

## SHORT NOTES

### FIRST RECORDS FOR NEW ZEALAND OF MOSELEY'S ROCKHOPPER PENGUIN (*Eudyptes chrysocome moseleyi*)

The Rockhopper Penguin (*Eudyptes chrysocome*) is usually classified into two subspecies (Condon 1975, Kinsky 1980). The nominate form is circumpolar in distribution, occurring at most subantarctic islands in colder waters towards the Antarctic Convergence and also at Heard Island on the southern side of the Convergence. In the New Zealand region substantial numbers breed at Macquarie, Campbell, Auckland and Antipodes Islands. The second subspecies, *E. c. moseleyi*, breeds only at four island groups close to the Subtropical Convergence — Gough and Tristan da Cunha Islands in the South Atlantic Ocean and Isles Amsterdam and St Paul in the Indian Ocean. This is the larger of the two subspecies (Williams 1980) and has especially luxuriant yellow plumes on the sides of the head. *E. c. chrysocome* from the Australasian Subantarctic are distinguishable from other populations of this subspecies and also from *E. c. moseleyi* by the presence of pink (rather than black) margins of skin around the base of the beak (Carins 1974). In this note, we give details of the first two records of *E. c. moseleyi* for New Zealand.

On 26 August 1968, DVM caught a Rockhopper Penguin ashore on the southeast coast of South East Island (44°21'S, 176°10'W) in the Chatham group. F. C. Kinsky later identified it from photographs as *E. c. moseleyi* (Kinsky 1980). Two years later, on 8 November 1970, a Rockhopper Penguin, presumably the same individual, was seen at the same place, this time standing beside an empty nesting scrape in the lee of a large boulder near the shoreline. The bird had disappeared when DVM checked the site five days later, and it was not seen again during subsequent visits to the island at that time of year. Copies of the photographs were lodged at the National Museum, Wellington.

On 14 January 1984, an employee of Wellington City Council found an unusual penguin sheltering among rocks at Moa Point (41°21'S, 174°48'E) on the Cook Strait coast 3 km west of the entrance to Wellington Harbour. Fearing that it might be injured by people or dogs, he took it to Wellington Zoo, where it was identified as a Rockhopper Penguin. An article about the bird was published in the Wellington *Evening Post* on 23 January 1984, together with a close-up photograph. PJM was alerted to the possibility that it did not belong to the local subspecies by the absence in the photograph of any pale margin at the base of the bill. When examined next day the bird proved to be a specimen of *E. c. moseleyi*, having the typical characteristics of long pendulous plumes on the head, a dark face lacking any pink flesh around the bill, and extensive dark feathering

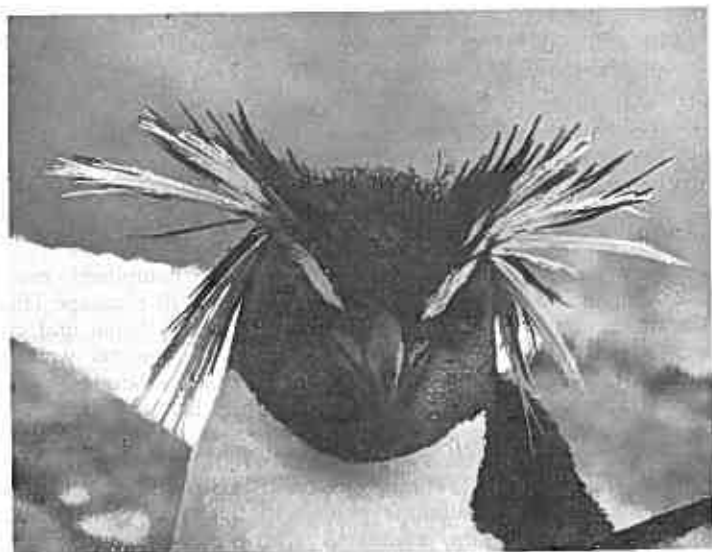


FIGURE 1 — Immature Moseley's Rockhopper Penguin in fresh plumage, 1 March 1984, showing characters to aid field identification of the subspecies. **Upper:** Long pendulous plumes and large occipital crest with no pink flesh around the margins of the beak. **Lower:** Prominent dark feathering along the leading edge and at the distal end of the under-flipper.

on the distal under-surface of the flippers (Serventy *et al.* 1971, Duroselle & Tollu 1977).

