



All photos copyright IMR



**ICES**  
**CIEM**

International Council for  
the Exploration of the Sea  
Conseil International pour  
l'Exploration de la Mer

**ICES SYMPOSIUM**

**INFORMATION**

**“Effects of fishing on benthic fauna,  
habitat and ecosystem function”**

**June 16 – 19, 2014  
Tromsø, Norway**



- Host institution: Institute of Marine Research, Norway
- Dates: Website open for abstract submission, September 30  
Deadline for submission of abstracts, January 31  
Conference, June 16 – 19, 2014
- Venue: Rica Ishavshotel, Tromsø, Norway (<https://www.rica.no/hoteller/tromso/rica-ishavshotel/>)
- Conveners: Lene Buhl-Mortensen, Børge Holte and Carsten Hvingel (Norway), Mariano Koen-Alonso (Canada) and Francis Neat (Scotland)
- Local organizers: Lene Buhl-Mortensen, Børge Holte and Carsten Hvingel
- Lodging: Contact for information on booking and reservations: Vera Helene Lund, ([vera.helene.lund@imr.no](mailto:vera.helene.lund@imr.no))
- Technical support: ICES Secretariat/IMR

For more information, see <http://www.ices.dk/news-and-events/symposia/Pages/default.aspx>



### Scope

Understanding the impacts of fishing activity to the seafloor is a key element in the development of sustainable ecosystem-based marine resource management. Any bottom-contact fishing will impact the sea floor to some extent depending on the seabed type and the gear type used. In some cases impacts are clear; bottom-trawling can cause immediate and long-lasting damage to deepwater coral, sponge and sea-pen communities. In other cases impacts are not even apparent; beach-seining of shallow sandy habitats has continued for centuries without obvious change. It is only recently that we have begun to appreciate the extent of this variability and initiate research aimed at understanding how disturbance caused by fishing affects ecosystem function, biodiversity, productivity, vulnerability and resilience. Longer term ecosystem and community responses to indirect impacts of fisheries such as discards are hardly understood at all. There is a growing need to develop indicators of ecological status, including seabed integrity and we generally lack predictive models of recovery for most ecosystems. Technical solutions aimed at minimising seabed impacts are starting to appear, but their efficacy remains to be tested in many ecosystems.



This symposium will review the physical and biological effects of fishing activities to sea bottom ecosystems, look at various technical conservation measures designed to mitigate these effects and ultimately try to quantify the overall ecosystem impact. The aim is to develop tools for use in informed ecosystem-based fisheries management.

### Format

Registration will open on Monday 16th June. From Tuesday through Thursday there will be oral and poster sessions. Morning and afternoon sessions will be opened by key-note invited speakers. At the end of each day a plenary discussion will be held on management implications. On the final afternoon a plenary will be held in which the proceedings of symposium will be drawn together. In total 30 oral presentations (20-25 min) and 6 key-note addresses (45 min) are scheduled. Friday will be dedicated to a mid-summer excursion in the Norwegian arctic.

The symposium program will be structured around fisheries impacts on different seabed types and communities. The sessions will be divided into the following themes:

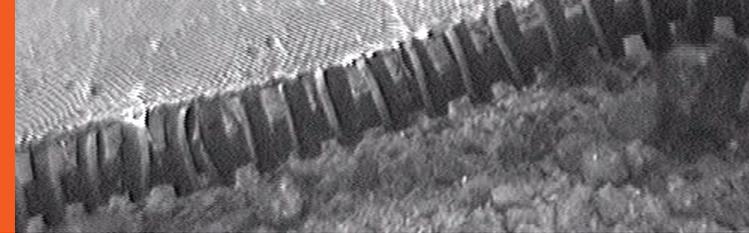
- Soft bottom/infauna (macrobenthos) community composition
- Mixed bottom/epifauna and habitat forming megafauna
- Gear effects and development

Posters and oral presentations are encouraged on the following topics:

- Instantaneous and physical changes to the benthic ecosystem caused by fishing activity
- Change in the extent of habitats impacted by bottom trawling – how big is the problem?
- Effects of fishing on marine faunal biodiversity
- Effects of fishing on nutrient recycling and benthic-pelagic coupling
- Effects of fisheries discards on the benthic ecosystem
- Effects of seabed protection measures; total or partial fishing gear modification and technical conservation measures.
- Development of indicators of ecological and community change

### Invited speakers

- Poul Degnbol (ICES)
- Malcolm Clark (NIWA, New Zealand)
- Adriaan Rijnsdorp (IMARES, The Netherlands)
- Simon Thrush (NIWA, New Zealand)
- John Willy Valdemarsen (IMR, Norway)
- Michel Kaiser (Bangor University, UK)
- Barry O'Neill (Marine Scotland – Science, UK)



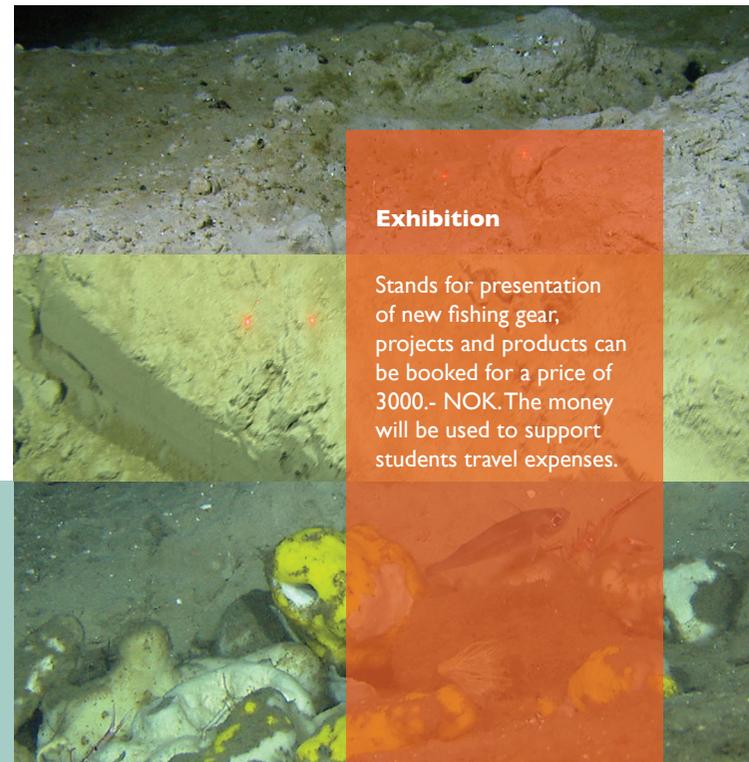
### Target audience

The symposium's scope is global and aims to bring together 150-300 scientists from different countries and areas of expertise. The symposium will be structured in order to;

- provide a forum for presenting the state of the art in the field
- promote close contact, discussions, collaboration and networking opportunities
- create an environment that allows for good communication and exchange of views and results

### Publication

The proceedings of the symposium will be published in the peer-reviewed journal Marine Biological Research. Papers based on oral and poster presentations may be submitted for review and it is anticipated that publication will be within 15 months after the symposium.



### Exhibition

Stands for presentation of new fishing gear, projects and products can be booked for a price of 3000.- NOK. The money will be used to support students travel expenses.