



North Atlantic Right Whale Consortium

Annual Meeting

25-26 October 2022

New Bedford Whaling Museum

MEETING FORMAT AND AGENDA

Pre-Meeting:

Prior to the meeting, all registered participants will receive a unique meeting site login code that will allow them to view all pre-recorded presentations in advance of the meeting. All underlined presentations should be view **in advance of the meeting** as they will not be shared live. Those presentations that are not underlined will be shared **live** during the meeting. The six-digit number preceding the presentation title corresponds to the video number on the meeting site. Please note that presentations that are to be viewed live will be uploaded to the meeting site **post meeting**, and therefore have six-digit codes as well.

Participants (both onsite and remote) may submit questions/comments for presenters using the meeting site chat function in advance of the meeting.

Live Meeting:

Remote participants will be able to view the meeting, including live presentations and discussions, using their unique login code on the meeting site.

Following any live presentations within a session, a discussion panel will take place with all presenters within that session. Presenters who are onsite will gather at the front of the auditorium and presenters who are remote will be pulled in to the auditorium by projection feed. The panel will take questions/comments from both onsite and remote meeting participants. Remote participants should use the chat function on the meeting site to submit questions and comments.

All meeting materials (both static and live) are intended for registered participants only and may not be shared in any capacity. All participants have agreed to the meeting Code of Conduct. There is no recording (including but not limited to video, audio, screenshots, or photography) or sharing (including social media) of any material (including but not limited to presentations, presentation content, discussions) without explicit consent of the presenter, speaker, moderator, etc.

*A unique email and passcode are required to access meeting materials and remote viewing of live sessions

*Time listed are EDT

*Underlined talks should be view **in advance** of the meeting and will not be shared live

25 October 2022

0800-0830 Check in

0830 Opening / Keynote

Scott Kraus, NARWC Chair

0900 Session 1: Species Status Update

Moderated by Scott Kraus

- 01.01.01 **North Atlantic Right Whale Catalog update and whale naming results**
• *Philip Hamilton, Anderson Cabot Center for Ocean Life at the New England Aquarium*
- 01.01.02 **Update on the North Atlantic Right Whale Unusual Mortality Event: 2017-present**
• *Deborah Fauquier, National Marine Fisheries Service*
- 01.01.03 **2022 North Atlantic right whale entanglement update**
• *Moira Brown, Canadian Whale Institute/Campobello Whale Rescue Team*
- 01.01.04 **Serious injury and human impact monitoring and determinations**
• *Heather Pettis, Anderson Cabot Center for Ocean Life at the New England Aquarium*
• *Allison Henry, Northeast Fisheries Science Center*

1030 Break

1100 Session 2: Distribution and Habitat Use

Moderated by Tim Frasier

- 01.02.01 **Redefining North Atlantic right whale habitat-use patterns under climate change**
• *Erin Meyer-Gutbrod, University of South Carolina*
- 01.02.02 **Decadal-scale phenology and seasonal climate drivers of North Atlantic right and other baleen whales in a rapidly warming marine ecosystem**
• *Daniel Pendleton, Anderson Cabot Center for Ocean Life at the New England Aquarium*
- 01.02.03 **Forecasting near-term movements and density of North Atlantic right whales**
• *Nathan Crum, Florida Fish and Wildlife Conservation Commission*
- 01.02.04 **Abundance and distribution of North Atlantic right whales in eastern Canada estimated from aerial line-transect surveys from 2017 to 2021**
• *Caroline Sauvé, Department of Fisheries and Oceans Canada*
- 01.02.05 **Vulnerability of North Atlantic right whales to entanglement and collision in the Gulf of St. Lawrence: insights from their movement patterns and diving behavior**
• *Valérie Harvey, Department of Fisheries and Oceans Canada*
- 01.02.06 **From top to bottom: Predominantly near-surface and near-bottom distribution of North Atlantic right whales in the Gulf of St Lawrence**
• *Andrew Wright, Department of Fisheries and Oceans Canada*
- 01.02.07 **Didn't we just see you over there? What can vessel-based mark-recapture tell us of right whale movement in the southern GSL in 2022**
• *Delphine Durette-Morin, Canadian Whale Institute*
• *Amy Warren, Anderson Cabot Center for Ocean Life at the New England Aquarium*
- 01.02.08 **North Atlantic right whale density model for U.S. waters**
• *Jason Roberts, Marine Geospatial Ecology Laboratory, Duke University*

*A unique email and passcode are required to access meeting materials and remote viewing of live sessions

