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Short communication

Partial albinistic cases in adult and juvenile Cory's shearwaters *Calonectris diomedea*

DIETRICH RISTOW, LUDGER WITTE

Pappelstraße 35, D-85579 Neubiberg, Germany (dietrich.ristow@t-online.de)

Riassunto - *Osservazioni di albinismo parziale in berta maggiore* Calonectris diomedea. In questa nota riportiamo due osservazioni di albinismo parziale in berta maggiore. Il primo caso riguarda un maschio adulto, che ha mostrato una singola timoniera albina per almeno 4 stagioni riproduttive consecutive. Il secondo concerne un pulcino (femmina) al nido, che presentava un'ampia distribuzione asimmetrica di remiganti e copritrici depigmentate su entrambe le ali.

When no melanin granules are deposited during feather growth, its colour becomes white. There is no consensus in the terminology of this or related colour aberrations. Breeders for pets and poultry tend to use a genetically based classification (e.g. Grouw 2000), whilst field observers favour a phenotypical one (e.g. Ellis *et al*. 2002). For simplicity, the terminology of Lanza (1982), who defines a bird to be partially albinistic no matter if a single or several feathers become white by colour aberration, is adopted here. The phenomenon is widespread across many avian genera. In this short communication we report on two cases of partial albinism in the Cory's shearwater *Calonectris diomedea*. Although no cases are mentioned in a recent general review on petrels (Warham 1990, 1996), we are aware of two other such cases, i.e. in the Manx shearwater *Puffinus puffinus* (D. Thomas *in litt.*) and in the storm petrel *Hydrobates pelagicus* (Sultana and Borg 2002).

In a population study of a breeding colony near Crete during the past three decades (Ristow 1998), more than 2400 adults were ringed. Among them, one male breeder had a completely white tail feather. This individual was controlled on 30 May 1993, 13 July 1994, 15 June 1996, and 8 July 1997. Its left 3rd retrix was always white and had been moulted regularly together with the other tail feathers (Fig. 1).

Among more than 2900 chicks handled for ringing, there was one partial albino juvenile, the distribution of the abnormal feathers on both wings being asymmetric. It was first noted on 24 August 2001 in an undernourished condition and checked again in its nest a month later (Fig. 2). It was still in poor condi-

Figure 1. Tail of an adult male Cory's shearwater showing a depigmented feather (Crete, 13 July 1994).

Figure 2. Two months-old juvenile female Cory's shearwater showing asymmetric distribution of depigmented wing feathers (Crete, 25 September 2001).

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tion, the retarded status suggesting that it had been fed by one parent only. A blood sample for biomolecular analysis performed at Heidelberg University later on (Wink 2000), revealed its sex as a female. Typically, in >1% of the nests studied, one parent disappears and the chick starves, but shows normal plumage colouration (pers. obs.). It seems unlikely, therefore, that the exceptional nutrition state was related to its aberrant plumage.

The frequency of partial albinistic cases is in the order of magnitude which one would expect for a genetic defect. Perhaps the reported details will be explained when the switching on and off of the genes' expression responsible for feather colouration is better understood than today.

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