

## Project partners

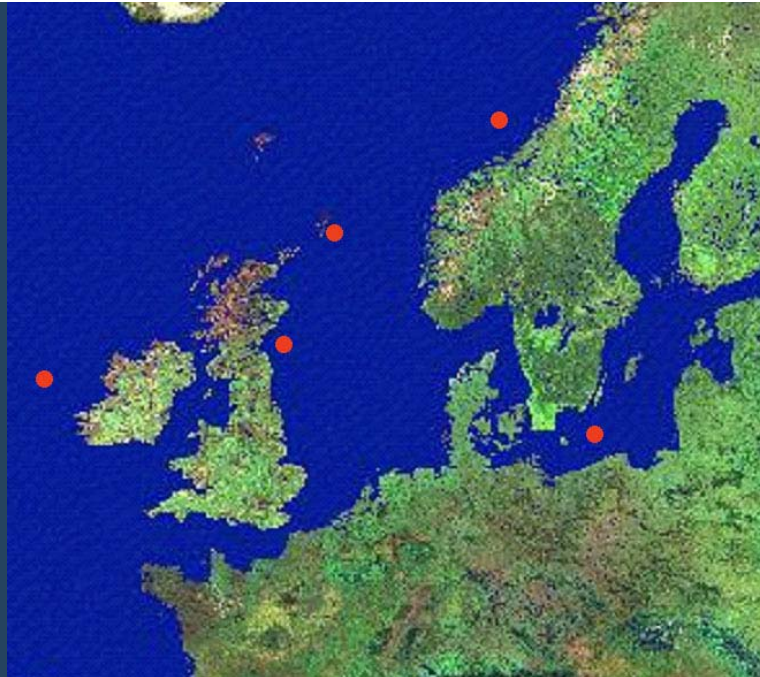
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*PROTECT case study areas in the Baltic Sea, North Sea and NE Atlantic*

For further information on specific project objectives, activities and deliverables, please email the project coordinators or visit the PROTECT website:

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## Marine Protected Areas as a Tool for Ecosystem Conservation and Fisheries Management



January 2005 – June 2008



EU 6<sup>th</sup> Framework Programme  
Specific Targeted Research

Project No: SSP8-CT-2004-513670

# MPAs for Ecosystem Conservation and Fisheries Management

## WHY PROTECT?

Marine protected areas (MPAs) are currently seen as a tool for both fisheries management and marine environmental protection. Although the benefits of MPAs are often easily identified, little empirical evidence exists that demonstrates the real effectiveness of MPAs in an European context. This is largely due to insufficient scientific documentation and lack of effective tools for MPA design, monitoring and evaluation.

## What is PROTECT?

PROTECT is a new research project involving 17 European institutions aiming to enhance the basis for the development and management of MPAs in Europe as part of an ecosystem-based approach to fisheries management. The project is running from January 2005 to June 2008 with support from the EU 6th Framework Programme.

## PROTECT objectives:

1. To evaluate the potential of MPAs as a tool to protect sensitive species, habitats and ecosystems from the effects of fishing
2. To outline and develop scientific monitoring, assessment and evaluation tools for MPAs that can assess: i. the impact of fisheries on marine ecosystems, ii. the effect of different levels of protection, iii. the impact and socio-economic effects of MPAs on fishing communities
3. To improve the link between science and management in the areas of: i. MPA design and implementation, ii. timing and level of stakeholder involvement, iii. management effectiveness and adaptability

## Case studies

In order to address a variety of issues related to the establishment and management of MPAs in European seas, PROTECT will focus on three actual case studies, representing different ecological and fisheries management scenarios.

**A top-down controlled ecosystem in the Baltic Sea:** Focuses on areas where upper trophic levels are dominated by cod with sprat and herring as its most important prey. A fragile and highly dynamic balance exists between these species and environmental conditions. *Case study coordinator: Petri Suuronen, FGFRI, FI.*

**A “wasp-waist” eco-system in the North Sea:** Focus is on potential conflicts between vulnerable top predators in local ecosystem and an important sandeel fishery. The role of MPA scenarios for sustainable recruitment dynamics is explored. *Case study coordinator: Henrik Mosegaard, DIFRES, DK.*

**Deep-water *Lophelia* reefs in the Northeast Atlantic:** Evidence exists of ongoing damage to deep-water coral reefs caused by fishing. Instruments are required to assist the design and implementation of management measures to protect remaining, pristine deep-water coral reefs. *Case study coordinator: Anthony Grehan, NUIG, IRL.*



## Working themes of PROTECT

The project is implemented through a set of cross-cutting themes that will be applied to each of the case study areas:

1. Knowledge required to model and evaluate MPAs, including the development of MPA success criteria
2. MPA monitoring strategies and databases
3. The socio-economic impacts of MPAs
4. MPA Modeling, including:
  - Ecosystem indicators and community metrics
  - Stock-specific spatial models
  - Multi-species and multi-fleet models
  - Bio-and socio-economic models

## PROTECT Outputs

PROTECT will enhance the basis for the design, selection, implementation, monitoring and evaluation of MPAs in European waters by establishing science-based management tools assisting the use of MPAs as part of an ecosystem-based approach for fisheries management.

Project findings will be discussed with key stakeholder groups and synthesised to facilitate application in management planning and policy making.

## Project communication

Results and recommendations from the project will be communicated to a wide audience of marine scientists, planners, policymakers and stakeholders through a PROTECT website, newsletters, workshop proceedings, reports, leaflets, CD-ROM and papers in scientific journals. An European scientific MPA symposium will be held in September 2007.