

**A long-lived Southern Buller's Mollymawk (*Diomedea bulleri bulleri*)
with a small egg**

Albatrosses are such long-lived birds that it is difficult to maintain a study that follows a cohort from hatching to the death of the last individual. During a study of the breeding of Southern Buller's Mollymawks (*Diomedea bulleri bulleri*) at the Snares Islands (48° 02' 166° 35' E) in January/February 1948, Dr L.E. Richdale banded 161 breeding birds (Richdale, L.E. 1949, Buller's Mollymawk: incubation data, *Bird-Banding* 20: 127-141). The survival of these birds until 1971 was reported by Richdale & Warham (1973, Survival, pair bond and nest-site tenacity in Buller's Mollymawk, *Ibis* 115: 257-263), who predicted that if the mortality rate of the 1948 birds remained constant (11.15%), the last member of the group would not die until about 1995.

A new study of the Southern Buller's Mollymawk population at the Snares Islands was begun in March 1992, with further visits in July 1992 and March 1993. In both March 1992 and 1993, one of the birds originally banded by L.E. Richdale was found incubating. In 1948, this bird was fitted with band number G98 and recorded as a breeding female. On 20 January 1969, it was recaptured and given band number M-14721; band G98 was removed at this time. This bird was recaptured on 5 March 1992 on an egg and it was seen again that year on 8 March. In 1993, the bird was seen incubating on 8, 12 and 15 March.

In 1948, M-14721 was at least 5 years old, the minimum age of first breeding in this species (Sagar unpubl.), so in March 1993 this bird was in at least its 51st year.

The same nest was used by M-14721 in at least both 1992 and 1993 and this was within the same colony as used in 1948 and 1969. Therefore, the extreme nest site tenacity determined by Richdale & Warham (1973) continued for at least 46 years with this bird.

An analysis of the sizes of eggs laid 13 to 22 years apart by the same female Southern Buller's Mollymawks at the Snares Islands showed that the more recent eggs tended to be shorter and the breadth about the same as those laid in 1948 (Richdale & Warham 1973). Egg measurements for M-14721 show that egg size continued to decline with increasing age, while the mean dimensions and size of eggs of Buller's Mollymawks at the Snares Islands varied very little over the same three years of record (Table 1). This indicates that age, rather than changes in food supply, affected the egg size of M-14721. The dimensions of the egg laid by M-14721 in 1993 were by far the smallest recorded for this species in all three years of record (Table 1).

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TABLE 1 — Egg dimensions (mean, standard error of mean, range, in mm) and volume index (length x breadth²) of Southern Buller's Mollymawks breeding on the Snares Islands in 1948, 1969 and 1993. For each year measurements are given for the colony as a whole and for female M-14721 alone. Measurements for 1948 are from Richdale (1949, Table 4).

	Length	Breadth	LB ²
1948 (N = 64)	103.2, 0.47, 93.5-111.0	65.4, 0.25, 0.8-69.8	441
M-14721	111.0	64.5	462
1969 (N = 97)	103.6, 0.38, 93.9-111.9	64.9, 0.19, 59.9-69.9	436
M-14721	106.7	64.9	449
1993 (N = 41)	105.4, 0.94, 91.9-114.3	64.8, 0.34, 59.8-68.5	445
M-14721	91.9	59.8	329

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White-bellied Storm Petrel revisited

A well-decayed storm petrel found by T.D. Morrison on Hampden Beach, North Otago, on 12 June 1987 was provisionally identified by one of us (JTD) as a dark morph White-bellied Storm Petrel (*Fregetta grallaria*) and hence recorded as an unusual find (Powlesland 1989; see also Gaze 1988, Marchant & Higgins 1990). We have since re-examined it and now propose that it was a Black-bellied Storm Petrel (*F. tropica*).

Description: Upperparts sooty black, upper tail-coverts white. Flanks white, centre of belly black with flecks of white but not an unbroken line.

Measurements (mm): Wing 160, culmen 15, mid-toe 30, tarsus 44. Plumage alone is insufficient to confirm the identification of this species. However, when measurements and description are compared with those from Marchant & Higgins (1990) and Rowe & Plant (1989), we conclude that this specimen is *F. tropica*, not *F. grallaria*.

LITERATURE CITED

- GAZE, P.D. 1988. Classified summarised notes, South Island 1st July 1986 to 30th June 1987. *Notornis* 35: 311-323.
 MARCHANT, S.; HIGGINS, P.J. (eds). 1990. *Handbook of Australian, New Zealand and Antarctic Birds*. Melbourne: Oxford University Press.
 POWLESLAND, R.G. 1989. Seabirds found dead on New Zealand beaches in 1987 and a review of *Procellaria* species since 1960. *Notornis* 36: 299-310.
 ROWE, S.; PLANT, A. 1989. Beach patroller's guide to stormcast seabirds (Procellariiformes) found in New Zealand. Private pub.

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