



**Symposium on the**  
*Impacts of Human Disturbance on Arctic marine mammals, with a focus on*  
*Belugas, Narwhals & Walrus*

13-15 October 2015, University of Copenhagen, Denmark

The North Atlantic Marine Mammal Commission (NAMMCO) is organising a Symposium on the impacts of human disturbance, including noise and shipping activities, on the distribution, behaviour and conservation status of marine mammals in the Arctic, with a focus on belugas, narwhals and walrus.

This will be a scientific Symposium, with the primary objectives being to 1) present an overview of the information currently available; 2) identify and characterize possible sources of disturbance, and effects on individuals and populations; and 3) consider the need for possible mitigation measures to minimise sources of anthropogenic disturbances and 4) reflect on future studies needed to assess long-term impacts of anthropogenic activities on both individual and population levels (particularly in the light of global warming). The conclusions will be available to stakeholders shortly after the meeting in the form of a report with specific recommendations. Participants may also be invited to submit papers stemming from the Symposium for publication in a special volume of the *NAMMCO Scientific Publications* series.

### ***Provisional Programme***

Tuesday, 13 October

**Registration begins at noon, talks begin at 1300.** *There will be discussion sessions each day.*

**Jill Prewitt** — *Welcome from NAMMCO*

**Mads Peter Heide-Jørgensen** — *Status of Arctic marine mammals*

**Kit M. Kovacs** — *Concerns and opportunities*

**Chad Jay** — *Pacific Walrus Population Response to Reduced Sea Ice and Human-caused Disturbance*

**Veronique Lesage** — *Title to come, topic: belugas in the St Lawrence River*

**Marianne Marcoux** — *Overview of the Department of Fisheries and Oceans' comments on the environmental impact statement of Baffinland's Mary River Project*

**Susanna Blackwell** — *Detecting the effects of seismic exploration on the behaviour of whales: what we've learned from bowheads and hope to learn about narwhals*

**Rod Hobbs** — *Title to come, topic: belugas in Cook Inlet*

**Evening Event: Icebreaker with light food and drink**



[Wednesday, 14 October](#)

**Kristin Westdal** — Title to come, topic: Narwhals in Eclipse Sound

**Outi Tervo** — *Impacts of human disturbance on the acoustic behaviour of bowhead whales Balaena mysticetus*

**Mads Peter Heide-Jørgensen** — *Narwhals feeling for silence*

**Mads Peter Heide-Jørgensen** — *Hunting and disturbance of walrus in Greenland*

**Cormac Booth** — *Oceans of noise: Assessing risks to marine mammals in the face of uncertainty.*

**Manuel Castellote** — *Anthropogenic noise on Cook Inlet and Bristol Bay beluga habitat: potential for negative effects*

**Michael Hendrick/Christopher Putnam** — Title to come, topic: “Incidental Take Regulations” for walrus in Alaska

**Rikke Gukdborg Hansen** — Title to come, topic: “Narwhals and seismic investigations in Melville Bay”

**Greg Donovan** — *Recent relevant work on Human Disturbance on Arctic marine mammals within the IWC with emphasis on guidelines for responsible seismic survey practices.*

[Thursday 15 October](#)

**Randy Reeves** — *Concerns, Evidence, Approaches to Mitigation, and Research Needs Related to Human Disturbance of Belugas, Narwhals and Walruses*

**Peter Ewins** — *Hudson Strait: a case study with the shipping industry*

**Sue Wilson** — *Shipping disturbance impacts on ice-breeding seals: research from the Caspian Sea*

**Lilia Dmitrieva** — *Evidence-based mitigation of shipping disturbance of ice-breeding seals: experience from the Caspian Sea*

**Simon Goodman** — *Towards a risk assessment for shipping disturbance of Arctic ice-breeding pinnipeds and associated conservation strategy to be developed*

**Jürgen Weissenberger** — *Tentative title. “Sound from oil industry activities – some research projects related to habitat modelling for risk assessment of acoustic disturbance and detectability of marine mammals as part of mitigation measures”. [Update on 3 projects: “Agent based modelling for risk assessment of acoustic disturbance”, “Traditional ecological knowledge study on behavioural reactions to sound” and “Detectability of marine mammals with IR and active acoustics”]*

**Tenna Boye** — Title to come, topic: hunting and whalewatching in Greenland

**Sandra Granquist** — *Effects of wildlife watching tourism on Arctic marine mammals, with a special note on harbour seal watching in Iceland*

**Shawna Karpovich** — Title to come, topic: physiological impacts of ship-based tourism on harbour seals in Alaska