

## Notes on nonbreeding seabirds at the Prince Edward Islands

### Introduction

The Prince Edward Islands (46 50S, 37 45E) consist of two main islands, Marion and Prince Edward, and a number of small stacks (van Zinderen Bakker *et al.* 1971). At least 26 species of seabirds are known to breed on these isolated islands (Williams *et al.* in press). This note documents the occurrence at the islands of additional seabirds not known to breed there: 13 species, and one subspecies: and the occurrence of a marked colour phase of one of the regular breeding species. Unless otherwise stated, the observations reported here were made on Marion Island by members of the FitzPatrick Institute, University of Cape Town, during 1974 - 1977. Prince Edward Island was visited on four occasions during this period for a total of ca. 20 days.

The use of bright lights during nocturnal launchings of weather balloons at Marion Island often attracted and temporarily blinded petrels Procellariidae causing some to collide with buildings, especially on foggy nights. This facilitated procurement of specimens of species otherwise seldom seen. Precise localities are given in van Zinderen Bakker *et al.* (1971).

### Systematic List

#### Chinstrap Penguin *Pygoscelis antarctica*

An immature bird moulted in the company of Macaroni Penguins *Eudyptes chrysolophus* in February 1977 at Bullard Beach.

#### "Royal" Penguin *Eudyptes chrysolophus schlegeli*

The Macaroni Penguins breeding on the Prince Edward Islands belong to the nominate race *E.c. chrysolophus*. "Royal" Penguins *E.c. schlegeli* apparently breed only at Macquarie Island. They differ from nominate Macaroni Penguins in having white eye and throat regions (not black as in the Macaroni); broader, less tassled head plumes; are of larger overall body size; and have a markedly heavier bill (Shaughnessy 1975). Intermediate forms are not uncommon at Macquarie Island (Shaughnessy 1975) and occur among Macaroni Penguin populations elsewhere (Barré *et al.* 1976).

A flock of 20 "Royal" Penguins was observed at Marion Island in 1960 (Voous 1963). A single "Royal" Penguin moulted with Macaroni Penguins at Bullard Beach in February 1977. Van Zinderen Bakker (1971) recorded one intermediate form in 1965, and several were seen in Macaroni Penguin colonies in 1974 - 1977.

Blackbrowed Albatross *Diomedea melanophris*

At least two adults were seen on four days in November 1976 at Marion Island, and at least two adults at Prince Edward Island in November 1977. These birds were all seen flying inshore or along cliff tops. There was no evidence of breeding.

Southern Giant Petrel *Macronectes giganteus*

This species occurs in two colour phases, dark and white (Conroy 1972). At the Prince Edward Islands only four white phase birds have been recorded. Two have been seen on Marion Island and two on Prince Edward Island. Only one was seen during the breeding season.

Antarctic Fulmar *Fulmarus glacialisoides*

Single birds were seen in October 1974, July 1976 and September 1976, all flying over inshore waters.

Pintado Petrel *Daption capense*

Van Zinderen Bakker (1971) reported one bird. One was seen in May 1975 and between August and December 1976, when regular sea watches were made, Pintado Petrels were seen inshore on many days. They usually occurred singly but up to six were seen at one time.

Whiteheaded Petrel *Pterodroma lessonii*

Two individuals, one in November and one in December 1976, were examined after they had collided with buildings on foggy nights. Both had bare and vascularised brood patches.

Dove Prion *Pachyptila desolata*

Van Zinderen Bakker (1971) reported 16, including two together in a burrow. None was reported in 1974 - 1977 despite examination of many hundreds of prions belonging to one or other of the two resident species, viz. Broadbilled Prion *P. vittata salvini* and Fairy Prion *P. turtur*.

Cory's Shearwater *Calonectris diomedea*

Two were seen in the strait between the two main islands in November 1977.

Little Shearwater *Puffinus assimilis*

Over one hundred gathered at dusk off Cave Bay, Prince Edward Island in November 1977. A single wing was also found at a skua "midden" on the same island.

Wilson's Stormpetrel *Oceanites oceanicus*

A single bird was seen inshore on two consecutive days in December 1976.

Blackbellied Stormpetrel *Fregatta tropica*

Van Zinderen Bakker (1971) recorded three individuals. The species was seen frequently in 1974 - 1977, and in all months from September to May, including groups of up to 22 birds. At least 15 were caught at night at Marion and at Prince Edwards Islands. Five of these were collected and all had enlarged gonads and bare brood patches.

### Greybacked Stormpetrel *Garrodia nereis*

Crawford (1952) obtained one specimen. The species was recorded nine times in the period 1973 - 1977. The records had a wide temporal range : September 1, December 3, March 2, April 2, and May 1. All of these birds were caught at night, generally after colliding with buildings. Three specimens out of four, caught in September and December, had enlarged gonads and bare brood patches; all others had downy brood patches and were not dissected. Frost *et al.* (1976) recorded "several" flying close inshore at dusk at the west coast of Marion Island in March 1976, and they collected a bird with a heavily vascularised brood patch.

### Gull *Larus sp.*

A "flock" of small gulls seen near Marion Island in 1962 was believed by Rand (1963) to be Hartlaub's Gulls *Larus hartlaubii*.

### Arctic Tern *Sterna paradisaea*

A party of four were seen in September 1976, and parties of five and 14 in late November and early December 1977 respectively.

### Discussion

Eight of the above species breed at other subantarctic islands (Watson 1975) and must be considered as potential breeders at the Prince Edward Islands. Because petrels have vast feeding ranges, even when breeding, the occurrence of specimens with developed gonads and brood patches does not provide evidence of breeding at the locality at which they are taken. However the frequency and distribution of sightings coupled with gonad and brood patch development suggest that of the eight species the Blackbellied and Greybacked Stormpetrels almost certainly breed and the Little Shearwater, Whiteheaded Petrel, and possibly also the Pintado Petrel, may breed at the Prince Edward Islands. The infrequency of sightings of the Blackbrowed Albatross, Dove Prion and Wilson's Stormpetrel make it seem unlikely that they breed at the Prince Edward Islands.

The unexpected discovery of Little Shearwaters at Prince Edward Island, when none has been recorded at Marion Island, underlines the general lack of knowledge concerning the birds of this island. Upon Marion Island the presence of ca. 2 000 feral cats (van Aarde 1977) has probably depressed the populations of small petrels. The relative density of petrels on Prince Edward Island appears greater (pers.obs.). This is not merely because Prince Edward Island lacks cats. The extensive cover of volcanic ash, a substrate favoured by burrowing petrels, and also the potentially milder climate of the sheltered, sun-facing northern coast apparently make the island more favourable for small petrels than does Marion Island. We strongly recommend that efforts be made to explore Prince Edward Island during the main seabird breeding season between October and March.

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