

New Zealand Records of
PTERODROMA LONGIROSTRIS (Stejneger)
and a New Record of
PTERODROMA LEUCOPTERA (Gould)

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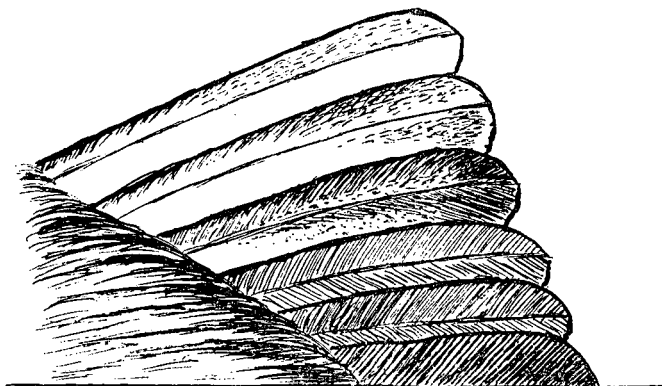
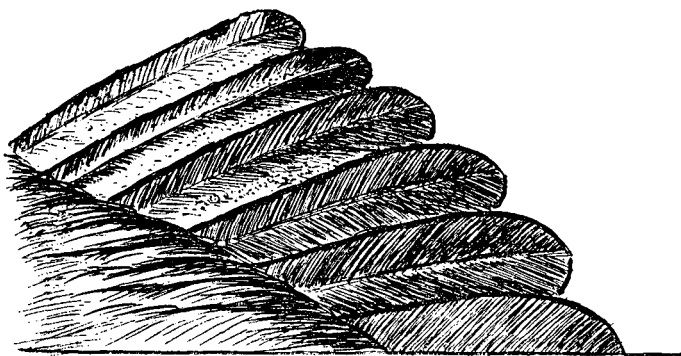
In the course of the year 1961 three specimens of Stejneger's Petrel (*Pterodroma longirostris*) have been found on New Zealand coasts in two widely separated North Island localities. The first record to come to notice was a corpse, fragmentary after mauling by gulls, but quite fresh, found by the writer on the shores of Cook Strait at Baring Head on 3/12/61. The remains were complete enough to give dimensions and fresh colours of soft parts, which were — bill, black; feet with a bluish tinge, stained brownish on outer toe and about half-way up the outer side of tarsus. Webs pale fleshy, not terminally dark as in *P. leucoptera leucoptera*. The bird was in full fresh plumage; forehead and lores mainly white as in fresh plumage the black-based centres of the feathers hardly show; crown and nape fairly dark grey contrasting with paler grey back; secondaries frosted still paler grey, upper secondary coverts more so and edged with white. All primaries have white edges on inner webs, less sharply defined than in *P. cooki*, the outermost least definite; axillaries white, primary shafts dark. The tail of twelve feathers spreads to a wedge-shaped fan. The outermost rectrices have the outer web solid grey except at base and some grey fairly solid on the inner web against the shaft distally, otherwise white or peppered. In the next rectrix the inner web has more grey, but the outer web has some white coming up along the shaft nearly to the tip. In this pattern of outer rectrices, although variable, *P. longirostris* has consistently stronger dark pigmentation than *P. leucoptera* and much more than *P. pycrofti* and *P. cooki*. In the contrasting dark crown the race resembles *P. leucoptera* with which Murphy (1929) has grouped it specifically, but its tail is both darker and relatively longer. The tail-wing index of the specimen is 48%.

The other two records are from Ohope Beach, near Whakatane, in the Bay of Plenty. Both were fresh and were found on the same day, 5/1/62, by Mr. V. T. Davis. They show, however, slight differences in plumage and were in different phase of moult. One of them (9767) is still renewing primaries and rectrices and has a good deal of old body plumage especially on the crown. The other (9768) has completed a moult and has a contrasting blackish crown. It has better defined white areas on primaries and outer rectrices than the other, a slightly longer tail and shorter bill. All three birds however are well within the range of described variability of the northern hemisphere specimens attributed to *Pterodroma longirostris* and of the breeding birds from Masafuera which Lonnberg (1921) described under another name (*P. masafuerae*).

