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MEDITERRANEAN ADVISORY COUNCIL

Main Outputs on Adriatic Anchovies and Sardines PLEN 17-03 and EWG 17-15

INTRODUCTION

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Summary of main outputs on Anchovies and Sardines

56TH PLENARY MEETING REPORT (PLEN-17-03)

PLENARY MEETING,

06-10 November 2017, Brussels

Additional information about the scientific methods and more details are available on the JRC website

The scientific output expressed in the Plenary meeting Report does not imply a policy position of the European Commission

56° STECF Report – Adriatic anchovy and sardines

EC **proposal for a EU MAP** on the Adriatic small pelagic stocks.

In the MAP ANNEX I and II there are respectively the target fishing mortality **F_{MSY} ranges** and conservation reference point for sardines and anchovies.

These values were derived from STECF 15-14 (2015a) and are now **outdated** by revised input data and consequent new assessments.

The **MAP** proposal is currently **in discussion** with the European parliament and the Council.

56° STECF Report – Adriatic anchovy and sardines

STECF considered the ToRs and noted that the **urgent questions** relate mainly to the estimation of the MSY reference points to be used in multi annual plans.

STECF has evaluated the information on sardine and anchovy stocks in GSA 17-18, and the information available on **stock dynamics** (growth, maturation, natural mortality, fishery selectivity and estimated SSB and recruitment).

56° STECF Report – Adriatic anchovy and sardines

STECF considers that there are potentially **two different approaches** to managing these stocks in the context of maximizing yield while maintaining **precautionary exploitation.**

MSY approach based on a target F_{MSY}

- often problematic for short lived species;
- potentially lead to losses in catches in years when the stock is large.

"Biomass escapement strategy"

-more demanding in terms of timing of management information

- if implemented successfully may deliver greater catch in the long term, and minimizing risks of the stock to fall at low level of stock biomass.

EWG 17-15 DISTRIBUTION OF JUVENILES AND SPAWNING AREAS

Detailed information about juveniles and spawning ground in the Mediterranean basin has been done through project MEDISEH. (Giannoulaki et al 2013).

Data from different acoustic surveys performed in the Mediterranean were used for the identification and the modelling of nursery grounds.

EWG 17-15 DISTRIBUTION OF JUVENILES AND SPAWNING AREAS

Detailed maps and related table of correspondence with relevant spatial coordinates, of:

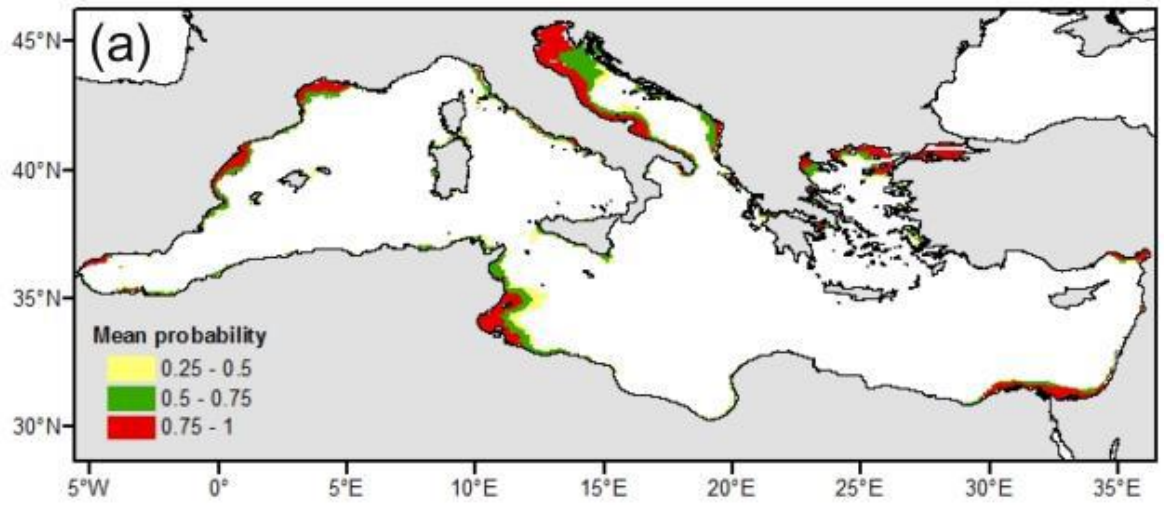
1) The recurrent areas of juveniles' aggregations;

