

## Notes on the Races of Prions

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All prions are similar in general appearances, and identification of species depends very much on the proportions of certain body measurements (see 'Bird in the Hand' this issue). Racial diagnosis is therefore difficult and must also rely on features of measurement. The result is that separation of races in the prions often cannot be supported on present evidence.

In most cases it is impossible to distinguish between individuals from populations breeding at widely separated colonies within the geographical range of a species. For example, good series of body measurements given by Richdale (1965) and Swales (1965) are useful for comparison in the case of the Broad-billed Prion, *Pachyptila vittata*. The measurements they give show that birds of this species breeding on islands off the south of New Zealand do not differ sufficiently from those on Gough Island in the South Atlantic for separation on the characters examined.

There are no reliable methods at present for recognition of racial differences within the following species:

Broad-billed Prion	<i>P. vittata</i>
Medium-billed Prion	<i>P. salvini</i>
Thin-billed Prion	<i>P. belcheri</i>
Fulmar Prion	<i>P. crassirostris</i>
Fairy Prion	<i>P. turtur</i>

Fulmar Prions from the Chatham Islands may have larger measurements than others. A wing of more than 190 mm and bill width of more than 12 mm could be diagnostic of this race, *P. c. pyramidalis*. Remaining Fulmar Prions, *P. c. crassirostris*, should have wings less than 190 mm and bill widths under 11.5 mm (Fleming, 1939).

In the case of the Fairy Prion, further work may be expected to yield useful characters distinguishing the populations from different breeding localities.

This leaves the Dove Prion, *P. desolata*, of which there are three recognisable races (see Tickell, 1962). Their characters may be summarised as follows:

***P. d. desolata***—Narrowest billed form; wing and tail normal length. When bill width less than 13.5 mm and tail more than 85 mm—probably this race from Kerguelen.

***P. d. banksi***—Wide bill; normal wing and tail. When bill width more than 13.5 mm and tail more than 85 mm—probably this race from Antarctic waters south of Convergence: South Orkney, South Georgia, Heard and Cape Denison.

***P. d. alter***—Wide bill; short tail and in some (Auckland Island) short wings. When bill width more than 13.5 mm and tail less than 85 mm—probably this race from Macquarie and Auckland Islands. The Auckland Island birds have wings usually less than 185 mm.

Since matching examples taken from each of these populations are available (e.g. Falla, 1937) caution must be given that the definitive racial determination of an individual is probably unreliable.

### References

- Falla, R. A. (1937), 'Birds', B.A.N.Z. Ant. Res. Exp. Rep., Series B, vol. 2, 288 pp. (prions pp. 191-203).  
 Fleming, C. A. (1939), 'The Birds of the Chatham Islands', *Emu* 38: 380-413, 492-509.  
 Richdale, L. E. (1965), 'Breeding Behaviour of the Narrow-billed Prion and the Broad-billed Prion on Whero Island, New Zealand', *Trans. zool. Soc. Lond.* 31: 87-155.  
 Swales, M. K. (1965), 'The Sea-birds of Gough Island', *Ibis* 107: 17-42, 215-229 (Broad-billed Prion pp. 40-41).  
 Tickell, W. I., N. (1962), 'The Dove Prion, *Pachyptila desolata* Gmelin', F.I.D.S. Sci. Repts No. 33, 55 pp.

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