DIET AND CONTAMINATION OF AN ENDEMIC SHEARWATER CONFINED TO THE ENCLOSED MEDITERRANEAN BASIN

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The Mediterranean Basin contains highly contaminated marine ecosystems. Because contaminants bioaccumulate throughout species' lifespan and biomagnify through the food chain, long-lived predators such as Procellariiformes are appropriate to monitor pollutants. However, little investigation has been made of contaminant levels in Mediterranean Procellariiformes. Here we analysed heavy metal (lead, cadmium, mercury, selenium) and pesticide contamination in the Mediterranean endemic Yelkouan shearwater *Puffinus yelkouan* compared to the Cory's shearwater *Calonectris diomedea*. As one of the main factors influencing contaminant levels in seabirds is diet, we also analysed the diet composition of the two species, revealing the predominance of fish prey in both shearwaters. Yelkouan shearwaters ate smaller preys and more frequently crustaceans while larger and potentially more contaminated mesopelagic and demersal preys tended to be more frequent in the Cory's shearwater diet. Lead, cadmium and selenium levels were higher in feathers of the Yelkouan shearwater, indicating that these heavy metal levels were not related to diet differences between the two species, but probably to different food foraging and moulting areas. The heavy metal levels we found probably have no adverse effect on these birds, but pesticide contamination of eggs could have caused some breeding failure.