

SHORT NOTE

Juan Fernandez Petrels prospecting at the Chatham Islands

Juan Fernandez Petrels (*Pterodroma externa*) breed only on Isla Alejandro Selkirk (Mas-a-fuera), 80° 45' W 33° 45' S, in the Juan Fernandez Islands, where Brooke (1987) estimated about one million of their burrows. Formerly this petrel was considered conspecific with the White-naped Petrel (*P. cervicalis*), but Imber (1985) separated it, mainly on marked intestinal differences.

P. externa is almost entirely white below, whereas *P. cervicalis* has a distinct black diagonal mark on the underwing (Fig. 6c in Imber 1985). The blackish cap and pale grey to white nape of *P. cervicalis* distinguish it dorsally from *P. externa*, whose nape is dark grey, except that during moult its nape may be mottled with white (King 1967). Falla (1976) discussed other differences.

The only previous record of Juan Fernandez Petrel in the south-west Pacific Ocean was a specimen blown inland in the Waikato district, New Zealand, in 1971 (Reed 1976).

Observations at the Chatham Islands

1984: On 17 February at 2200 h, when at the summit (224 m) of South East Island, 44° 20' S 176° 10' W, DVM heard calls, which reminded him of the Kermadec Petrel (*Pterodroma neglecta*), from one or two birds making low passes just west of western summit. When he heard a tape recording of calls taken at the same place in 1986 (see below), he confirmed that the calls were the same as he had heard in 1984.

1986: Between 0100 and 0420 h on 29 January at the same place, MJI and JAW with B. Seddon, S. Rowe and F. Nieuwland heard a strange but distinctive call among those of Black-winged Petrels (*P. nigripennis*) and Sooty Shearwaters (*Puffinus griseus*). The call, repeated at irregular intervals, was a drawn-out mellow *ooo*, immediately followed by a staccato *kokok* or *kukuk*. S. Rowe took a tape recording.

We watched this petrel with the aid of two 50 watt spotlights as it flew about the rocky summit. The weather was fair with a light wind, and cloud often obscured the nearly full moon. The petrel was much larger than a Black-winged Petrel. Its under surface was white but for a short grey line at the carpal flexure (wrist) extending diagonally inwards (seen as it hovered about 5 m from us); and the tips and trailing edges of its wings and the tip of its tail were grey also. The upperparts, seen less clearly, were dark without a pale nape.

On 31 January we heard such calling again from 0100 to 0300 h. On 3 February we heard and saw such a bird from 0235 to 0405 h, but not again despite watches until 13 February. The flight call of Juan Fernandez Petrels at the breeding colony was described as: "...*coo-cuck-cuck*, first long and

musical, then harsh" (W.R.P. Bourne, *in litt.* 2 July 1983). Later, Brooke (1987) recorded his impressions of flight and ground calls at the colony. MJI had heard in 1983 a tape recording of petrels calling at Macauley Island, Kermadec Islands, where White-naped Petrels breed. On hearing again this tape in 1987, he confirmed that the calls of White-naped Petrels are different from those heard at the Chatham Islands.

The petrel (or petrels) seen and heard in 1986 was identified as a Juan Fernandez Petrel by plumage and calls. This identification was accepted by the Rare Birds Committee.

1988: At Mangere Island (286 m), 13 km north-west of South East Island, AJDT saw a strange petrel at 0200 h on 22 January. He brought it to ground while spotlighting petrels but it flew off before capture. His observations of it agree with Juan Fernandez Petrel, though at the time, he thought that it was a Buller's Shearwater (*Puffinus bulleri*).

Despite further work there, he did not see or hear such a bird again until 2400-0600 h on 2 March. Then he had four sightings and twice heard a call rendered as *oooo wek-ek*. On later hearing the tape recording of Juan Fernandez Petrel at South East Island and part of M.L. Brooke's recordings at the Juan Fernandez colony, he concluded that he had probably heard the same species at Mangere Island.

1989: Nightly between 26 and 29 January, JAW and others heard at least two Juan Fernandez Petrels at the summit of South East Island, between 2300 and 2400 h. The birds, seen in the moonlight on 26 January and by spotlight on 29 January, were flying at high speed around the summit. These records were accepted by the Rare Birds Committee.

1989-90: On 8 December 1989, E.C. Young noticed an unusual corpse near a nest of Southern Skuas (*Catharacta skua lonnbergi*) at the South East Island summit. DVM collected the remains, which are of a Juan Fernandez Petrel. This specimen has been deposited in the National Museum of New Zealand, Wellington, where, after mallophaga were retrieved by R.L. Palma, it was skeletonised.

Description: Upperparts dark grey, greyish black on primaries, tail and crown. No pale nape. White below. Narrow, dark grey bar 60 mm long extending diagonally inwards from carpal joint on underwing. Primaries with inner webs white, extending as a wedge up to 75 mm beyond greater coverts of underwing. Tail feathers with white bases of inner webs increasing outwards but, on outermost pair, still leaving a sooty tip 35 mm long by the shaft, lessening towards inner edge. Outer two pairs of tail feathers thus darker, and with less white on inner webs, than in White-naped Petrel. Feet flesh with black extremities. Grey bloom on many feathers indicated recent moult.

Measurements (mm): culmen 38.5, width at base 17.5, depth at base 17.0, tarsus 41.3, mid-toe and claw 55, wing 322, tail 139, total length 425.

Since this specimen was found, Juan Fernandez Petrels have been heard and seen flying at South East Island summit by DVM and JAW during January 1990. The bird seen by DVM was regularly hesitating as it flew over some *Olearia* scrub, as if considering landing.

Discussion: Scarlett (1982) listed bird subfossils found at the Chatham Islands. Many were seabirds, including the Kermadec Petrel, which is closely related to the Juan Fernandez Petrel (Imber 1985). The Chatham Islands seem climatically marginal for surface-breeding *P. neglecta*, whereas *P. externa*, which burrows at 1000 m (Brooke 1987), might be able to breed at lower altitudes in higher latitudes. It ranges at least to 48°S from its breeding colony (Clark 1986).

As bones of *P. externa* were not available to Scarlett (*in litt.* 24 February 1988), the skeleton of the present specimen should be compared with Chatham Islands subfossils. *P. externa* may well have bred there formerly and be now attempting to colonise again.

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