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The breeding biology and foraging ecology of Balearic shearwaters (*Puffinus mauretanicus*) studied by bird borne data loggers.

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Some years ago, L. Dall'Antonia (1) devised and manufactured a data logger which, positioned on the back of a bird, can detect and memorise the direction in which the bird is heading during a flight. This direction recorder, devised to investigate the homing performance of pigeons, was subsequently used in a study of a wild species, the Cory's shearwater *Calonectes diomedea*.

The excellent performance of the instrument in the investigation on homing ability of birds, induced us to attempt extending our investigation to marine birds' foraging patterns. Recent versions of the data logger, equipped with flight sensor and depth meter or saltwater switch, were recently used in a preliminary study of the foraging strategies of chick rearing Balearic shearwaters.

Due to low recapture rates (only 3 out of 6 tagged birds were recovered) only preliminary data from a small sample size are available. The data loggers have recorded data on the pattern of nest attendance (including the departure time to foraging trips and the return time) and the diurnal pattern of flight and dive activity (including the dive depth and duration). Despite the small sample size, our results show that our data loggers can successfully be used in studies of the Balearic shearwater's breeding biology and foraging ecology, including the diving pattern