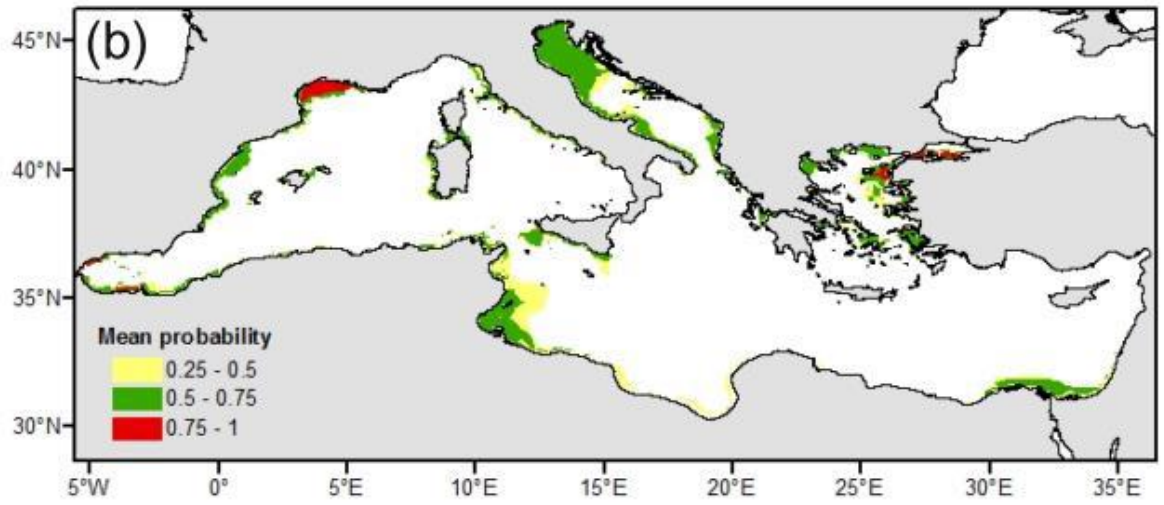
2) The recurrent spawning aggregations areas.

Maps of likely annual nursery and spawning area were obtained;

Persistence map was defined to describe preferential (high mean, low std), occasional (high mean, high std) and rare (low mean, low std) juvenile and spawning grounds.

