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Orientation: Integral Management of the Sea
 Specialization Area: Environmental Analysis and Evaluation
 Research Area: 3.5. Biodiversity and coastal ecology



PhD project: Spatial and temporal variability of the marine trophic web in the Atlantic Iberian waters

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Summary: Understanding the complex food-web interactions and ecosystem functioning is essential in fisheries management to progress towards an ecosystem-based approach. This approach on the west Iberian marine trophic web involves considering multispecies, trophic interactions, impact on ecosystems, and the socio-economic dimension. This proposal aims to develop an ecosystem model that integrates temporal and spatial heterogeneity and considers potential ontogenetic changes in trophic ecology to explore ecosystem responses to anthropogenic or environmental pressures. The data collected will be used to improve and update the existing Ecopath with Ecosim (EwE) model, which can be applied in evaluating the Good Environmental Status of the Marine trophic webs off the Atlanto-Iberian coast and in OSPAR assessments. The new data collected on gut contents and stable isotopes of the marine organisms of the west Iberian marine trophic web will help clarify the trophic position and trophic relationships and significantly improve the existing model.

