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FIRST KNOWN MOVEMENTS BETWEEN TWO COLONIES OF THE MANX SHEARWATER PUFFINUS PUFFINUS ON THE COPELAND ISLANDS. NORTHERN IRELAND

The Copelands are a group of three islands located at the mouth of Belfast Lough, Northern Ireland. Copeland Bird Observatory is located on Old Lighthouse Island approximately 3km offshore and has a Manx Shearwater Puffinus puffinus colony estimated at 2867 Apparently Occupied Sites (Stewart 2000; Mitchell et al. 2004). Shearwaters have been ringed there since 1952. Big Copeland is the largest island in the group and is midway between the mainland and Old Lighthouse Island. Historically, there have been no surveys of Big Copeland for Manx Shearwaters. The population was estimated to be 100+ pairs in the 1970s (Neville McKee pers. comm.) but this was a projection based on the work of the adjacent observatory. Big Copeland was surveyed for the first time in 2001 as part of the Seabird 2000 survey and this resulted in a minimum population estimate of 1766 AOS (Stewart 2000; Mitchell et a.l. With this new information on Manx Shearwater numbers and 2004). distribution, members of the observatory visited the Big Copeland colony in the summers of 2002 and 2004 in an attempt to catch adult shearwaters that were originally ringed on Copeland Bird Observatory. In 2003, a visit was made in late August to ring pulli. During these visits, 75 adult shearwaters were handled and five birds originally ringed at the observatory have so far been re-trapped or recovered dead (Table 1).

These birds represent the first recorded movements of shearwaters between the two Copeland colonies. These movements are not unexpected as perhaps one third of fledglings may leave their natal colony and in a similar situation on Skomer and Skokholm in Wales, movements between the two islands have been shown to be frequent (Brooke 1990). These two islands, together with Middleholm island, may be considered a 'super-colony'. The Copeland colonies total approximately 5000 AOS, which is 13% of the Irish population and renders the islands internationally important for the species (Mitchell et al. 2004). The whole island group was designated as an Area of Special Scientific Interest in 2004, the population of Manx Shearwaters being an important part of this designation. Rathlin Island (Co. Antrim) hosts the only other Manx Shearwater colony in Northern Ireland. Formerly thought to hold at least 1000 pairs (Brooke 1990), it seems this colony has been badly affected by introduced ferrets Mustela furo (Mitchell et al. 2004). Some birds may still be

present on inaccessible parts of the cliff but limited surveying as part of Seabird 2000 revealed no shearwaters (Mitchell *et al* 2004).

Table 1. Manx Shearwaters from Copeland Bird Observatory re-trapped on Big Copeland 2002-2004.

Tabel 1. Noordse Pijlstormvogels geringd door Copeland Bird Observatory die zijn teruggevangen op Big Copeland. 2002-2004.

Bird	History at Copeland Bird Observatory	Re-trapping details on Big Copeland
EJ13676	Ringed on 02/09/1981 as a chick. Retrapped once in 1984 but not since.	Re-trapped 2002
EJ13692	Ringed on 03/09/1981 as a chick. Never re-trapped on the observatory.	Re-trapped 2002
ER32268	Ringed on 19/08/1990 as a chick. Never re-trapped on the observatory.	Re-trapped 2002.
EB53839	Ringed as an adult on 06/08/1978. Never re-trapped on the observatory	Re-trapped 2004
EJ13209	Ringed on 12/09/1980 as a chick. Never re-trapped on the observatory.	Found dead in the colony 2004.

The apparent near demise of the Rathlin colony renders the protection of the Copeland colonies and the understanding of their population dynamics all the more important. Further trapping is required on Big Copeland to ascertain the degree of inter-change between the islands and to compare this with the pattern of movements between sub-colonies on Old Lighthouse Island. If the interchange with Big Copeland is found to be equivalent it would support the treatment of the two islands as one large colony and assist in the conservation of the Manx Shearwater on the Copeland Islands and in Northern Ireland.

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