SMALL BIRDS IN A LARGE OCEAN: HOW TO STUDY THE DIETS OF DIFFERENT STORM PETRELS?

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Understanding animals' foraging ecology is essential for the conservation of most species. With seabirds it is difficult to carry out dietary studies and these tend to be scarce. This is even harder if the study species is highly pelagic and very small, such as storm petrels. Thus, there is no standard satisfactory method to study their diet.

Molecular techniques have been recently developed to study the diet of predators by detecting prey DNA in their guts, regurgitations or faeces. These molecular techniques have not been extensively explored but are a very promising tool to improve the study of many trophic links, including in the marine habitats and the seabirds that dwell in them. The aim of this study is to develop a new method to study the diet of different species of storm petrels, contributing to two ongoing ecological case-studies of these species. Here we present the first results on the diet of storm petrels using a molecular technique based on the detection of prey DNA in the birds' faeces. In the long term we aim to contribute to the development of a feasible and reliable method to study the diet of breeding and non-breeding storm petrels, which will noticeably benefit the awareness on the future and conservation of these remarkable birds and will promote the applicability of similar techniques to other seabird species.