Development of a by-catch excluder for the Danish and European trawl fisheries (39265)
The project aims to develop and test a widely usable gear that effectively sorts out unwanted species and sizes of fish during trawling. This objective should be seen in light of a future discard ban for the EU—a ban which, in Denmark and in other European countries, will result in a growing demand for technical solutions that can increase the sorting of fish in the gear during fishing.

The development work of the project is based on a so-called "Excluder system" that can be integrated into most standard trawl gears. The "Excluder system" is developed for the North American market by Tor-Mo Trawl in Hirtshals in collaboration with the Green Line Fishing Gear. The Excluder is used today on a voluntary basis by approximately 15 large fishing vessels in Alaska, but is not directly applicable in Danish and European fisheries because the species composition, trawl size and type of vessel is significantly different in fisheries in Alaska.

The project's main result will be the development, testing and documentation of an Excluder system, which is targeted the Danish and European trawl fisheries.

In light of the political development in EU, a very large market potential is expected to appear for such an Excluder and the redemption of this market potential will result in 1) more successful implementation of the discard ban, 2) more selective and sustainable fisheries, and 3) increased growth and revenue for companies in the project.

This project is coordinated by Denmark's Pelagic Producer Organisation.

The project is funded by the Danish Ministry of Food, Agriculture and Fisheries through the Green Development and Demonstration Program (GUDP).

National Institute of Aquatic Resources
Section for Ecosystem based Marine Management
Denmark's Pelagic Producer Organisation
Greenline Fishing Gear
Tor-mo trawl ApS
HG62 Beinur
Period: 01/01/2015 → 31/12/2016
Number of participants: 5
Research areas: Fisheries Management & Fisheries Technology
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Spatially-explicit management methods for North Sea cod – a Danish fishermen-science collaboration (REX, REX II, REX III) (38430, 38431, 38541)

The REX project started in 2006 as a protest from the Danish Fishermen Association because fishers had a less pessimistic perception of the status of the cod stock in the North Sea than ICES, and they considered the agreed TAC levels far too low. In particular the fishermen considered the scientific surveys as inappropriate due to extremely low catches of large cod because of wrong gear and fishing on smooth bottom only. This seemed to call for more spatially-explicit oriented approaches and REX was born with an aim of getting closer to a common understanding of the true number of adult cod in the North Sea by focusing on communication and collaboration in developing and implementing a scientifically sound and robust survey strategy with commercial ships in a north-eastern area selected by the Danish Fishermen Association using three vessels presenting different fishing methods (flyshooter, trawler and gillnetter).

The development of the fishermen-scientists collaboration with mutual respect has increased the understanding on both sides. In particular the emphasis on defining common goals, facing and solving conflicts immediately and extending thorough collaboration from survey planning, conducting of field work to interpretation of results during workshops have contributed to bridging the communication gab.

A better understanding of cod biology has also been a focal point in these projects through the new field studies incorporating fishermen’s knowledge. This includes distribution and migration, feeding behavior and importance of Hot-Spots (e.g. ship wrecks). Electronic tags were applied to learn about migration also in the Baltic. Together with the aim of continuing to obtain better assessments of the stocks such more mechanistically oriented studies are needed to answer two apparently simple questions “Where are the cod and why?”

The REX projects have strengthened the scientific collaboration with fishermen and produced several results and types of knowledge that will influence future work on developing spatial explicit management tools. REX also represents capacity building for DTU Aqua’s interdisciplinary field research and monitoring towards the spatial dynamics of cod.

The project is coordinated by DTU Aqua.

National Institute of Aquatic Resources
Section for Marine Living Resources
Danish Fishermen's Association
Period: 01/01/2006 → 31/01/2010
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