

{rokbox title=|Interacción de aves marinas con barca de arrastre mallorquina :: Foto: Beatriz Guijarro, COB-IEO|
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M. Louzao, J. M. Arcos, **B. Guijarro**, **M. Valls** and D. Oro, (2011). [Seabird-trawling interactions: factors affecting species-specific to regional community utilisation of fisheries waste.](#) Fisheries Oceanography. Volume 20, Issue 4, pages 263–277, July 2011.

Abstract: Bottom trawl fishing provides substantial amounts of normally unavailable demersal prey to seabirds (e.g., discards), affecting their life-history traits and population dynamics, as well as community structure. Within this framework, we studied seabird-trawling interactions throughout the annual cycle in a poorly studied ecosystem in the Mediterranean, the Balearic archipelago, on a both species-specific and a community level. Whereas the species-specific approach showed a significant influence of season (phenology) on shaping seabird's trawling attendance patterns, the spatio-temporal coupling of regional community was a result of a complex interaction between fishery-related variables. The most frequent and abundant species were the yellow-legged gull *Larus michahellis* and Cory's shearwater *Calonectris diomedea*, the latter attending vessels in higher numbers than expected from local population figures. Conversely, the remaining breeding species occurred in lower numbers than expected according to their local breeding populations, suggesting that discards were of relatively little importance. Discarding activity took place over the entire shelf and continental slope surrounding Mallorca, but especially in the southwest, adjacent to the breeding grounds of approximately 12% of the Balearic total seabird breeding population, including 13% the Balearic shearwater *Puffinus mauretanicus* world population. Overall discards corresponded to 0.74 of landings (range: 0.09–6.00) and consisted primarily of fish followed by crustaceans and molluscs (approximately 80, 15, and 5%, respectively). Seabird-trawling interactions should be taken into account in the frame of an ecosystem-based approach to fisheries management, and particular attention should be devoted to the critically endangered Balearic shearwater.

Keywords: Balearic shearwater, discards, ecosystem-based management, generalized linear models, kernel analysis, *Puffinus mauretanicus*, seabird-fishery interactions.