SIGHTING OF A LEACH'S STORM PETREL OCEANODROMA LEUCORHOA NEAR THE ANTARCTIC POLAR FRONT

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On 5 February 1994 we identified a Leach's Storm Petrel Oceanodroma leucorhoa near a warm core, anticyclonic eddy associated with the Antarctic Polar Front (Trathan 1995), about 500 km north of South Georgia at 50°11'05"S, 38°30'29"W. The weather at the time of observation was overcast with light winds and calm seas. We were standing within the pilot house (12 m above sea level) of the RRS James Clark Ross and we watched the bird for about two minutes as it flew at roughly the same heading as the ship about 100 m ahead of us. The Leach's Storm Petrel was associated with several Black-bellied Fregetta tropica and Wilson's Oceanites oceanicus Storm Petrels. We identified it as a Leach's Storm Petrel on the basis of its size, colouration, and flight pattern. It was about the same size as the Black-bellied Storm Petrels that were present, and was entirely dark brown or blackish, save for a pale rump patch. The exact colouration of the rump patch was whitish but not gleaming white, and its borders were somewhat irregular; at least, they were not razor-sharp as they usually are on the very similar Madeiran Storm Petrel Oceanodroma castro. The flight pattern of the Leach's Storm Petrel was distinctive, characterized by deep and languid flaps that propelled the bird on an erratic and bounding course. The languid, bounding flight pattern recalled that of the much larger Soft-plumaged Petrels Pterodroma mollis that were common in the area. Compared to those of Wilson's Storm Petrels, the wings of the Leach's Storm Petrel were longer, more sharply angled at the carpal joint and more finely pointed at the tips. We were not able to ascertain whether the tail was notched, as would be true for Leach's Storm Petrel, or whether the bird's feet projected beyond the tail, as true for Wilson's Storm Petrel. Despite the general similarity of the bird's colouration to that of a Wilson's Storm Petrel, we could instantly ascertain that it was not Wilson's on the basis of its wing shape and flight pattern. Therefore we are confident that the bird we saw was not an aberrant, dark-rumped Wilson's Storm Petrel, such as have been observed near South Georgia in the past (Bourne 1987, Curtis 1988). All three observers are familiar with Leach's Storm Petrels in the field, and also with the other species of storm petrels with which Leach's might be confused.

Leach's Storm Petrels have a broad breeding distribution in the North Atlantic and Pacific Oceans, and a portion of the Atlantic populations regularly crosses the equator during the boreal winter when they are not breeding. During this season, they have been found in small numbers off South Africa (Griffiths & Sinclair 1982, Bourne 1992) and Brazil (Murphy 1936, J.R. Jehl pers. comm.). There are in addition records of vagrants from Australia and New Zealand (Serventy *et al.* 1971, Marchant & Higgins 1990), the Indian Ocean and the Arabian Sea (Lapthorn *et al.* 1970). There is one additional record from the South Atlantic Ocean comparable to the one we report from South Georgia: on 3 January 1947 one was seen at 57°40'S,

5°00'E (Biermann & Voous 1950). This record, from the African sector of the Southern Ocean, was well to the south of the Antarctic Polar Front.

Immature Leach's Storm Petrels habitually prospect for potential breeding sites using nocturnal visits to offshore islands, during which they vocalize and occasionally alight and enter burrows (Warham 1990). They have done this at at least two southern hemisphere locations during the austral winter: St Croix Island off South Africa annually between 1976 and 1984 (Randall & Randall 1986) and in the Chatham Islands off New Zealand in 1980 (Imber & Lovegrove 1982). Observations of vagrants and prospecting pre-breeders in the southern hemisphere suggest a range expansion, and shipboard observers should be alerted to the possible increased incidence of this species in southern oceans.

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REFERENCES

- BIERMAN, W.H. & VOOUS, K.H. 1950. Birds observed and collected during the whaling expeditions of the 'Willem Barendsz' in the Antarctic, 1946–1947 and 1947–1948. *Ardea* 37 Suppl.: 1–123.
- BOURNE, W.R.P. 1987. Parellel variation in the markings of Wilson's and Leach's Storm-Petrels. *Sea Swallow* 36: 64.
- BOURNE, W.R.P. 1992. Leach's Storm-petrels visiting ships at sea. *Br. Birds* 85: 556–557.
- CURTIS, W.F. 1988. An example of melanism in Wilson's Storm-Petrel. *Sea Swallow* 37: 63.
- GRIFFITHS, A.M. & SINCLAIR, J.C. 1982. The occurrence of Holarctic seabirds in the African sector of the Southern Ocean. *Cormorant* 10: 35–44.
- IMBER, M.J. & LOVEGROVE, T.G. 1982. Leach's Storm-Petrels (*Oceanodroma leucorhoa*) prospecting for nest sites on the Chatham Islands. *Notornis* 29: 101–108.
- LAPTHORN, J., GRIFFITHS, R.G. & BOURNE, W.R.P. 1970. Leach's Storm-Petrel *Oceanodroma l. leucorhoa* from the Indian Ocean and Sharjah, Persian Gulf. *Ibis* 112: 260–261.
- MARCHANT, S. & HIGGINS, P.J. (Co-ordinators) 1990. Handbook of Australian, New Zealand & Antarctic birds, Vol. 1. Melbourne: Oxford University Press.
- MURPHY, R.C. 1936. The oceanic birds of South America.

New York: American Museum of Natural History.

- RANDALL, R.M. & RANDALL, B.M. 1986. The seasonal occurrence of Leach's Storm Petrel *Oceanodroma leucorhoa* at St. Croix Island, South Africa. *Ostrich* 57: 157–161.
- SERVENTY, D.L., SERVENTY, V.N. & WARHAM, J. 1971. The handbook of Australian seabirds. Sydney: Reed.
- TRATHAN, P. 1995. Characterization of the Antarctic Polar frontal zone to the north of South Georgia in summer 1994. Paper presented at the Challenger Society Meeting, Cambridge, U.K., May 1995.
- WARHAM, J. 1990. The petrels: their ecology and breeding systems. London: Academic Press.



Leach's Storm Petrel by Penny Meakin (Harrison, J. et al. 1997. The atlas of southern African birds)