Number	Sex	Wing	Tail	Tarsus	Toe	Culmen	Width	Depth	Tail- wing Index
D.M. 9766	♂	228	109	30	34	25	10	10	48%
D.M. 9767	♂	220+	105	29	35	23.5	8	9	46.6%
D.M. 9768	♂	217	100	29.5	35.5	25	9	9	46.1%

There can, I think, be no longer any doubt that Stejneger's (1888) description of first one and later another moulting specimen from Japanese seas is the first valid definition of the petrel which later Lonnberg (1921) described from a series of Juan Fernandez breeding specimens as *Pterodroma cooki masafuerae*. Because of the extreme condition of moult in the Japanese specimens and the difficulty of guessing the original colour of the feet in dried skins, there has been an understandable tendency to treat Stejneger's species as a marginal uncertainty when genera of small gadfly petrels have been reviewed (Loomis 1918, Mathews 1934, Murphy 1929, Fleming 1941, Falla 1942, Austin 1952). In an earlier paper (Falla 1942) I proposed the relegation of *P. cooki masafuerae* Lonnberg to the synonymy of *P. longirostris* (Stejneger), considering that this was justified by a narrow margin of evidence in favour. Doubt has been removed since Dr. N. Kuroda has kindly supplied dimensions, tail sketches and other particulars of type and co-type, as well as comparing some details of the recent New Zealand specimens sent to him. Whatever other moulting migrants of small gadfly petrels of similar size, such as *P. brevipes* and the anomalous *P. pycrofti*, may have been later referred in literature to *P. longirostris*, it is clear that in general pattern and dimensions, length and shape of tail, pattern of outer rectrices, and foot coloration, both type and co-type of *P. longirostris* present all the essential features of the birds later described from Masafuera, and also of the three vagrants recently found in New Zealand.

In the varying pattern of relationships suggested by the several reviewers listed above one of the few points of general agreement has been to group *longirostris* (and/or *masafuerae*) subspecifically with *Pterodroma leucoptera* (Gould). The material under consideration does not warrant expansion of this discussion into another review, except that it provides an opportunity to emphasise one or two points of difference that are apparent in fresh material. Mr. P. C. Bull has kindly permitted me to examine a specimen and record a further occurrence of *P. leucoptera* in New Zealand.* This bird, an adult female, was found by him on Otaki Beach on 25/6/61, and the skin has been preserved. It is appreciably larger than any of the specimens of *longirostris* and the dark area from the crown extends further on to the shoulders as most reviewers have noted. The dimensions here given may be compared with those of the series above. Wing 232, tail 92, tarsus 30.5, toe 35, culmen 25, width culmen 11, depth 10. The tail wing index of this specimen is 39.6%. Apart from size difference, and the relatively longer tail of *longirostris*, the two are separable by uniform difference in foot pattern, *longirostris* lacking the dark distal area on the webs of *leucoptera*, and in the shape of the tail shown in the accompanying figure.

(a) *P. leucoptera*(b) *P. longirostris*

REFERENCES

- Austin, O. L., Jr., 1952 — Bull. Mus. Comp. Zool. Harvard, 107 (7) 391-403.
- Falla, R. A., 1942 — "Review of the smaller Pacific forms of *Pterodroma* and *Cookilaria*." *Emu* XLII, (2) 111-118.
- Fleming, C. A., 1941 — "Notes on the genus *Cookilaria*." *Emu*, XLI (1) 69-77.
- Lonnberg, E., 1921 — Nat. Hist., Juan Fernandez and Easter Island, III, Zool., pt. 1, p. 14.
- Loomis, L. M., 1918 — A review of the albatrosses, petrels and diving petrels. *Proc. Cal. Acad. Sci.* (4), 2, pt. 2, No. 12: 1-187.
- Mathews, G. M., 1934 — A checklist of the Order Procellariiformes. *Novit. Zool.*, 39: 151-206.
- Murphy, Robert Cushman, 1929 — On *Pterodroma cookii* and its allies. *Am. Mus. Novit.* No. 370: 1-17.
- Stejneger, L., 1893 — *Proc. U.S. Nat. Mus.*, XVI, 618-620.

* For earlier occurrences see —

1943, Bull, P. C. — "The occurrence of *Pterodroma leucoptera* in New Zealand," *Emu*, XLII, 145-152.

1946, Bull, P. C. — "Further record of *Pterodroma leucoptera*," *Notornis* 2, 29-30.