

# 1<sup>ST</sup> BIENNIAL GREENLAND MARINE RESEARCH SEMINAR

Understanding climate and biodiversity changes in the Arctic remains high on international research agendas. The fjords and seas around Greenland and their importance and impact on society are included in multiple research projects.

Being a key partner in EU and North American projects, the Greenlandic Institute of Natural Resources and Greenland Climate Research Centre invites stakeholders and interested parties to engage with three on-going projects.



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Greenland Institute  
of Natural Resources



Research activities to be presented and discussed include:

- Learning from local and indigenous knowledge - understanding fishery impacts and policy needs.
- The future perspective and societal impact of changing fjords in Greenland and North-Atlantic.
- Documenting environmental change at Davis Strait, a gateway between the Arctic and subpolar North Atlantic, and understanding impacts on southern Baffin Bay marine ecosystems.



# ECOTIP

Investigating ecosystem tipping cascades in the Arctic Seas.

ECOTIP investigates the link between the physical and biological systems, where a regional change in the hydrography of the Arctic seas might trigger a biological change on plankton - the base of the marine food web - with cascading effects on fisheries and carbon sequestration. This type of ecosystem tipping cascade could have a large influence on the distribution and production of higher trophic levels (e.g., fish and marine mammals) as well as on global climate. ECOTIP aims at understanding and predicting these potential changes and their consequences through biological observations and models, socio-economic interviews and workshops.

ECOTIP includes a Local Ecological Knowledge study to learn about how biodiversity changes are currently impacting Greenlandic fisheries and communities, and to obtain up to date knowledge of the key strengths and challenges for fishery adaptation in the Greenlandic context.

For more information, please contact:  
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<https://ecotip-arctic.eu/>



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# FACE-IT

The future of Arctic coastal ecosystems – identifying transitions in fjord systems and adjacent coastal areas.

Environments connected to Arctic fjords are changing rapidly, with consequences for society. A warmer climate is an important driver of change, but other factors also play a major role, including pressures and opportunities from fishing, tourism, shipping, and changing socio-economic conditions.

FACE-IT aims to enable adaptive co-management of social-ecological fjord systems in the Arctic in the face of rapid cryosphere and biodiversity changes.

## Objectives

- Identify and quantify key drivers of biodiversity changes and their past and future trends.
- Identify cascading effects of a changing biodiversity associated with ongoing and projected changes in Arctic coastal food webs.
- Assess the interdependencies between environmental changes and Arctic coastal livelihoods.
- Support adaptive co-management at the local and national levels.

For more information, please contact:  
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<https://www.face-it-project.eu/>



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# DAVIS STRAIT OBSERVING SYSTEM

A sustained observational network for Davis Strait - Understanding exchanges through a critical Arctic gateway.

The Davis Strait observing system was established in 2004 to advance understanding of the role of Arctic – sub-Arctic interactions in the climate system by collecting sustained measurements of physical, chemical and biological variability at one of the primary gateways that connect the Arctic and subpolar oceans.

For more information, please contact:  
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<https://iop.apl.washington.edu/project.php?id=davis>



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