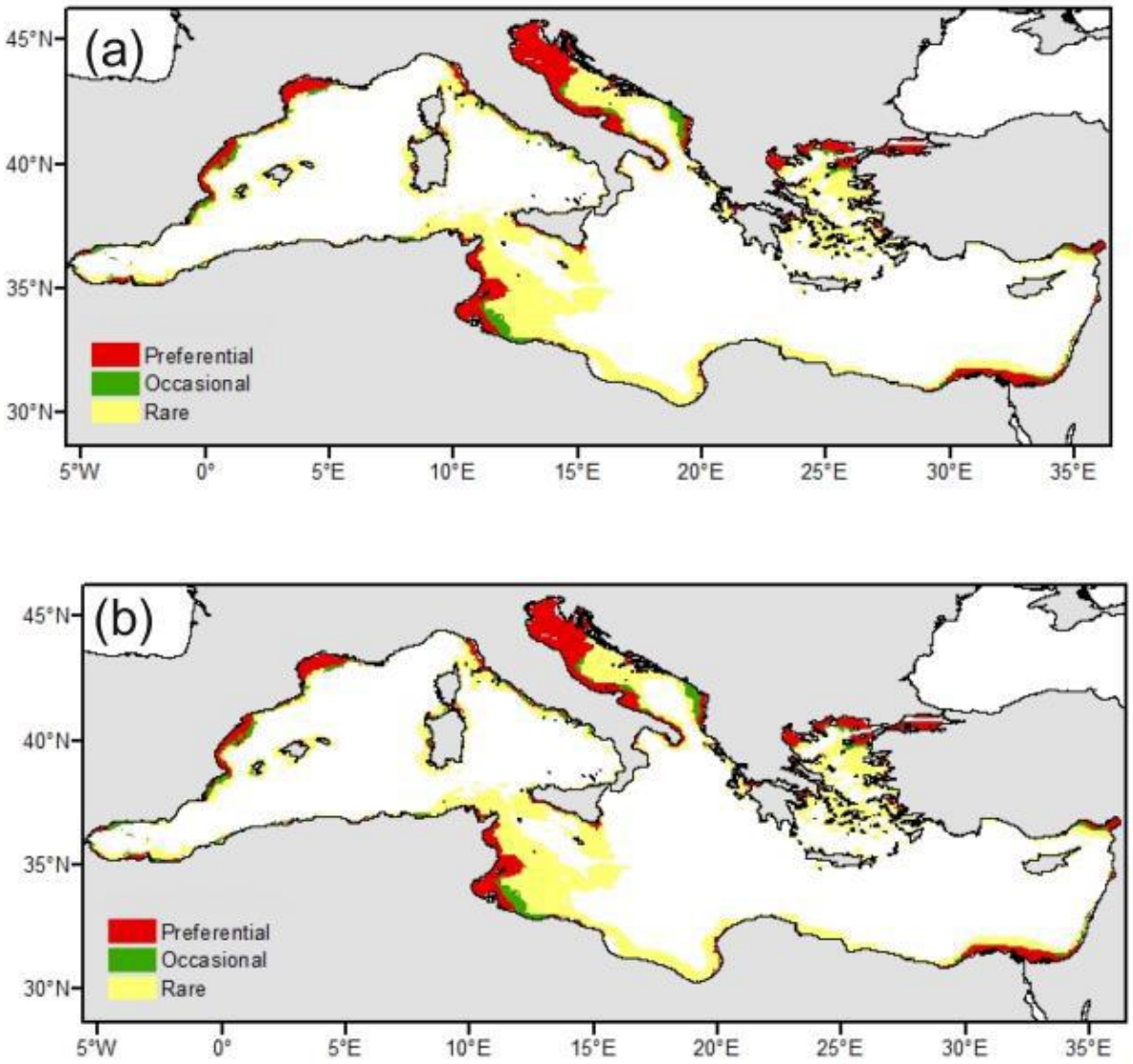
EWG 17-15 MAPS - ANCHOVY SPAWNING HABITAT





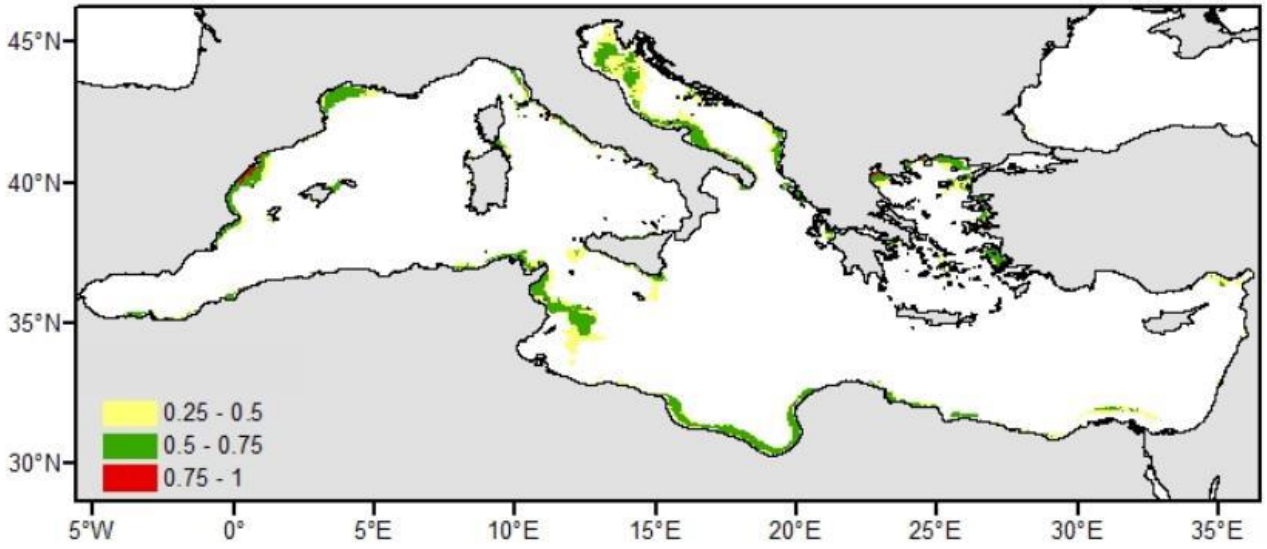
Mean probability maps of *Engraulis encrasicolus* spawning (egg) habitat for the period 2003-2008.
(A) June
(B) July

