

Petrels off the North Cape, New Zealand.

By J. B. Cleland, M.D.

After leaving Auckland for Sydney by the S.S. Ulimaroa on 25th February, 1927, we ran towards evening into drizzling rain. At about 9 p.m., after passing the Bay of Islands and approaching the North Cape, several Petrels flew on board, and two were brought to me. It appears that it is by no means an uncommon occurrence, presumably in weather such as this, for Petrels to fly on board steamers and hide away in corners till the morning, when the seamen lift them overboard when they are cleaning the decks. It would seem that the birds land with a thud, and several such were heard, but the birds were not secured. It is evident that some Petrels at least fly on the high seas at night. It is not clear whether they are attracted by the ship's lights or merely accidentally in the darkness approach the ship, become mystified by the lights, and strike the rigging or decks. One of the two Petrels obtained was *Pelagodroma marina*, the other a large Petrel with dark upper surface and white under-parts (*Puffinus bulleri*). The following data were obtained:—

Pelagodroma marina, ♂, iris dark brown; bill and legs black; total length to end of tail $7\frac{1}{2}$ in., to tip of wings 8 5-8 in.; span of wings $15\frac{3}{4}$ in. No entozoa. Stomach contents (kindly reported on by Prof. T. Harvey Johnston): shell fragments, numerous long delicate fin rays of small fish, some long delicate pinnate setae probably of planctonic crustacea, bivalve shells of pyriform shape belonging to *Ostracod crustacea*, tiny crustacean appendages and orange-coloured oily matter. It is suggested that the fish fed on the shell debris and crustacea and died later, and that the Petrel ate the carcass, since the latter was fragmentary and more or less digested.

Puffinus bulleri, ♀, iris dark brown; bill blackish above, pallid lilacy-greyish below and on the sides; tarsus lilacy-flesh-coloured on the inside, blackish externally with a large central flesh-coloured area; outer toe and web blackish with a pale spot above the claw; inner toes flesh-coloured, the membrane flesh-coloured at the base with a black cloud towards the periphery; total length $18\frac{1}{2}$ in.; span of wings $40\frac{1}{2}$ in. Cestodes and *Mallophaga* present. Stomach contents (Prof. T. H. Johnston): marked odour like sardines, pinkish-grey contents, oil globules abundant and pinkish, muscle fibres, bony fragments and entire ribs of tiny fish, and also a few vertebrae (chiefly caudal), lenses of fishes' eyes, parts of pectoral girdles of fishes. No trace of crustacean remains.

[From Godman's Monograph on the Petrel :—*Puffinus bulleri* is a wedge-tailed Shearwater, ashy grey on the upper surface and on the greater wing-coverts. The under wing-coverts, axillaries, and quill lining are pure white; the under tail-coverts are also for the most part white, the lateral ones more or less ashy-grey externally.

	British Museum	Tring Museum	Tring Museum
Wing ..	11.1 inches.	11.5 inches.	11.8 inches.
Tarsus ..	2.1 inches.	1.9 inches.	2.0 inches.
Middle toe and claw	2.35 inches.	2.4 inches.	2.45 inches.
Culmen . .	1.55 inches.	1.6 inches.	1.7 inches.

From Buller's description of type :—"Total length 14 in. [?—Ed.], culmen 1.55, wing 11.1, tail 4.8, tarsus 2.1, middle toe and claw 2.35. Tail black, bill blue black, fading into bluish grey on the sides of both mandibles; inside of tarsi, which are much flattened, the middle and inner toes, and the inter-digital web fleshy-white, outer aspect of tarsus and the whole of the outer toe brownish-black; iris black." Mr. Sandager's specimen had the lower part of both mandibles bluish, the remainder black; the outer margin of the tarsus and two outer toes black, the remainder pale with a bluish tinge; inter-digital membrane pale, shaded with black. Godman remarks, "but it is difficult to understand what he means by the word 'pale.'"—Editors.]