Danish seine - An environmental friendly fishing method? - DTU Orbit (09/12/2018)

Danish seine - An environmental friendly fishing method?

Today, extensive research is devoted to assess the effects of demersal trawling on the marine ecosystem, but only few of such studies considered the Danish seine. Danish seines and bottom trawls are grouped together in the legislation. Trawling is more common and responsible for the major part of the total landings where the seine fleet and catches are decreasing. The Danish seine is a specific type of encircling net to catch demersal fish. It is characterized by moderate fuel consumption and no use of heavy weights or doors, probably resulting in a relatively gentle bottom-contact and low interactions with the seabed compared to e.g. traditional trawling. However, the assumptions on the more environmental friendliness in seining are not sufficiently addressed.

The present study aims at increasing the knowledge on Danish seining including its effect on the benthic ecosystem. The study starts with a comparison of existing catch data for Danish seines and trawls and continues with several substudies: Detailed description of all stages of the seining process to get a basis for the following investigations. Selectivity trials to support existing data, whereby both economically valuable and economically non-valuable species will be regarded. Estimation of potential interactions of the gear with the sea bottom. Assessment of survival chance of discarded animals. Observation of fish behavior during capture process. Combination of all single parts to provide an overall picture of effects of the Danish seine fishery on the marine environment.

This study may contribute to increase understanding the catching process in the seine fishery and the gears interaction with seabed during the different stages of the fishing process. The outcome of such studies will be highly relevant in future discussions on the impacts Danish seining may have on the marine environment and the faunal diversity and to maintain viable fisheries in the future.

General information
State: Published
Organisations: National Institute of Aquatic Resources, Section for Ecosystem based Marine Management
Contributors: Noack, T., Eggers, F., Frandsen, R., Krag, L. A., Madsen, N.
Publication date: 2014
Peer-reviewed: No
Electronic versions:
Publishers version
Source: PublicationPreSubmission
Source-ID: 93297341
Research output: Research › Poster – Annual report year: 2014