EWG 17-15 MAPS - ANCHOVY SPAWNING HABITAT

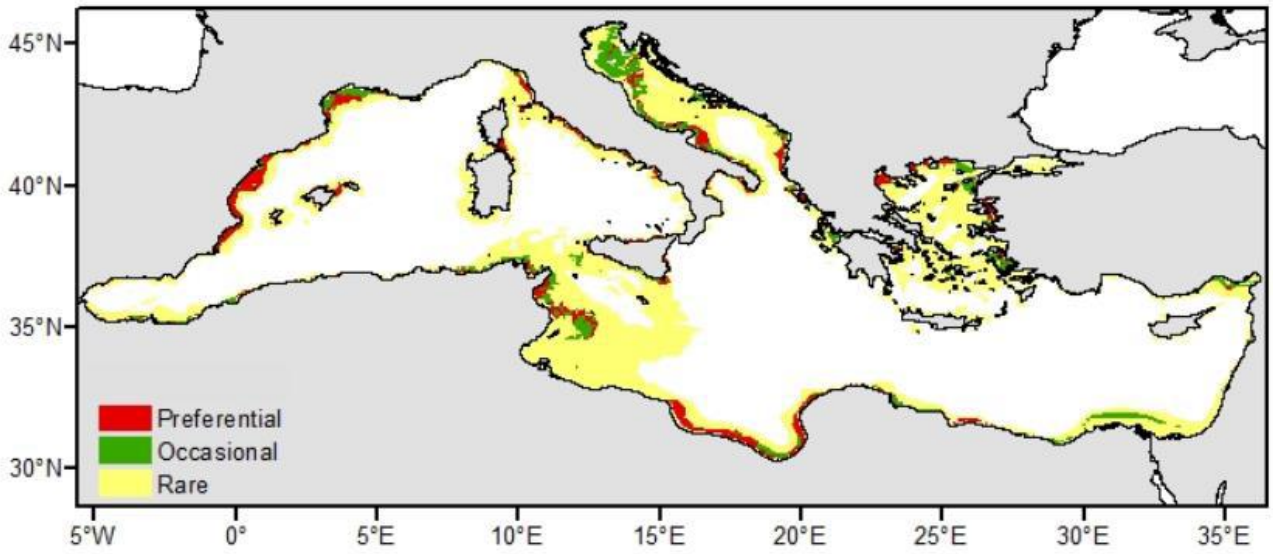


Persistent habitat maps of *Engraulis encrasicolus* spawning (egg) habitat for the period 2003-2008.
(A) June
(B) July

