

Sensitive ecological traits to climate variability and fishing impact across European Atlantic and Mediterranean systems: — embracing processes at population, community and ecosystem level —

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Background

- **WG-COMEDA** (*Working group on comparative analyses between European Atlantic and Mediterranean Ecosystems to move towards an Ecosystem-based Approach to Fisheries*) is a ICES Working Group that was formed in 2014 with the intend to establish a collaborative research platform for scientists from the **Atlantic** and the **Mediterranean**; to work together across different biological levels from **population**, through to **community** and **ecosystems**.

- The second meeting of this WG took place in Palma de Mallorca in April 2014 funded by the **EUROMARINE** consortium and included the participation of 20 scientists (10 of them partially funded by the grant) from **European Atlantic** and **Mediterranean** countries (Denmark, France, Greece, Italy, Spain, Sweden, UK and Portugal).



WG-COMEA members met at the IEO in Palma de Mallorca in May 2015

Our Objectives

- The **general objective of the WG**, aims at strengthening the scientific basis for regional and integrated ecosystem approach of living resources, through a **comparative research platform**. A **comparative approach** of marine ecosystems is essential to learn how Atlantic and Mediterranean ecosystems are structured; how they function, and which are the more sensitive species or ecological processes to be managed within these dynamic ecosystems.

- The **specific objective in the 2015 WG meeting** was to identify key **sensitive ecological processes** (from species and population processes, thorough inter-specific relationships, to trophic flows) to climate variability and fishing impact issues on Atlantic and Mediterranean ecosystems^[1].



Our Outcomes: Working Across Five Transversal Research Topics

TOPIC 1

“Population traits that stabilize and shape demersal fish community dynamics”



Jan van Kessel

TOPIC 2

“Patterns and drivers of functional diversity of fish communities”



Michigan Science Art

TOPIC 3

“Biodiversity and ecosystem trait changes at regional scales”



Glynn Gorick

TOPIC 4

“Stabilizing dynamics of forage fish communities”



Daide Lorpesti

TOPIC 5

“Functional diversity in benthic ecosystems”



Alle-Ing

Our Next Steps

- Final analyses of each topic will be presented in the next meeting of the WG in Bilbao (Spain) from the 6th to the 9th May 2016.

- The WG will benefit from the **large network of collaborations** established to develop new scientific initiatives, approach other important macro-ecological questions and invite other colleagues from other continents to participate.