*Time listed are EDT

*Underlined talks should be view **in advance** of the meeting and will not be shared live

01.02.09 **Incorporating prey information into the Duke Right Whale Density Surface Model**

- *Camille Ross, Bigelow Laboratory for Ocean Sciences*

1300 Lunch

1415 Session 3: Health, Physiology, and Genetics

Moderated by Bill McLellan

01.03.01 **Photogrammetric analysis of North Atlantic right whale growth and body condition trends could encourage reduction of sub-lethal trauma, a prerequisite for species survival**

- *Michael Moore, Woods Hole Oceanographic Institution*

01.03.02 **Including serious injury and morbidity cases in the ongoing Unusual Mortality Event of North Atlantic right whales (*Eubalaena glacialis*): 2017-present**

- *Sarah Sharp, International Fund for Animal Welfare*

01.03.03 **Genomic estimates of diversity and population history of North Atlantic and southern right whales**

- *Carla Crossman, Department of Biology, St. Mary's University*

01.03.04 **Skin transcriptome analysis as a potential tool for assessing health in the North Atlantic right whale**

- *Ebru Unal, Mystic Aquarium*

01.03.05 **Drone-based measurements of blowhole temperatures of North Atlantic right whales (*Eubalaena glacialis*) and humpback whales (*Megaptera novaeangliae*)**

- *Gina Lonati, University of New Brunswick St John*

01.03.06 **Using North Atlantic right whale family lineages as a conservation tool**

- *Kara Shervanick, NMFS Southeast Regional Office*

1530 Break/Extended for small meeting/strategic planning opportunities

Informational Tables (outside of Harborview Gallery):

The following groups will have tables set up in the Harbor View gallery during the break to provide information/demonstrations:

- **NEIT Table**

The Northeast Implementation Team is a recovery team appointed by NOAA under the ESA to assist with the development and implementation of the North Atlantic Right Whale recovery plan. Members of the NEIT will be available in-person and virtually to provide updates on past and current efforts to support GARFO and NARWs.

Remote participant [LINK](#)

Meeting ID: 882 8240 2569; Passcode: **773774**

- **Whale and Dolphin Conservation (WDC) On-Demand Fishing Gear demonstration**

On demand fishing gear trials show promise in reducing right whale entanglements and sustaining economically and culturally important fisheries. Whale and Dolphin Conservation will be demonstrating two types of functioning on-demand display units for individuals interested in learning more about how this alternative fishing gear works.

*A unique email and passcode are required to access meeting materials and remote viewing of live sessions

*Time listed are EDT

*Underlined talks should be view **in advance** of the meeting and will not be shared live

1630 Session 4: Acoustics

Moderated by Peter Corkeron

01.04.01 **Near real-time passive acoustic monitoring for right whales on the U.S. east coast – an update**

- *Mark Baumgartner, Woods Hole Oceanographic Institution*

01.04.02 **Adaptable, open-source deep learning NARW vocalization detection tool**

- *Bruno Padovese, Institute for Big Data Analytics, Faculty of Computer Science, Dalhousie University*

01.04.03 **Current NARW PAM Project updates from the NEFSC**

- *Genevieve Davis, NOAA/NMFS Northeast Fisheries Science Center*

1715 Day 1 Wrap

1730 Onsite Reception

*A unique email and passcode are required to access meeting materials and remote viewing of live sessions

*Time listed are EDT

*Underlined talks should be view **in advance** of the meeting and will not be shared live

26 October 2022

0830 Business Meeting

The business meeting is open to ALL attendees. Please join us!

0930 Session 1: Management Program Updates

Moderated by Sean Brilliant

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

- *Angelia Vanderlaan, Fisheries and Oceans Canada*

02.01.02 **NOAA Fisheries' North Atlantic Right Whale Road to Recovery**

- *Niki Lisi, National Marine Fisheries Service Office of Protected Resources*

02.01.03 **Building the road to recovery: Conservation and management of the eastern North Pacific right whale**

- *Jenna Malek, NOAA Fisheries, Alaska Region*

1015 Break

1045 Ropeless Consortium Meeting Summary

- *Mark Baumgartner, Woods Hole Oceanographic Institution*
- *Sean Brilliant, Canadian Wildlife Federation*
- *Michael Moore, Woods Hole Oceanographic Institution*

1100 Session 2: Anthropogenic Event Monitoring and Mitigation - Entanglement

Moderated by Michael Moore

02.02.01 **An approach for allocating where right whale entanglement events may have occurred**

- *Amy Knowlton, Anderson Cabot Center for Ocean Life at the New England Aquarium*