EWG 17-15 MAPS - ANCHOVY NURSERIES HABITAT

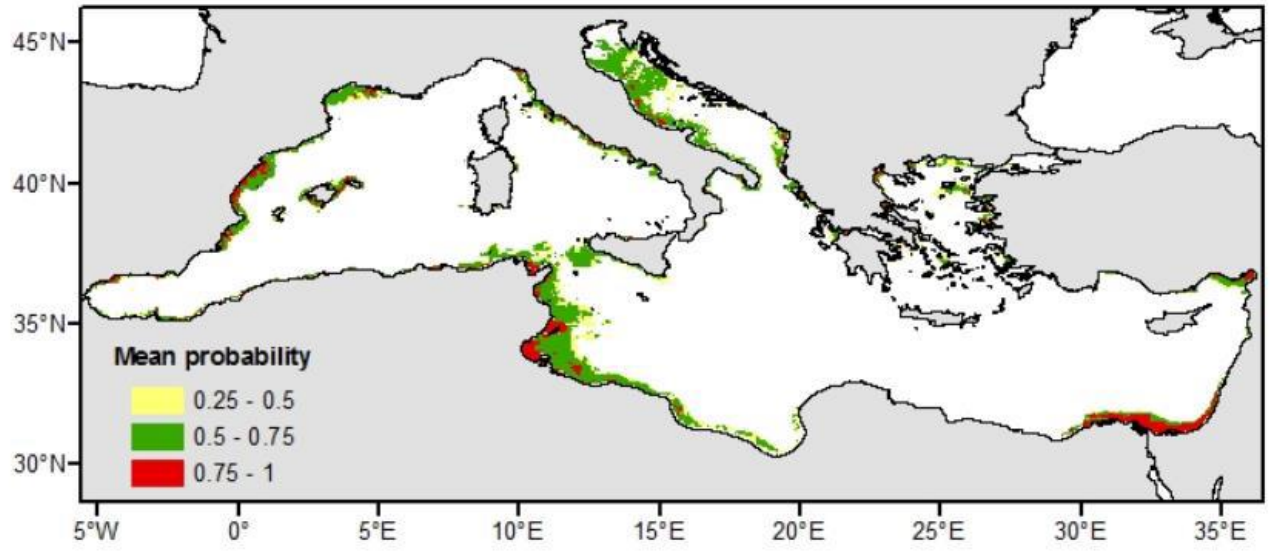


Mean probability maps of *Engraulis encrasicolus* nurseries habitat (2003-2008, late autumn)

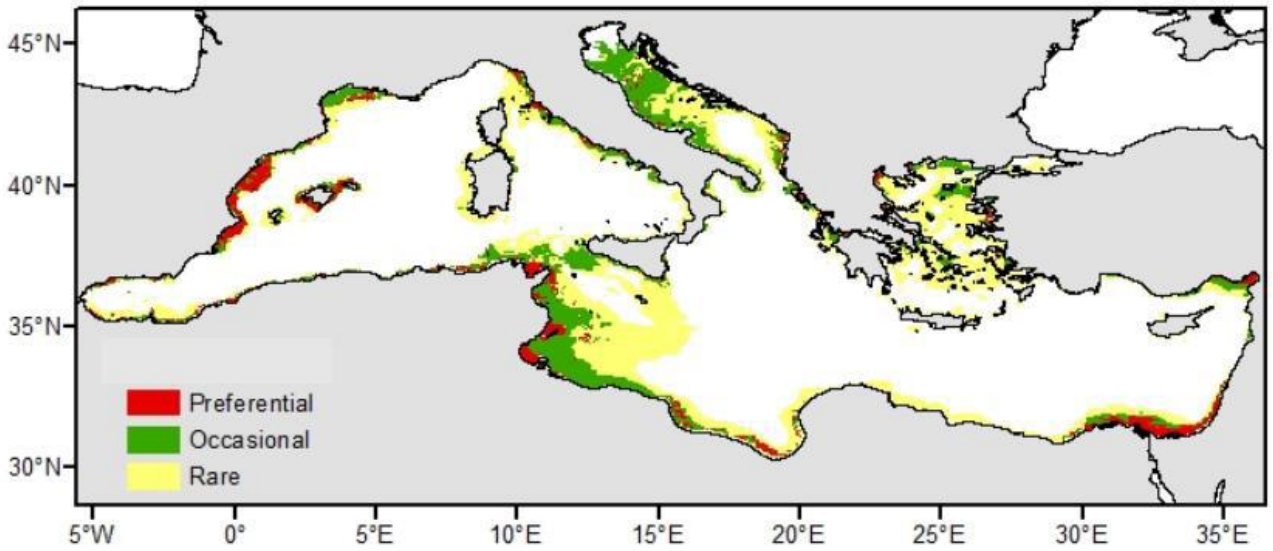


Persistent habitat maps of *Engraulis encrasicolus* nurseries (2003-2008, late autumn)

