



## HC-40. New bycatch insights unveiled through strandings analyses

Hernandez-Gonzalez, Alberto <sup>1</sup>; Ivaylova, Silvina <sup>1</sup>; Puig-Lozano, Raquel <sup>2</sup>; Covelo, Pablo <sup>3</sup>; López, Alfredo <sup>3,4</sup>; Pin, Xabier <sup>3</sup>; González, Mónica <sup>4,5</sup>; Vázquez, Uxía <sup>3</sup>; Pierce, Graham <sup>1,6</sup>

1. Instituto de Investigaciones Marinas (IIM-CSIC)
2. Instituto Universitario de Sanidad Animal y Seguridad Alimentaria (IUSA)
3. Coordinadora para o Estudio dos Mamíferos Mariños (CEMMA)
4. Centro de Estudos do Ambiente e do Mar (CESAM);
5. Universidade de Vigo (UVigo)
6. Oceanlab, University of Aberdeen

Stranded cetaceans represent an indirect source of information on bycatch as it is possible to obtain the biological profile of individuals most likely to be caught by fisheries in a particular area through necropsies. In Galicia, NW Spain, the stranding network CEMMA necropsied 3,928 common dolphins (*Delphinus delphis*), 560 bottlenose dolphins (*Tursiops truncatus*) and 345 harbour porpoises (*Phocoena phocoena*) between 1990 and 2023. Of all individuals examined, 18.5% of common dolphins (n = 725), 6.3% of bottlenose dolphins (n = 35) and 12.5% of harbour porpoises (n = 43) had external injuries consistent with bycatch (e.g., skin cuts and/or impressions caused by contact with nets, amputations, broken mandible and/or teeth). Results showed that both common dolphins and bottlenose dolphins with evidence of bycatch stranded most frequently in the north-western part of the study area (> 60%), while harbour porpoises with evidence of bycatch stranded principally in the southwest. The highest bycatch incidence for the three cetacean species was detected in winter (> 30% of the total annual). It was also observed that bycatch incidence is higher in juvenile common dolphin individuals (160 - 190 cm in length), juvenile female bottlenose dolphins (< 250 cm in length), and adult harbour porpoise individuals (150 - 200 cm in length). Finally, after analysing the diet of these three cetacean species, more pelagic prey were identified in the stomachs of bottlenose dolphins with evidence of bycatch; and demersal prey in the stomachs of harbour porpoises with evidence of bycatch. Since part of the bottlenose dolphin population have an oceanic distribution, and harbour porpoises have a more coastal distribution, these findings could indicate that these two cetacean species can be affected by different métiers in the study area (e.g., trawling vs gillnetting) and, therefore, this information could be used to support future ecosystem-based fisheries management.