



Protecting bycaught species in mixed fisheries (PROBYFISH)

3-year project under contract to EASME and DGMARE directly

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The concept

The identification of measures to protect by-catch species in mixed-fisheries management plans

“The assumption behind MAPs is that by focusing on the target species and managing those sustainably, any MAP would be expected to deliver on the conservation objectives for the by-catch species as well.”

Project Objectives

- Identify the bycatch species for which management of the target species is sufficient in the North Sea, Southwestern and Northwestern waters
- Where TAC management of target species alone is insufficient for the management of bycatch species, propose candidate triggers (e.g. of biomass or abundance) that will be used to elicit a management response to promote the protection of the various by-catch species.
- Assess the efficiency of other measures for protection of associated by-catch species (e.g. spatial, gear-related and other technical measures).

Impact of stakeholders and end-users

The involvement of stakeholders in the project is key to the successful completion as well as to the value of the tools developed. Input is needed on all tasks to ensure that solutions suggested are operational in a practical management system.

- We have invited NWWAC, SWWAC, NSAC, ICES and RCGs
- Participation can be on one of three levels:
- Receive news by email and allow presentations at AC meetings
- Participate in skype meetings influencing project decisions and progress
- Participate in person to project meetings influencing project decisions and progress as part of our Stakeholder Advisory Board

Task 1: Identification of target and bycatch species

Task 1.1. Format of input data on catch composition in weight, value and effort of all regional fleets and métiers

Task 1.2. Methods to classify stocks as “target”, “hybrid”, “valued bycatch” and “collateral bycatch”

Task 1.3. Identification of main fleets, métier, seasons and areas contributing the majority of catches

Task 2: Effect of management through TACs of target species on protection of bycatch species

Task 2.1. Development, conditioning and expansion of mixed fisheries models to include data-limited stocks

Task 2.2. Classification of robustness of assessment, reference points and fleet based data for all stocks

Task 2.3. Effect of TACs for target species on bycatch species

Task 2.4 Sensitivity of mixed fisheries models to changes in key productivity parameters on whether single species TACs are sufficient

Task 3 Identification of bycatch species where target stock TAC management is insufficient

Task 3.1. Extent and consistency of correlation between identified target and bycatch species

Task 3.2. Analyses of the possible causes of consistent correlations

Task 3.3. Identification of optimal fleet units for a proper management strategy evaluation

Task 3.4. Identification of bycatch species not protected by TAC management of target species

Task 4. Identification of appropriate management measures for bycatch stocks

Task 4.1. Effect of single species TACs

Task 4.2 Effect of grouped bycatch species

TAC. Task 4.3 Gear and métier based approaches

Task 4.4 Fixed spatiotemporal management measures: closed areas and closed seasons

Task 4.5 Adaptive spatiotemporal management approaches

Task 5. Identification of candidate indicators and appropriate trigger values

Task 5.1: Existing indicators and trigger values for bycatch species

Task 5.2 Test the performance of indicators and trigger values

Task 5.3 Determine a final list of indicators and trigger values

Task 6. Development of a management tool

Task 6.1. Developing the stakeholder interface

Task 6.2 Developing the tool to determine regional target and bycatch species

Task 6.3 Developing the tool to identify whether TACs for target species are sufficient

Task 6.4 Developing the tool to identify the effect of additional management measures