



# DEEPFISHMAN

## Management and monitoring of deep-sea fisheries and stocks

EU funded project grant agreement 227390

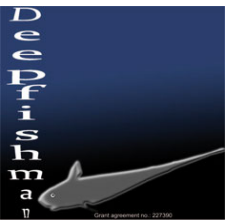


Pascal Lorance (project coord.)



Deepfishman

CoralFISH - DEEPFISHMAN final symposium 28-30 August 2012, Galway, Ireland

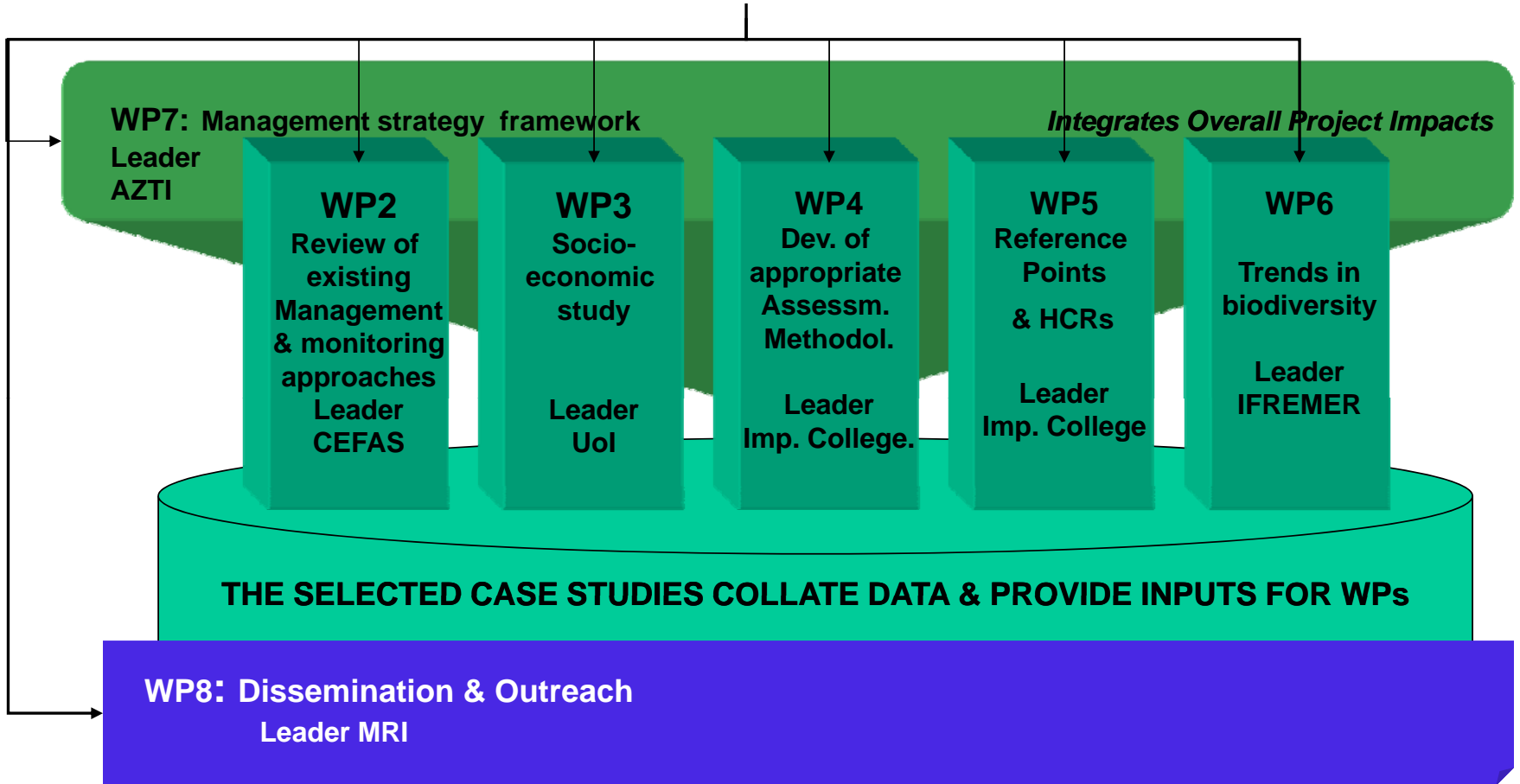


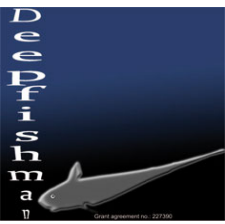
# DEEPFISHMAN general aim

- Develop strategy options for the management of deepwater fisheries in the NE Atlantic
  - Appropriate/new
    - Stock assessment methods
    - Biological reference points (BRPs)
    - Harvest Control rules (HCRs)
    - Managements strategies
  - Account of
    - Stock sensitivity
    - Biodiversity/ecosystem and VMEs sustainability and conservation
    - Socio-economy
  - Specify additional monitoring data requirements
    - (e.g.) lack of scientific cruises, economics data missing in some fisheries, poor knowledge of high resolution spatial distribution of fishing effort



# How the project is organised





<p><b>CS 1</b></p> <p><b>Directed single species fisheries</b></p> <ul style="list-style-type: none"> <li>• Orange roughy (Namibia)</li> <li>• Orange roughy (west of Scotland and Ireland)</li> <li>• Blue ling (west of Scotland)</li> </ul>	<p><b>CS 2</b></p> <p><b>Multi species fishery</b></p> <p>Trawl fishery (west of the British Isles, 4 species)</p>	<p><b>CS3</b></p> <p><b>Artisanal fisheries</b></p> <ul style="list-style-type: none"> <li>• Blackspot sea bream (Greece)</li> <li>• Blackspot sea bream (Gibraltar &amp; Biscay)</li> <li>• Black scabbardfish (Portugal)</li> </ul>	<p><b>CS4</b></p> <p><b>Data rich</b></p> <p>Beaked Redfish</p> <ul style="list-style-type: none"> <li>• Irminger Sea</li> <li>• Norwegian Sea &amp; Barents Sea</li> </ul>	<p><b>SC5</b></p> <p><b>Data rich</b></p> <p>Greenland halibut</p> <p>NAFO</p>