02.02.02 **Collaborations with commercial fish harvesters to determine suitability of low-breaking strength gear modifications in Atlantic Canadian fixed-gear fisheries**

- *Rhyl Frith, Canadian Wildlife Federation*

02.02.03 **How effective are fisheries closures? An orthogonal entanglement risk reduction analysis of time-area fisheries closures in the Gulf of St. Lawrence snow crab fishery**

- *Alexandra Cole, Canadian Wildlife Federation*

02.02.04 **Entanglement response for right whale, Snow Cone: A case study**

- *Scott Landry, Center for Coastal Studies*

02.02.05 **Grappling with the disentanglement toolkit**

- *Max Fertik, Rhode Island School of Design*
- *Max Werner, Rhode Island School of Design*

02.02.06 **Whales and fishermen in Gaspésie: 4 years of survey data, towards a coexistence on the maritime territory**

- *Lyne Morissette, M- Expertise Marine Inc.*

02.02.07 **Bycatch Solutions Hub: Connecting the seafood industry to practical solutions to protect Endangered, Threatened, and Protected (ETP) species**

- *Phillip Sanchez, Sustainable Fisheries Partnership*

*A unique email and passcode are required to access meeting materials and remote viewing of live sessions

*Time listed are EDT

*Underlined talks should be view **in advance** of the meeting and will not be shared live

1200 Session 3: Anthropogenic Event Management – Entanglement

Moderated by Moira Brown

- 02.03.01 **NOAA's Ropeless Roadmap: A strategy to develop on-demand fishing**
 - Michael Asaro, NOAA Northeast Fisheries Science Center
- 02.03.02 **Fisheries and Oceans Canada (DFO): Entanglement prevention and mitigation efforts**
 - Brett Gilchrist, Fisheries and Oceans Canada
 - Melissa Landry, Fisheries and Oceans Canada
- 02.03.03 **Atlantic Large Whale Take Reduction Plan update**
 - Marisa Trego, Greater Atlantic Regional Office, US National Marine Fisheries Service
- 02.03.04 **Abandoned gear removal efforts in the Massachusetts Restricted Area**
 - Erin Burke, Massachusetts Division of Marine Fisheries

1300 Lunch

Student/Professional Roundtables – [Professional Host Bios](#)

1. In person: Harbor View Gallery
2. Remote participants [LINK](#)

Meeting ID: 856 5553 3437; Passcode: **945210**

1415 Session 4: Anthropogenic Event Monitoring and Management – Vessel Strikes

Moderated by Amy Knowlton

- 02.04.01 **Transport Canada (TC) update on North Atlantic right whale vessel management measures**
 - Michel Charron, Transport Canada
 - Chantal Bois, Transport Canada
- 02.04.02 **Assessing the risk of vessel strike mortality in North Atlantic right whales along the U.S East Coast**
 - Lance Garrison, National Marine Fisheries Service, Marine Mammal and Turtle Division, Southeast Fisheries Science Center
- 02.04.03 **Proposed amendments to the North Atlantic right whale vessel speed rule**
 - Caroline Good, Office of Protected Resources, National Marine Fisheries Service
- 02.04.04 **U.S. Army Corps of Engineers conservation and protection measure implementation in the South Atlantic region**
 - Kathryn Lebow, U.S. Army Corps of Engineers - Jacksonville District

1515 Session 5: Wind Energy: Impacts and Management

Moderated by Mark Baumgartner

- 02.05.01 **Impact of continual turbine operational noise on the migration of the North Atlantic right whale**
 - Robert Stern, Save Long Beach Island, Inc.
- 02.05.02 **How is NOAA Fisheries approaching the recovery of North Atlantic right whales with offshore wind development?**
 - Sean Hayes, NOAA Northeast Fisheries Science Center
- 02.05.03 **NMFS offshore wind energy protected species management updates**
 - Nick Sisson, NOAA Greater Atlantic Regional Fisheries Office
- 02.05.04 **NEFSC research efforts to better understand right whale habitat and distribution in Southern New England offshore wind development areas and nearby waters**

*A unique email and passcode are required to access meeting materials and remote viewing of live sessions

*Time listed are EDT

*Underlined talks should be view **in advance** of the meeting and will not be shared live

- *Christopher Orphanides, NOAA Fisheries*

1615 Open Forum

Moderated by Scott Kraus

1700 Meeting Wrap and Close

*A unique email and passcode are required to access meeting materials and remote viewing of live sessions

*Time listed are EDT

*Underlined talks should be view **in advance** of the meeting and will not be shared live