**Fisheries and Oceans Canada: an update on research and monitoring activities for North Atlantic right whales** (***Eubalaena glacialis***)

Fisheries and Oceans Canada (DFO) continues to conduct research on the critically endangered North Atlantic right whale (NARW) with initiatives including aerial surveys, passive acoustic monitoring, habitat and prey studies, noise analyses and modelling, and other studies. Systematic aerial surveys to document the seasonal distribution of NARWs in Canadian waters started in mid-April. Multiple passes of the southern Gulf of St. Lawrence (GSL) were conducted to document NARW distribution in this area throughout the season. Additional surveys were undertaken in the northern GSL, southern Scotian Shelf, and off Newfoundland and Labrador. Photographs and videos of NARWs were collected by a variety of platforms and preliminary identifications of individuals and documentation of injuries are underway. Research to improve the ability to monitor NARWs acoustically, especially in areas with high levels of shipping noise is ongoing and soundscape modelling is underway. Passive acoustic monitoring using bottom-mounted acoustic recorders and gliders continued at a number of sites across Atlantic Canada including seven near real-time detection systems in the GSL and the Whale Binaural Rings Project, which uses pairs of coastal circular arrays for real-time NARW detection and localization over large areas. Foraging-habitat and prey studies continue with the processes driving *Calanus* availability in southern GSL foraging areas assessed through the analysis of 3-D distributions of *Calanus* spp. and coupled bio-physical *Calanus* simulations. A species distribution modelling framework which can integrate presence-only datasets with sightings from systematic surveys to improve overall predictions of suitable habitat is currently under development. *Fisheriescape*, a comprehensive spatio-temporal distribution and intensity layer for fixed-gear fishing activity in the GSL is being developed. A new mass-spectrometry method for quantifying hormone levels in NARW blow samples provided promising initial results. This presentation will summarize the NARW focused research undertaken by DFO and its collaborators.