The bird weighed 3.45 kg and was in the early stages of moult, with feathers being shed from the tail, belly, flippers and crest. The throat and cheeks were tinged with pale feathers, indicating that it was an immature bird (Harrison 1983). It gave several loud trumpeting calls, at the same time rapidly shaking its upraised head from side to side. Warham (1963) has observed this display being given only by male Rockhopper Penguins.

Zoo staff cared for the bird while it completed moulting. PJM examined it again on 1 March 1984 in its fresh plumage (Fig. 1), which still retained tinges of grey feathering on the throat and cheeks. It weighed 2.15 kg. The following body measurements were taken according to Warham's (1972) methods: culmen length 45.3 mm, culmen width 10.3 mm, bill depth 19.2 mm and flipper length 180 mm. These measurements are less than the averages for adult male *E. c. moseleyi* from Gough Island (Williams 1980) and Isle Amsterdam (Duroselle & Tollu 1977) but are consistent with this bird being immature. The long pendulous plumes in the crest varied in length from 80 mm to 85 mm, compared with an average of 91.3 mm for adult males from Isle Amsterdam. By contrast, the corresponding average for eight adult *E. c. chrysocome* of both sexes measured by PJM on Campbell Island in February 1984 was 66.2 mm (range 62-70.5 mm).

The penguin repeatedly gave the male display call, which was noticeably lower in pitch than the same call of Campbell Island males. Jouventin (1982) has shown with sonograms that *E. c. moseleyi* calls at lower frequencies than *E. c. chrysocome*, and in fact he has suggested elevating *moseleyi* to full specific status on the basis of vocal and reproductive behaviour and morphology.

The penguin was banded and released at sea on 15 March 1984 about 6 km south of the entrance to Wellington Harbour.

Rockhopper Penguins, even of the local subspecies, are uncommon vagrants on New Zealand coasts. The nearest populations of *E. c. moseleyi* are at Isles Amsterdam and St Paul, about 7800 km to the west in the Indian Ocean. Penguins from these islands come ashore fairly often in southern Western Australia and in Victoria (Condon 1975), travelling eastward on the circumpolar currents driven by the West Wind Drift. These islands are therefore likely to be the source of the two *E. c. moseleyi* found in New Zealand. Similarly, individuals of this subspecies seen in South Africa are thought to come from Tristan de Cunha and Gough Islands in the Atlantic Ocean to the west (Cooper *et al.* 1978). In both Western Australia (Anon 1983) and South Africa most records are of moulting birds, often juveniles, in January and February.

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### CONFIRMATION OF BREEDING BY BLACK-WINGED PETREL ON SOUTH EAST ISLAND, CHATHAM ISLANDS

The Black-winged Petrel (*Pterodroma nigripennis*) which, in the New Zealand region, is known to breed in the Kermadecs and Three Kings Islands, has been recorded frequenting several more southern islands over the last few years, including Mangere, Black Rock (Pitt Island) and South East Island in the Chathams group. Although recorded in the *Annotated checklist of the birds of New Zealand*, (1970, 1980) and *The new field guide to the birds of New Zealand* (1979) as breeding on South East Island, breeding had not in fact been confirmed in the Chatham Islands. During January 1984 I was a member of the Wildlife Service's Black Robin management team on South East Island. On 26 January, Phil Clerke, Phil Thompson and I visited the summit of South East Island at about 10.30 p.m. to observe incoming petrels. As on previous nights, moderate numbers of Black-winged Petrels (several hundreds) were circling the summit area and calling from the air, and others were noted on the ground. Smaller numbers of Sooty Shearwaters (*Puffinus griseus*) were heard and seen in the summit area.

In a short burrow on the western summit I found a Black-winged Petrel with an egg. The bird was incubating and the egg was warm. The bird was examined, photographed, and released. This burrow was inspected again by Phil Clerke and Don Merton