

Marine biodiversity: A fish and fisheries perspective (E)

Conveners: Jim Ellis (UK), Remment ter Hofstede (the Netherlands), and Henn Ojaveer (Estonia)

Marine biodiversity fluctuates in time and space and may be affected by many factors (e.g. fishing, dredging, climate, eutrophication, habitat destruction, and species transfers), though the impacts of such changes on the structure and functioning of ecosystems is unclear. This theme session will report and compare changes in marine biodiversity (including genetic, species, and habitat diversity), and examine how these variations affect marine ecosystems and the provision of ecosystem services. Studies should focus on fish and shellfish, especially in terms of how exploitation affects biodiversity, though more holistic community investigations that examine both fishes and associated taxa are welcomed.

Contributions examining the following areas are encouraged:

- New methods for assessing genetic, species and habitat diversity;
- Spatial patterns and gradients, and temporal changes in diversity, with particular emphasis on fish, using traditional and novel indices;
- The impact of human activities on the diversity of fish communities;
- The potential impact of climate change on the diversity of fish communities;
- The socio-economic importance of 'biodiversity', including consequences for fisheries management;
- Relationships between the diversity of fish and shellfish assemblages and the structure, function, and resilience of marine habitats and ecosystems.

Background information: The proposed theme session will build on current studies in Marine Biodiversity and Ecosystem Functioning (MarBEF; www.marbef.org) being conducted under the EU Network of Excellence. This network has >50 marine and fisheries institutes as partners. One of the main topic areas under investigation is concerned with fish biodiversity, which will be investigated by 18 leading fisheries institutes and universities. The proposed theme session will include some of the studies conducted in the Northeast Atlantic and adjacent seas. Contributions from outside the MarBEF consortium are also welcomed.

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