



North Atlantic Right Whale Consortium Annual Meeting 27-28 October 2020

The times list below indicate timing for the live Q&A sessions with those who have uploaded pre-recorded presentations to the meeting site. Meeting participants will receive a unique site login code and should view these presentations in advance of the meeting. Participants may submit questions/comments for presenters both in advance and during the meeting. The six digit number preceding the presentation title corresponds to the video number on the meeting site. During the meeting, all “presenters” listed within a session will be together live on screen with a moderator to answer pre-submitted and live questions. There will be no live presentations during the meeting.

27 OCTOBER 2020

1000AM **Keynote/Opening:** *Scott Kraus, NARWC Chair*

1015AM **Session 1: Species status and management update**

- **01.01.01:** **North Atlantic Right Whale Catalog Update, Recent Genetic Findings, and Whale Naming Results:** *Philip Hamilton*
- **01.01.02:** **Mortality update:** *Sarah Sharp*
- **01.01.03:** **Entanglement/injury update:** *Scott Landry, Heather Pettis, Allison Henry*
- **01.01.04:** **Fisheries and Oceans Canada: an update on research and monitoring activities for North Atlantic right whales:** *Angelia Vanderlaan*
- **01.01.05:** **Fisheries and Oceans Canada (DFO) update on North Atlantic right whale management measures:** *Adam Burns and Melissa Landry*
- **01.01.06:** **Transport Canada management update:** *Michelle Sanders*
- **01.01.07:** **US management update:** *Colleen Coogan*
- **01.01.08:** **Unusual Mortality Event:** *Deborah Fauquier*

1115AM **Break**

1130AM **Session 2: Anthropogenic Events and Mitigation**

- **01.02.01:** **Ropeless Consortium Meeting Summary:** *Sean Brilliant*
- **01.02.02:** **Simulated performance of lobster fishing gear under different gear configurations:** *Amy Knowlton*
- **01.02.03:** **Right whales in shallow waters: a case-study on coastal lobster fishing grounds:**
Lyne Morissette

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- **01.02.04:** In the path of North Atlantic right whales: Perspectives of an offshore wind developer: *Laura Morse*
- **01.02.05:** Automatic whale detection from vessels for real-time ship-strike mitigation – current developments and applicability: *Daniel Zitterbart*
- **01.02.06:** Protected species observer (PSO) detections of NARW; significant events for the greater good: *Craig Reiser*
- **01.02.07:** Multi-agency emergency intervention to an injured North Atlantic right whale (*Eubalaena glacialis*) calf: *Hendrik Nollens*
- **01.02.08:** Effectiveness of speed restrictions to protect North Atlantic right whales from ship strikes within Charleston South Carolina and Savannah Georgia Seasonal Management Areas: *Jon Lang*

1230PM Lunch

100PM Session 3: Demographics

- **01.03.01:** Incorporating recovery into mark-recapture: another approach to the estimation of abundance and demographic parameters: *Joshua Reed*
- **01.03.02:** Estimation of North Atlantic right whale reproductive dynamics while accounting for uncertainty in female reproductive states: *Nathan Crum*
- **01.03.03:** Estimating the population size of the North Atlantic right whale: *Vitor Dos Anjos*
- **01.03.04:** North Atlantic right whale monitoring and surveillance: report and recommendations of the National Marine Fisheries Service’s Expert Working Group: *Paul Wade*

145PM Break

200PM Session 4: Distribution

- **01.04.01:** Stable isotope analysis of baleen from North Atlantic right whale (*Eubalaena glacialis*) reflects distribution shift to the Gulf of St. Lawrence: *Rachel Forbes*
- **01.04.02:** Oceanographic processes impact Gulf of Maine foraging ecology and trigger abrupt right whale distribution shift: *Erin Meyer-Gutbrod*
- **01.04.03:** Large changes in right whale density in U.S. waters between 2003-2009 and 2010-2018: *Jason Roberts*
- **01.04.04:** In plane sight: a mark-recapture analysis of North Atlantic right whales in the Gulf of St. Lawrence: *Leah Crowe*
- **01.04.05:** North Atlantic right whales in the New York Bight update: comprehensive findings from monthly aerial surveys Over three years: *Ann Zoidis*
- **01.04.06:** Projecting regions of North Atlantic right whale (*Eubalaena glacialis*) habitat suitability in the Gulf of Maine in 2050: *Camille Ross*

300PM Break

315PM Breakout Sessions (direct links to each session on meeting landing page)

1. **Right whale politics and law**

Moderated by Kelly Kryc (Anderson Cabot Center for Ocean Life at NEAq)

An informal discussion on the current federal policy landscape for right whale conservation.

