," or "witt-a witta." The position in Western Australia lends weight to Cooper's caution regarding identification by call alone.—ERIC H. SEDGWICK, Collie, W.A., 17/4/61.