

MANX SHEARWATER NESTBOXES

by

HELEN BOOKER & TONY TAYLOR

Email: helen.booker@rspb.org.uk

Lundy's Manx Shearwater population is recovering rapidly since the Seabird Recovery Project eradicated rats from the island over the winters 2002/3 and 2003/4 (Appleton *et al.* 2006). The increase from approximately 300 pairs in 2001 to nearly 3,500 pairs in 2013 (Booker & Price 2014) has far exceeded expectations. The increase in population has enabled studies of Lundy's shearwaters with a ringing programme for adults and young by the Lundy Field Society and tracking work by Oxford University to investigate migration routes and foraging areas (Freeman *et al.* 2012). Such studies are revealing useful information into the population dynamics of the Lundy colony, increasing the level of understanding of population recovery and how the birds are using the surrounding waters. However, some aspects of colony monitoring are problematic and previous attempts to measure breeding success using a mark-recapture method concluded that a more accurate approach is needed (Booker *et al.* 2008).

Study of Manx Shearwaters, including assessments of breeding success, are best conducted where birds can be accessible in their burrows. The natural nest sites currently do not allow this owing to the steepness of the slopes and the depth and convoluted nature of the burrows. In time, as the population continues to expand perhaps onto the island's plateau, it may become possible to create 'inspection hatches' into natural burrows. In the meantime, to provide a sample of accessible nests, 30 artificial study nestboxes with their own access tunnels have been installed on Lundy's West Side in an area close to the highest density of nesting shearwaters.

The nestboxes follow the same design as those set up on the RSPB's Ramsey Island reserve in 2015 (Greg Morgan pers. comm.). In March 2016, with consent from Natural England, a team including the authors, four LFS volunteers, the island wardens and one of the Isles of Scilly Seabird Recovery Project team built and installed the nestboxes, divided into six small groups. Care was taken to avoid any existing holes and tunnels so as not to interfere with access routes to regularly used nest chambers. See the series of photos in the colour section (Plates 14 and 15) which show how the nestboxes were put together and installed.

Soil and blocks of turf that were moved during installation bedded in quickly and by late May there were no obvious signs of earlier disturbance. Grass grew round the boxes to the extent that by the end of August one lid was completely covered and the box had become very difficult to locate.

Boxes were subsequently monitored for signs of activity on four dates over the season, 22 May, 2 June, 31 August and 6 September. Despite the box lids being fixed with staples and cable ties to prevent passers by from opening them out of curiosity, over the course of the season nearly all had lost their staples, while others had been tampered with and forced open; one cable tie had been burnt to release it. Five boxes were found to be letting in light as lids were not able to close properly due to soil trapped between the box base and its lid.

Despite these issues, ten boxes had evidence of use or investigation by shearwaters, with most activity recorded in the August visit, suggesting the sites were being investigated by young birds not yet of breeding age prospecting for future breeding sites. Three of these boxes had excavations at the back, possibly related to the presence of natural access burrows close behind. One box

checked during August revealed a large downy chick, its parent birds having accessed the box via a tunnel behind the box that linked to the nest chamber. Over the season other boxes were found with droppings and/or feathers, one box containing multiple feathers during the August visit. In several there had been some digging at the rear surface, which was left as bare soil, leaving birds free to extend the nest chamber.

In the second season of nestboxes on Ramsey, two contained nesting pairs (pairs that had investigated the same boxes the year before) and many other boxes were being investigated by prospecting birds (Greg Morgan pers. comm.). It will be interesting to observe the success of nestboxes on both islands in the coming years.

In 2017 and subsequent years, the Lundy boxes will be checked periodically through the breeding season and their contents recorded. Measures will also be taken to ensure the boxes are closed more securely to prevent unwanted human disturbance. Notices (in the form of indelible ink) have been added to the lids, stating the purpose of the boxes and discouraging interference.

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