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Review of fisheries, ecology, management, regulation  
 Socio-economic reviews  
 Data description and availability



**Reviews in Fisheries Science**

Publication details, including instructions for authors and subscription information:  
<http://www.tandfonline.com/loi/bfrs20>

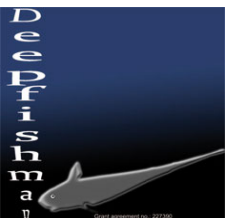
**Fisheries Assessment and Management: A Synthesis of Common Approaches with Special Reference to Deepwater and Data-Poor Stocks**

C. T. T. Edwards <sup>a</sup>, R. M. Hillary <sup>b</sup>, P. Levontin <sup>c</sup>, J. L. Blanchard <sup>d</sup> & K. Lorenzen <sup>e</sup>

<sup>a</sup> Division of Biology, Imperial College London, Silwood Park, Ascot, UK

<sup>b</sup> CSIRO Marine and Atmospheric Research, Wealth from Oceans National Research Flagship, Hobart, Tasmania, Australia

<sup>c</sup> Centre of Environmental Policy, Imperial College London, South Kensington, London, UK



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## History and dynamics of the overexploitation of the blackspot sea bream (*Pagellus bogaraveo*) in the Bay of Biscay

Pascal Lorange\*

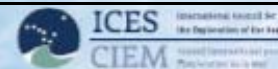
Ifremer, rue de l'île d'Yeu, BP 21105, 44311 Nantes cedex 3, France

\*Corresponding Author: tel: +33 240374085; fax: +33 240374075; e-mail: [pascal.lorange@ifremer.fr](mailto:pascal.lorange@ifremer.fr).

Lorange, P. 2011. History and dynamics of the overexploitation of the blackspot sea bream (*Pagellus bogaraveo*) in the Bay of Biscay. – ICES Journal of Marine Science, 68: 290–301.