EWG 17-15 MAPS - SARDINE SPAWNING HABITAT

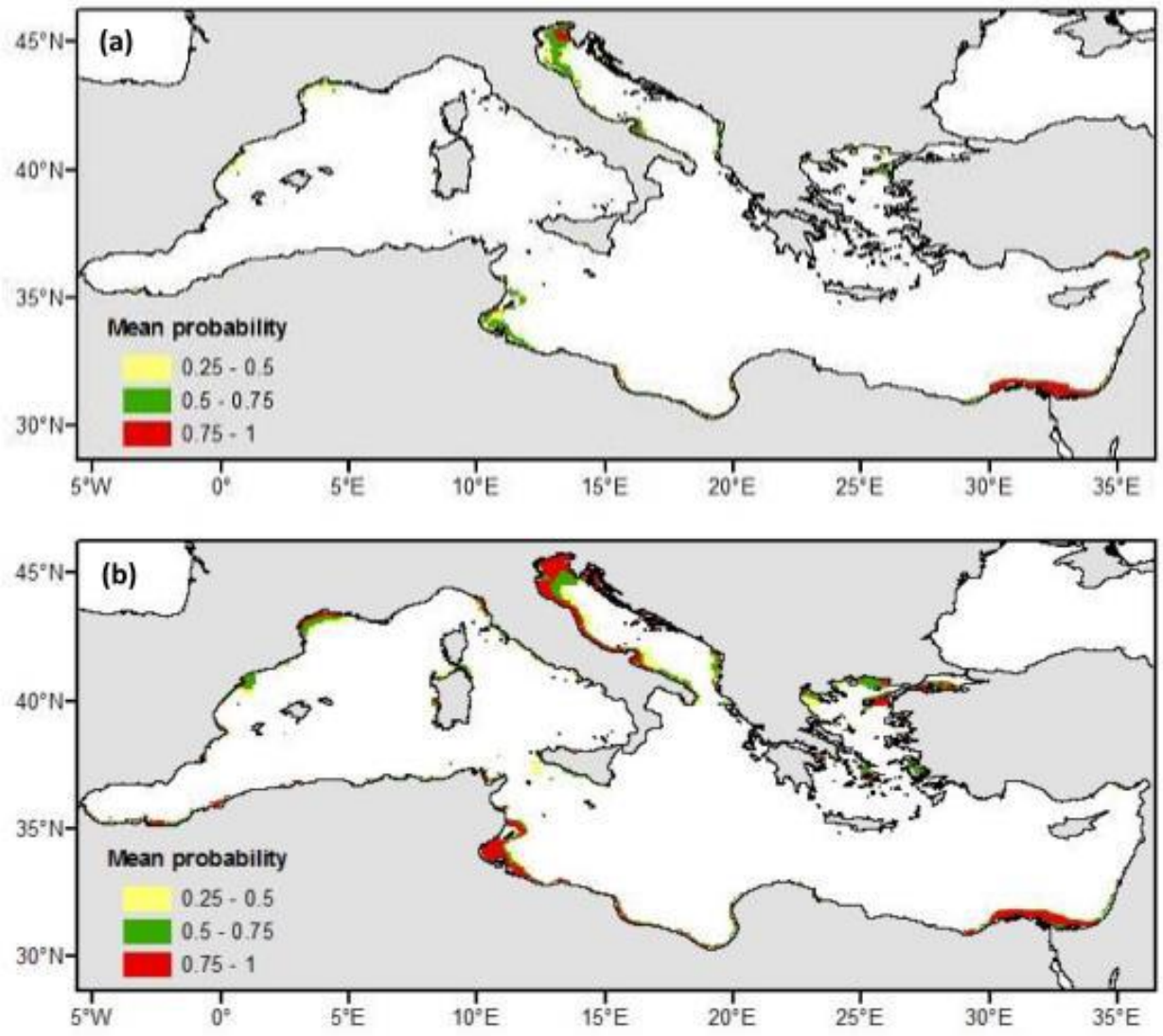


Mean probability maps of *Sardina pilchardus* spawning (egg) habitat (2003-2006 during early winter)



