

Project information

Keywords

social sciences, fishermen, stakeholders, management, banks, fish biodiversity, Barents Sea

Project title

Drivers of fish extinction and colonization on oceanic banks (DRIVEBANKS): adding social science and communication with management to ecology and oceanography

Year

2020

Project leader

Kari Elsa Ellingsen, NINA

Geographical localization of the research project in decimal degrees (max 5 per project, ex. 70,662°N and 23,707°E)

Banks in the Barents Sea, e.g. Svalbardbanken ca. 75°N, 20°E

Participants

Kari E. Ellingsen, Torkild Tveraa (Norwegian Institute for Nature Research, NINA), Nigel G. Yoccoz (Department of Arctic and Marine Biology, UiT The Arctic University of Norway), Roger B. Larsen, Jan Petter Johnsen, Keshav Prasad Paudel, Claire Armstrong, MSc student Vetle Lunde Ommundsen (Norwegian College of Fishery Science, NFH, UiT The Arctic University of Norway), Tom Williams, Per Arneberg (Institute of Marine Research, IMR), Cecilie von Quillfeldt (NPI).

Flagship

Fjord and Coast

Funding Source

Fram Centre. The project is linked to the Research Council of Norway (RCN) project DRIVEBANKS (Drivers of fish extinction and colonization on oceanic banks, 2017-2020, project leader: Kari E. Ellingsen).

Summary of Results

We have linked DRIVEBANKS to this project in the Flagship Fjord and Coast, and integrated it with social sciences, fisheries economics and management by collaborating with additional Norwegian participants. This multidisciplinary approach provides a platform for communication and the exchange of knowledge between the scientific community and stakeholders (fishermen and fisheries organizations), for mutual benefit and improved management of our common marine resources, with a special focus on the oceanic banks. Specifically, we focus on how to communicate knowledge and thereby bridging the gap between the scientific community, stakeholders, and the management. To gather information from fishermen, interviews have been carried out. In addition, we have used GIS-based spatio-temporal statistical models to determine the spatial and temporal patterns of fishing effort/activities, and identify hotspots with regard to fishing gears, vessels and species groups and assess how these spatio-temporal patterns are associated with seafloor topography and changes in climate, technology and management. We have also focused on what and how to communicate with the management.

Master and PhD-students involved in the project

In 2020 one student (MSc level; Vetle Lunde Ommundsen) delivered his thesis at NFH, UiT (<https://munin.uit.no/handle/10037/19359>).

For the Management

In Norwegian:

I forskningsrådsprosjektet DRIVEBANKS fokuserer vi på fiskesamfunn på banker i Barentshavet, og

vi studerer diversitetsmønstre og prosesser som opprettholder eller endrer diversiteten. Vi har bygget opp et tilleggsprosjekt med fokus på samfunnsvitenskap og fiskeriøkonomi, der vi kommuniserer med fiskere/fiskerlag. Fiskerne tilbringer store deler av året på fiskebankene og har mye kunnskap om fiskebanker og fiskens forflytninger i forhold til bankene. Data vi får fra fangst og sporinger tyder på at fisket flytter på seg, og vi undersøker om fiskerne mener det skyldes endringer de ser i naturen eller om det påvirkes av forvaltning og markedstilpasninger. Vi ønsker en tettere dialog mellom fiskere og forskere som kan ha en gjensidig nytteverdi. Målsetningen er at prosjektet bidrar til kunnskapsutveksling, og at vi også kan formidle nyttig informasjon til forvaltningen.

Published Results/Planned Publications

We aim to produce one publication specifically focusing on the social sciences and fishery economics outlined in this project. In addition, there will be a link between this project and DRIVEBANKS where other papers will be published.

Communicated Results

We presented the project at the annual Fjord and Coast Flagship meeting, 21th of October 2020.

The Master thesis can be found at <https://munin.uit.no/handle/10037/19359>.

Interdisciplinary Cooperation

The project has to a large degree interdisciplinary cooperation, including social scientists with knowledge on how to perform/handle interviews of users/stakeholders as well as fisheries economy, and participants with knowledge on management plans, harvesting technology, biodiversity, ecology and statistics.

Budget in accordance to results

The project received 400 000 NOK for 2020 from the Flagship Fjord and Coast. The project has been carried out according to the plan.

Could results from the project be subject for any commercial utilization

No

Conclusions

We have linked the RCN-project DRIVEBANKS to the Flagship Fjord and Coast, and integrated it with social sciences, fisheries economics and management by including additional Norwegian participants. This multidisciplinary approach provides a platform for communication and the exchange of knowledge between the scientific community and the stakeholders (i.e., fishermen and fisheries organizations), for mutual benefit and improved management of our common marine resources. Specifically, we focus on how to communicate knowledge and thereby bridging the gap between the scientific community, stakeholders, and the management.