

17/1/51, D5092 could flutter a few yards in weak flight in either 51 or 52 days from hatching.

Ref. Notornis 5: 16, 17.

(This long period could not have been due to weakness as D5092 was caught and rebanded by Sylvia M. Reed 26 years later).

H. R. McKENZIE

MATAITAI, CLEVEDON

25/12/50, nest 3 eggs.

13/1/51, 2 eggs chipping, 1 whole. The whole one later proved to have a large dead chick in it.

15/1/51, 1 chick 4 m from nest. 1 egg with cracks and two small holes in it.

16/1/51, 2 chicks gone from nest.

7/2/51, banded surviving chick, D5903. It was 46 days old when banded and showed no signs of flying. It was strong and healthy and could run as fast as the others had done but was not seen again on further visits. It was certainly not injured when banded. It was thought that a dog which prowled the flats may have killed it. This bird would probably have flown in about 50 days.

Ref. Notornis 5: 16, 17.

H. R. McKENZIE

Summary: Hence we have approximate periods of hatching to flying of 28-30, 32, 37-38, 50 and 51-52 days.

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SEA BIRD OBSERVATIONS OFF THE WEST COAST OF THE SOUTH ISLAND, NEW ZEALAND, OCTOBER-NOVEMBER 1975

From 29 October until 1 November 1975 I was a fisheries observer on board the deep-sea trawler *Shinkai Maru* which was engaged in exploratory fishing for the Japan Marine Fishery Resource Research Centre (JAMARC) off Greymouth, around 42°15'S and 170°40' E, approximately 45 km from shore, mostly at depths between 200 and 500 m. Air temperatures ranged between 14.8 and 15.5°C, sea surface temperatures between 13.9 and 14.0°C, barometric pressure between 1007.0 and 1022.8 mb, and winds were mostly from the westerly quarter with speeds between force 3 and 7 (Beaufort scale).

During daytime the vessel was followed by 1000-1500 birds which fed on frequently discarded fish offal. This aggregation of birds consisted of the following ten species:

Royal Albatross

Diomedea epomophora

Wandering Albatross

Diomedea exulans

White-capped Mollymawk

Diomedea cauta cauta

Salvin's Mollymawk
Black-browed Mollymawk
Giant Petrel
Cape Pigeon
Westland Black Petrel
Sooty Shearwater
Black-backed Gull

Diomedea cauta salvini
Diomedea melanophris
Macronectes giganteus
Daption capensis
Procellaria westlandica
Puffinus griseus
Larus dominicanus

Within this group there were usually about 500 Westland Black Petrels, 300 White-capped Mollymawks, 200 Sooty Shearwaters, 50 Cape Pigeons and 20 Salvin's Mollymawks. The remaining five species were seen infrequently.

The Westland Black Petrels came so close to the ship that it was easy to obtain photographs which clearly show the identification characters discussed by Bartle (1974, *Notornis* 21 (2): 135-166, and 1975, *Notornis* 22 (4): 345-346): the large, pale, dark-tipped bill and angular flight silhouette with short neck and long narrow wings (Figs 1 and 2). The dark colour of the feet was visible when the birds alighted on the water (Fig. 3).



FIGURE 1



FIGURE 2



FIGURES 1-3 — Westland Black Petrel (*Procellaria westlandica*) off the west coast of the South Island, New Zealand, October-November 1975.

Photos: C. M. Vooren

While these observations were made, two other large deep-sea trawlers were fishing nearby, and both were followed by bird flocks similar in composition and size to the one around the *Shinkai Maru*. Apparently the habit of feeding on offal from trawlers, first observed in the Westland Black Petrel in the early 1950s (Bartle 1974), is now firmly established in this species. According to the description of the breeding cycle of the Westland Black Petrel given by Jackson (1958, *Notornis* 7 (8): 230-233), the chicks are still in the burrows at the time when the present observations were made. The birds seen around the trawlers were therefore breeding adults and/or un-employed birds.

Grey-backed Storm Petrels (*Garrodia nereis*) were frequently observed but did not follow the ship. At any time of the day, single individuals could be seen at a rate of roughly 1 bird per 10 minutes observation.

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