





## From Galician waters to cetacean stomachs, a feeding story told by preys

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Cetaceans play an important role in maintaining the health and stability of marine ecosystems. To understand the trophic relationships of these top predators in waters off the Northwest Iberian Peninsula, and to determine their possible competition with fisheries, the stomach contents of 751 common dolphins (Delphinus delphis), 60 striped dolphins (Stenella coeruleoalba), 124 bottlenose dolphins (Tursiops truncatus), and 72 harbour porpoises (Phocoena phocoena) stranded on the Galician coast between 1990-2018 (almost 30 years) were analysed. Results indicated that their diets are mainly piscivorous (after identified 90 different taxa: 68 fish and 22 cephalopods), being the blue whiting (Micromesistius poutassou) and the European hake (Merluccius merluccius) the most important preys (in occurrence, number, and biomass) throughout all the years studied and for the four cetacean species. The long time series available allowed to detect interannual variation in the diet of both common dolphins and harbour porpoises by means of Generalised Additive Models (GAMs), observing an increase in the presence of European hake and a decrease of sardines (Sardina pilchardus) in the stomachs through time. Seasonal variation in the diets of the common and striped dolphins were also observed, with a higher consumption of blue whiting during the summer (May-September). Significant differences were found in the diet of the two bottlenose dolphin ecotypes present in Galicia, the coastal ecotype contains a higher percentage of demersal preys in the stomachs, while the oceanic ecotype contains more pelagic preys, confirming the habitat separation between the two. Results also confirmed an ontogenic variability in the diet of harbour porpoises, with juvenile animals showing a higher presence of coastal preys in the diet (e.g., pouting -Trisopterus luscus). There is an overlap between the diet of these four cetacean species and the fisheries' target species in the area, indicating competition for some resources.