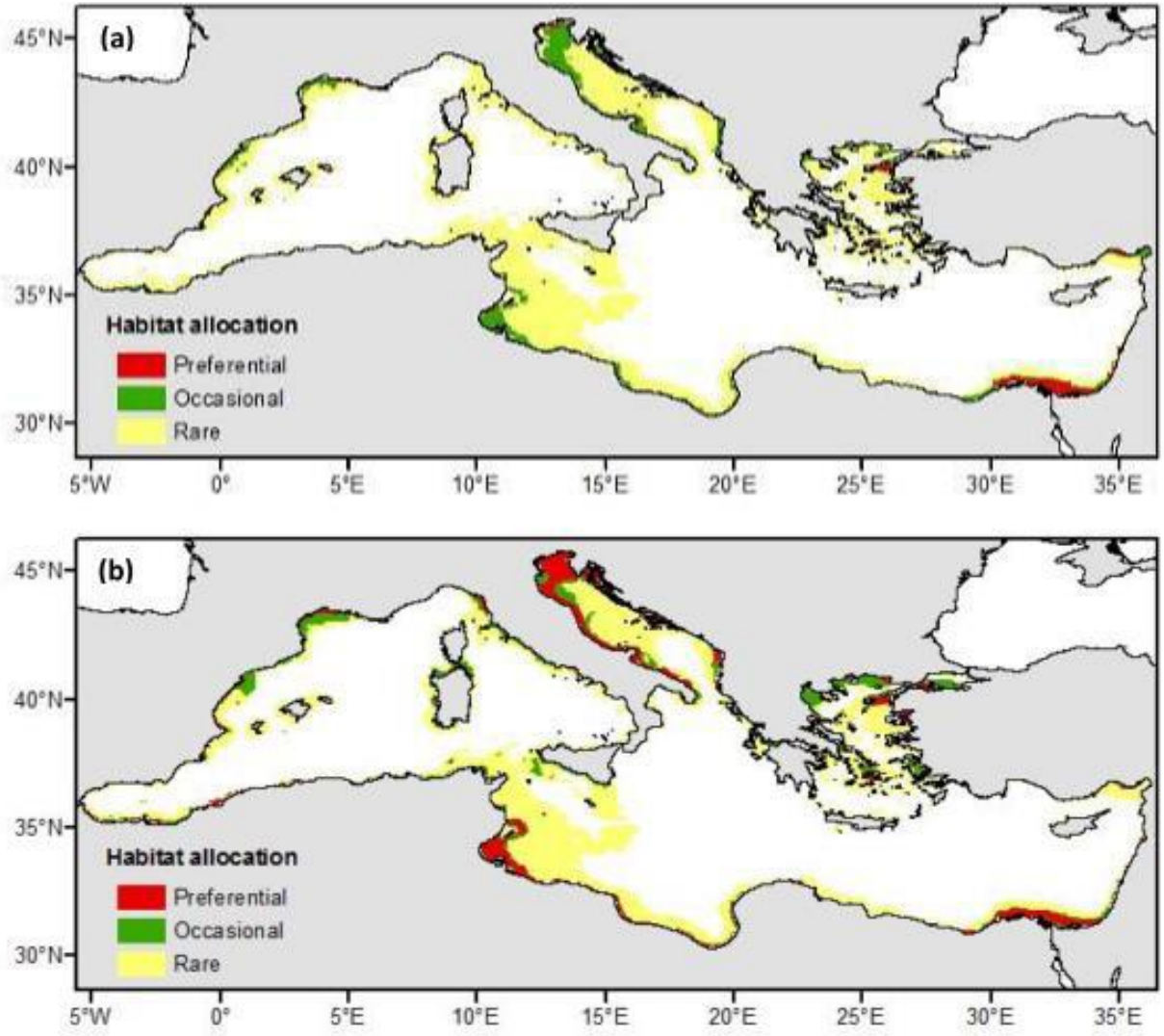
Persistent habitat maps of *Sardina pilchardus* spawning (egg) habitat (2003-2006 during early winter)

EWG 17-15 MAPS - SARDINE NURSERIES HABITAT



Mean probability maps of juvenile *Sardina pilchardus* habitat for the period 2003-2008 in
(a) June
(b) July

EWG 17-15 MAPS - SARDINE NURSERIES HABITAT



Persistent habitat maps of juvenile *Sardina pilchardus* habitat for the period 2003-2008 in
(a) June
(b) July

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Thanks for your attention!

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