

SHORT NOTE

The origin of specimens of New Zealand storm petrel (*Pealeornis maoriana* Mathews, 1932)

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The publications, on the Internet (<http://www.wrybill-tours.com>) and by Saville *et al.* (2003) of photographs of storm petrels taken by Brent Stephenson off the Mercury Islands on 25 January 2003, and by Flood (2003) reporting a number of storm petrels north of Little Barrier Island on 17 November 2003, all of which claim the sightings to have been of New Zealand storm petrel (*Paeleornis maoriana* (= *Oceanites maorianus* Oliver 1955)), a claim yet to be verified by the OSNZ Rare Birds Committee (see also Stephenson & Saville 2003), raises the question of the origin of the three previous 19th century specimens of this form. They were dismissed by Murphy & Snyder (1952), who thought that they must all have come from the vicinity of Banks Peninsula, as a pale morph (the "Pealea phenomenon") of Wilson's storm petrel *O. oceanicus* because they were closely similar to *O. oceanicus* in their size and proportions (Table 1) except for slightly longer tarsi, but differed in having streaked underparts. This now seems unlikely because a pale phase should have larger pale patches on its webs than in normal Wilson's storm petrels, whereas in the three specimens of *P. maoriana*, and in the published photographs, they are dark.

It is of critical importance where these three specimens came from. The first two, now lodged in the Museum National d'Histoire Naturelle at Paris, were taken by Quoy & Gaimard (1830) during the first cruise of the *Astrolabe* in January-March 1827.

According to Dunmore (1969) this voyage passed through Cook Strait and north up the east coast of North Island, with a circuit of the Hauraki Gulf, to North Cape, sometimes landing and sometimes trading with Maori offshore, as at Palliser, Tolaga, Firth of Thames, Bream Bay and the Bay of Islands, "at each of which places they encountered several hundred natives", so that the birds must have been collected somewhere along the east coast of North Island. If birds were taken at sea it was usually recorded, so since the two specimens do not say this, it raises the question whether they were obtained ashore or from the inhabitants. Attribution to Banks Peninsula as the collection site was due to confusion with the second voyage of the *Astrolabe* in 1837-40, which it passed up the whole east coast of New Zealand, and the supposed collection of the third specimen there. Manuscript accounts by Quoy survive for everything collected during the first voyage except the birds, which have not been traced yet.

It has become evident from repeated experience elsewhere that birds found on ships have not necessarily come on board where first noticed. Examination of the register in the British Natural History Museum at Tring with Dr Robert Prys-Jones shows that the slightly damaged third specimen was presented among 17 skins from the New Zealand area by "Carrick Steet" of London in February 1895. One was said to come from New Caledonia, five from the River Awanui in northern New Zealand, three from Kawaw, Auckland (presumably Kawau Island?), six from Great Barrier Island, a Cape pigeon *Daption capense* from Lyttelton, and the storm petrel from off Banks Peninsula, with no other data. This list of localities suggests that "Carrick Steet", called G.C. Steel by Mathews (1932) in the original description of *Pealeornis maoriana*, was some sort of tourist, perhaps in a yacht. The presence of the Cape pigeon from Lyttelton implies that the storm petrel could well have been collected off Banks Peninsula; on the other hand, the majority of Steet's specimens were said to come from Kawau and Great Barrier Islands in the Hauraki Gulf, between the sites at which Stephenson's photographs were taken off Mercury and Little Barrier Islands. Thus the bird might have come on board a vessel there days before it was noticed when preparing to dock off Banks Peninsula, or Steet, or Steel, may have got Banks and Coromandel Peninsulas as well as his name mixed up.

Therefore, all three specimens of this interesting bird could come from the same area off Coromandel Peninsula as the recent photographs. Clearly it deserves further investigation.

Table 1 Measurements (mm.) of the three specimens of *Pealeornis maoriana* by Murphy & Snyder (1952) and separately by the authors.

Measurer	Specimen	Wing	Tail	Culmen	Tarsus	Toe
Murphy & Snyder (1952)	Paris 17 (14393)	147	56.6	12.7	35.3	27.6
	Paris 18 (14372)	148	58	12.5	35.1	27.2
	BMNH 95.2.11.1	151.5	64.2	12.5	35	27.2
Jouanin	Paris 17 (14393)	148	65	12.5	37	28
	Paris 18 (14372)	150	63	13	37.5	28
Bourne	Paris 17 (14393)	148	66	12	37	27.5
	Paris 18 (14372)	148	61	12	36	27
	BMNH 95.2.11.1	148	67	12.5	35	2

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