Life on the blue Planet: Biodiversity Research and the New EU Marine Policies

Theme 3: Stop Marine Biodiversity Loss

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Theme 3: Stop Marine Biodiversity Loss

To explore the extent of biodiversity loss and the drivers of change in a variety of marine environments

To discuss the effects of fisheries and aquaculture practices and their associated effects on species richness

To explore the role of marine protection and marine reserves in protecting biota

To identify the steps required to reconcile policy with the health and diversity of the oceans

Structure of Theme Session 3

- Stop biodiversity loss in Coastal Environments
- Stop biodiversity loss in Estuaries
- Stop biodiversity loss in the Deep-sea
- Stop biodiversity loss in High seas
- Reconciling fisheries with stopping biodiversity loss
- Reconciling aquaculture with stopping biodiversity loss
- Urbanization and biodiversity loss
- How can MPAs contribute to stopping biodiversity loss?
- Policy challenges to stop biodiversity loss

Keynotes

Treating management decisions as large-scale experiments - Lisandro Benedetti-Cecchi, Italy

Stopping biodiversity loss in coastal environments - Ferdinando Boero, Italy

'Good' or not-so-good ecological status – and then? - Peter Herman, Netherlands

Stopping biodiversity loss in estuaries - Henrique Cabral, Portugal

The knowledge of deep-sea biodiversity: A new challenge - Daniel Desbruyères, France

Keynotes

Reconciling fisheries with stopping biodiversity loss in the deep-sea and high seas - Telmo Morato, Ruth Higgins, Fréderic Vandeperre and Ricardo S. Santos, Portugal

Fisheries and stopping biodiversity loss - Nick Dulvy, Reinhold Hanel, Jan Geert Hiddink, Priscilla Licandro, Pascal Lorance, Brian MacKenzie, Gui Menezes, Uwe Piatkowski, and Remment ter Hofstede.

The role of MPAs in the protection on the genetic structure of fish populations - Ángel Pérez-Ruzafa, Mercedes González-Wangüemert and Concepción Marcos, Spain

Policy challenges to stop biodiversity loss - An Cliquet, Belgium

Imminent Research Priorities

- Inventory coastal habitats types, species richness, relevance for ecosystem functioning and uniqueness in terms of vulnerability to human impact

- Develop knowledge of deep-sea specific diversity and distribution of main macro-habitats

- Develop current knowledge on the ecology and functioning of biodiversity in the high seas

- Explore cause-effect relationships between impacts and biotic response in estuarine habitats

Drivers of Change

– Assess the main drivers of change and develop functional indicators (rather than species) to detect ecosystem changes

– Determine consistent methods for monitoring environmental parameters to better interpret community variability

– Determine the impact of new chemicals and synthetic materials and compounds on the structure and functioning of marine ecosystems

– Understand the links between increased marine traffic and the spread of alien species

– Determine the impacts of industry, commercial fishing, and pollution on deep-sea environments

Biodiversity Management

– Develop a framework that allows MPAs to be treated as designed experiments, allowing for their re-design following proper assessment and critique.

– Analyse fine scale spatio-temporal data and information (e.g. on fisheries) in the creation of MPAs and the suitability of islands as reserves in terms of connectivity

– Determine current and predicted future state of benthic communities in Natura 2000 areas and how fishing activities could impact on these communities

– Determine the actual effects of marine reserves on the genetic structure of populations

– Promote the creation of large deep-sea and high sea MPAs

– Promote the development of an EU sustainable fishery certification mechanism

Linking Research With Policy

– Develop a balanced dialogue between scientists and policy makers to ensure that research priorities are correctly identified and supported

– Develop mechanisms to better incorporate key actors and the public in the discussions about marine biodiversity conservation to gain their active support for conservation measures

"Life on the blue Planet: Biodiversity research and the new European Marine Policies"

http://www.cimar.org/epbrs/e-conference.htm

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