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2. **Consortium role and looking forward**
Moderated by Scott Kraus- NARWC Chair
Thoughts and discussion for NARWC strategic planning
3. *Unmoderated Networking #1*
4. *Unmoderated Networking #2*
5. *Media Room: Ropeless Debrief for invited media*

400PM Breakout Sessions (direct links to each session on meeting landing page)

1. **Trauma prevention - rope**
Moderated by Michael Moore (Woods Hole Oceanographic Institution)/Amy Knowlton (Anderson Cabot Center for Ocean Life at NEAq)
Continued discussion on the path forward for mitigating right whale entanglements and associated trauma
2. **Climate change impacts on distribution and nutritional stress**
Moderated by Dan Pendleton (Anderson Cabot Center for Ocean Life at NEAq) /Nick Record (Bigelow Laboratory for Ocean Sciences)
3. *Unmoderated Networking #1*
4. *Unmoderated Networking #2*
5. *Media Room: By invite*

445PM Day 1 End Trivia and Cocktails

28 OCTOBER 2020

1000AM Session 1: Acoustics and Acoustic Detections

- **02.01.01:** **Listening for North Atlantic right whales in Nantucket Shoals from 2018 – 2020:** *Nicole Pegg*
- **02.01.02:** **Characterizing North Atlantic right whale upcalls and ambient noise levels in eastern Canadian waters:** *Clair Evers*
- **02.01.03:** **Optimizing real-time passive acoustic monitoring from gliders to trigger fishery and shipping dynamic management restrictions that protect North Atlantic right whales:** *Delphine Durette-Morin*
- **02.01.04:** **Evidence of song production by North Atlantic right whales:** *Hansen Johnson*
- **02.01.05:** **Near real-time passive acoustic monitoring for right whales on the U.S. east coast – an update:** *Mark Baumgartner*
- **02.01.06:** **Quantitative comparison of visual and acoustic surveys for the detection and dynamic management of North Atlantic right whales:** *Valentina Ceballos*

1100AM Break

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1115AM **Session 2: Physiology and Feeding Ecology**

- **02.02.01:** **North Atlantic right whale melanopsin pigment and pupil light response:**
Jeffry Fasick
- **02.02.02:** **North Atlantic right whale bioenergetics reviewed and modelled in the context of changing nutrition and entanglement stress:** *Jasmin Hiitt*
- **02.02.03:** **Understanding the cumulative impacts of multiple stressors on North Atlantic right whales: Introducing the PCOMS Working Group:** *Robert Schick*
- **02.02.04:** **Variations in North Atlantic right whale food (*Calanus* spp.) in the southern Gulf of St. Lawrence:** *Kevin Sorochan*
- **02.02.05:** **Variation in the late summer abundance and nutritional value of stage V *Calanus finmarchicus* in the Bay of Fundy from 2006-2019: implications for North Atlantic right whales and other copepod predators:** *Kristina Guarino*
- **02.02.06:** **Ocean circulation shapes early summer North Atlantic right whale preyscape in the southern Gulf of St. Lawrence: a biophysical *Calanus* model comparison of Cool vs Warm years:** *Catherine Brennan*

1215PM **Lunch**

1245PM **Session 3: Education/Outreach and New technologies**

- **02.03.01:** *Entangled: David Abel*
 - *A special link to this film will be made available to registered participants on the meeting landing page on 10/27 from 6-10pm EDT.*
- **02.03.02:** ***The Urban Whale - a documentary impact campaign:*** *Nadine Pequenezza and Joanne Jackson*
- **02.03.03:** **New methodology for using a remotely piloted aircraft system to measure body temperature of large whales, especially North Atlantic right whales:** *Gina Lonati*
- **02.03.04:** **Ship Speed Watch: a new tool to monitor and analyze vessel traffic:** *Gilbert Brogan*
- **02.03.05:** **Right Whale AI:** *Christin Khan*
- **02.03.06:** **Automated detection and identification of right whales in the Gulf of St. Lawrence:** *Olivia Pisano*

145PM **Break**

200PM **Breakout Sessions (direct links to each session on meeting landing page)**

1. *Entangled* Film discussion

Moderated by David Abel (Boston Globe, Entangled)

A discussion of the film *Entangled*, which will be available for NARWC participants to view on October 27th from 6-10pm

2. Trauma prevention - vessels (whale detection, vessel management)

Moderated by Amy Knowlton (Anderson Cabot Center for Ocean Life at NEAq)/Jessica Redfern (Anderson Cabot Center for Ocean Life at NEAq)

Continued discussion on the path forward for mitigating right whale vessel strikes

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3. *Unmoderated Networking #1*
4. *Unmoderated Networking #2*

5. *Media Room: By invite*

245PM Breakout Sessions (direct links to each session on meeting landing page)

1. Passive Acoustic Monitoring

Moderated by Genevieve Davis (Northeast Fisheries Science Center)/Hilary Moors-Murphy (Department Fisheries and Oceans Canada)

Where are people monitoring now vs outstanding gaps in coverage? Archival vs real-time PAM? What detectors are people using and comparability? 'Reporting' of acoustic detections/NARW acoustic detection database (PAM version of WhaleMap)?

2. Student/researcher roundtable

Moderated by NARWC Members

An informal opportunity to meet and chat with various Consortium members who represent different areas of expertise. Ask questions about their fields and how they view their role in right whale conservation.

3. Public awareness (consumer education)

Moderated by Anne DiMonti (RI Audubon)/Bob Rocha (New Bedford Whaling Museum)

- What is a North Atlantic Right Whale? How can we save a whale many people have never heard of? Why should people care?
- What does the extinction mean for the Ocean ecosystem?
- How do we get we convey the plight of the North Atlantic Right Whale and still give a message of hope?
- What tangible things can we offer the general public to do to help save the species?
- Thinking outside the box...how can we partner with other maritime, for profit and nontraditional organizations to expand outreach beyond the scientific/conservation community? For example, the NARWC Education Committee *Sharing the Seas: Safe Boating for Sailors and Whales* program.

4. *Unmoderated Networking #1*

5. *Unmoderated Networking #2*

6. *Media Room: By invite*

330PM Meeting wrap up/End

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