

# Abstract

## **The Channel Arena: An integrated study for a better understanding and management of the English Channel Ecosystem.**

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The English Channel constitutes a marine corridor between the Atlantic Ocean and the North Sea. Studies developed in a European framework, such as the CHARM project (Ifremer, CEFAS, Universities), have enabled a multi-disciplinary approach resulting in an Atlas describing the preferential habitat of several commercial fish species, integrating data over three decades with innovative spatial modeling techniques of the ecosystem.

This approach will lead towards an ecosystem-based management of living resources enabling to adapt human uses (including fisheries) to the biotic capacity of the marine environment and insure its sustainable use.

The main identified objectives are: *i)* to develop a multi-disciplinary understanding of the functioning of marine and coastal ecosystems submitted to strong human pressure; *ii)* to promote sustainable management by the development of decision-taking tools enabling to adapt human use intensity to the carrying capacity of ecosystems; *iii)* to provide indicators to characterize the ecosystem status, to measure the impact of human uses on these ecosystems and to evaluate the efficiency of management measures.