

Additional Records of Great-winged and Brown-headed Petrels from New South Wales, and some Comparisons

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Definite occurrences of the Great-winged (Grey-faced) Petrel (*Pterodroma macroptera*) and the Brown-headed (Providence) Petrel (*Pterodroma melanopus*) in New South Wales to date total less than a dozen in all. Consequently a further record for each is of some importance and is here chronicled with relevant details.

On April 11, 1955, Sefton found the dried-out remains of a Great-winged Petrel on Bellambi Beach (forty-five miles south of Sydney). Dimensions are given in the table below. This is a brown bird and could not possibly be described as 'sooty-black' as Murphy (1936) characterizes the species, or as Mathews and Iredale (1921) describe a bird from Western Australia. Fresh plumage is probably darker. This bird is deep in the moult and it is most noticeable that the replacement quills are almost black whilst the old abraded ones are a fairly light brown. The bill has a large dertrum (23.4 mm.) like the New Zealand race *gouldi*, and all New South Wales specimens probably originate from that quarter where the species is a spring-breeder. Goddard and Hindwood (1951) have brought together the five previous New South Wales records.

The Brown-headed Petrel was collected by Gibson at Currarong, near Jervis Bay, on October 1, 1955. This specimen was in excellent condition and must have been washed ashore the previous night. It evidently had not yet reached breeding age. The claws were extremely sharp, the plumage fresh and unworn and the gonads so minute as to make the sex indeterminable. McGill (1955) has recently summarized the Australian occurrences, which now number five, of this winter-breeder from Lord Howe Island.

The measurements of these two specimens, which are preserved in our collection, are shown in the following table.

	Locality	Date	Collected by	Cul- men	Wing	Tail	Tar- sus	Toe and Claw
<i>Pterodroma macroptera</i>	Bellambi Beach	11/4/55	A. Sefton	35	—	124	44	65
<i>Pterodroma melanopus</i>	Currarong Beach	1/10/55	J. D. Gibson	35	314	129	43.3	61

Damage to the longest primaries precluded a wing measurement in the first case. Additional dimensions for *macroptera* and *melanopus* respectively are maxillary unguis (dertrum) 23.4 mm., 23.7 mm., width of bill (taken at base of exposed culmen) 18 mm., 15 mm. The stomach of the Brown-headed Petrel contained the hard remains of many small cephalopods.

Determination of beach-recovered specimens of these large *Pterodroma* petrels is rendered difficult by their general conformity in dimensions and similarity in colour and shape of the bill. In each of the present examples the general aspect is dark brown, slightly paler on the under surface, with a more or less grey area on the forehead and throat, and dark bill and legs. The main differences are confined to the plumage and are briefly as follows.

Wing lining. In *melanopus* there is a rather conspicuous white patch on the under-wing formed by the inner webs of the primaries being white (but becoming grey towards the ends) and the greater under wing-coverts which are white except for the tips. In the *macroptera* specimen these parts are grey.

Dorsal feathers. In *melanopus*, a distinct greyish bloom is apparent on the feathers of the back, scapulars and upper tail-coverts, especially when viewed against the lay of the feathers.

Body feathers. The concealed basal portions of all the body feathers in *melanopus* are white, whereas in *macroptera* these are greyish, only tending to white on the breast and abdomen.

Forehead and Throat. The light coloured tips of the frontal feathers give a 'grey-faced' appearance to both birds, but with *melanopus* the resultant crescentic markings are distinct and well-defined, whilst in *macroptera* the effect is more diffused, giving a general grey colour to the region. In both species odd feathers in the throat are tipped with white, giving a more or less mottled appearance which would become accentuated as the pale feather-bases are exposed through wear.

Small differences apparent in the bill characters may or may not be constant. In *macroptera* the gonys is more pronounced, resulting in a deeper concavity between that point and the tip of the lower mandible, whilst in *melanopus* the curve of the maxillary unguis meets forward of the narial tubes at a greater downward angle.

It is evident, from the dearth of specimens from the region, that a regular dispersal or migration into the coastal waters of eastern Australia is not a part of the regime of either species, most recoveries being associated with severe meteorological conditions. However, the weather preceding the finding of the Brown-headed Petrel at Currarong was

notable only for the serene conditions prevailing in the north Tasman Sea. Young sea-birds in general are more inclined to wander than are adults and tend to range further from their geographic origin, sometimes in quite the opposite direction to the general movement. The Currarong bird seems to fit into this category.

REFERENCES

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1951 Goddard, M. T., and Hindwood, K. A., 'Sea-birds and Cyclones: Some Interesting New South Wales Records', *The Emu*, vol. 51, pp. 169-171.
1955 McGill, Arnold R., 'The Brown-headed Petrel in Australian Waters', *The Emu*, vol. 55, pp. 127-129.
See also: 1940 Hindwood, K. A. 'The Sea-birds of Sydney', *Proc. Roy. Zool. Soc. N.S.W. for 1939-1940*, pp. 13-14. (Containing comparative illustrations and text on the two species in the foregoing notes).

Emus Breeding in Victoria's Mid-Murray Area

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The Emu (*Dromaius novæ-hollandiæ*) has long since become uncommon in mid-northern Victoria and it should therefore be of some interest that one or two pairs are resident breeders on the western side of the Loddon River at Lake Charm East, almost half-way between the towns of Kerang and Swan Hill. We were made aware of this by a grazier—Mr. J. Stevenson—who leases the State forest area of the Sheepwash. This section, covering some 1200 acres, lies between the Loddon River and the Sheepwash Creek, the latter flowing during wet seasons only at which times the Sheepwash area is an island. The area is dotted with dense lignum, closely-growing river redgum (mostly young seedling growth to a height of fifty feet), and irregular patches of black box. There is a swamp about 400 yards long by half that in width covered mainly with bullrush (*Typha angustifolia*). Although small, the area could hide the Emus indefinitely from anything less than an organized search party. Apart from animals the Sheepwash is visited only by occasional shooters, fishermen, and wood-cutters.

On June 15, 1955, Mr. Stevenson guided the writer and Tom Lowe to view two nests with eggs which he had stumbled upon whilst riding horseback in search of cattle. We crossed a log bridge over the Sheepwash Creek and were guided about half a mile along winding timber-cutters' tracks through lignum six feet high, across the bullrush swamp—dry—to the edge of the timber near the Loddon River bank. The first nest visited was placed at the foot of a box tree and was closely sheltered on one side—though not covered—by a clump of lignum.