Received 31 August 2009; accepted 11 April 2010; advance access publication 17 June 2010.

## ICES Journal of Marine Science



ICES Journal of Marine Science (2012), 69(4), 547–552. doi:10.1093/icesjms/fsa014

### Short communication

## Historical variations in the year-class strength of beaked redfish (*Sebastes mentella*) in the Barents Sea

B. Planque<sup>1\*</sup>, E. Johannsen<sup>2</sup>, K. V. Drevetnyak<sup>3</sup>, and K. H. Nedreaas<sup>2</sup>



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Socio-economic modelling

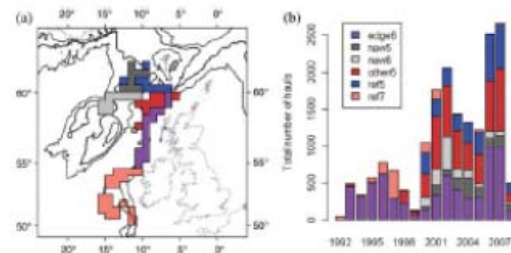


CS 1 Directed single species fisheries	CS 2 Multi species fishery	CS3 Artisanal fisheries	CS4 Data rich	SC5 Data rich
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- Standardised abundance indices
- New methods for stock assessment (MYCC, PSA, Bayesian state space model)
- Simulation tests of assessment methods

### Standardizing blue ling landings per unit effort from industry haul-by-haul data using generalized additive models

Pascal Lorange, Lionel Pawłowski and Verena M. Trenkel





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Fish communities analyses, patterns of diversity, temporal changes  
 Size-based multi-species modelling





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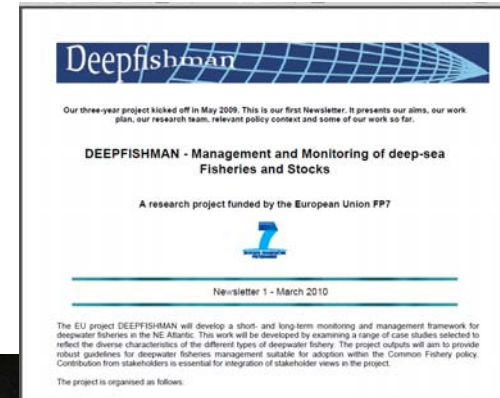
-Management strategy evaluation (MSE)

- mono-species
- multi-species
- qualitative



# Stakeholder process

- Workshop in Brussels 29-30 June 2009
- Workshop in Lisbon, 4 Dec. 2009
- Workshop in Lisbon 4 July 2011
- Questionnaire
- Final workshop 31 August 2012, Galway





# WIKI

Deliverable, reviews, reports, papers, posters



<http://deepfishman.hafro.is/> section documents

start [DEEPFISHMAN]

SEVENTH FRAMEWORK PROGRAMME

Deepfishman

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Deepwater fisheries pose particular difficulties for management. Target species are difficult to assess and they are generally vulnerable to overfishing. The EU project DEEPFISHMAN will develop a short- and long-term monitoring and management framework for deepwater fisheries in the NE Atlantic that will take account of these factors. Firstly, the aim will be to identify new and more effective assessment methods, reference points, control rules and management strategies to be used in the short term, making better use of available data. Secondly, a reliable long-term framework will be developed for which additional data needs will be specified in order to fill current information gaps to achieve reliable long-term management requirements. This work will be developed by examining a range of case studies selected to reflect the diverse characteristics of the different types of deepwater fishery. The socioeconomic profile and projected impact of the management strategy options will be examined. The project outputs will aim to provide robust guidelines for deepwater fisheries management suitable for adoption within the Common Fishery policy. Contribution from stakeholders is essential, this questionnaire intends to identify the stakeholder community of the project for further communication and integration of stakeholder views in the project

See also <http://www.ifremer.fr/deepfishman>

Deepfishman DoW (Description of the Work)

FRANÇAIS ESPAÑOL PORTUGUÊS Ελληνικά NORSK ÍSLENSKA

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