

Maritimes North Atlantic Right Whale Entanglement Workshop

October 15, 2020

Meeting Summary

Introduction and purpose

On October 15, 2020, the Canadian Wildlife Federation hosted a North Atlantic Right Whale (NARW) entanglement workshop in Halifax, Nova Scotia. Seventy-five participants (listed at the end of this report) from a variety of organizations attended in-person or online via Zoom.

The purpose of this meeting was to discuss the NARW entanglement situation in Atlantic Canada, allowing all those interested in or affected by NARW entanglement mitigation measures to be involved. The goal was to create a collective understanding of this situation, to identify common interests and topics of agreement among participants, and to begin developing a shared understanding and agreement on the value of various efforts to reduce entanglements.

All participants were welcome to contribute questions, concerns, and ideas. This workshop enabled us to identify gaps in knowledge, to create space for new ideas, and to specify research questions for future work in support of sound, evidence-based entanglement mitigation.

Presentations and Discussion

Four presentations were given to ensure all participants had a shared understanding on the entanglement situation in Canada:

1. Hansen Johnson, PhD Candidate, Dalhousie University: “Right whale distribution in Canadian waters”
2. Megan Jones, Veterinary Pathologist, Canadian Wildlife Health Cooperative: “North Atlantic right whale: Assessing causes of death in the Gulf of St. Lawrence”
3. Moira Brown, Research Scientist, Canadian Whale Institute and Campobello Whale Rescue: “What we know about entangled whales and how to disentangle them”
4. Sean Brilliant, Senior Conservation Biologist, Canadian Wildlife Federation: “2020 Canadian Right whale management measures and 2021 considerations”

Eight major concerns, summarized below, were raised throughout the day’s discussions:

1. Inadequate Gear Modification Testing – Weak sleeves, weak links, and low breaking strength ropes have not been tested thoroughly enough to show evidence that these modifications will reduce entanglement risk. There is concern because these measures are being implemented by Fisheries and Oceans Canada by the end of 2021.
 - a. UPDATE: 2021 DFO NARW measures indicate that the implementation of these devices will be delayed until the end of 2022.

2. Sinking Groundline – Concerns associated with the use of sinking groundline included the shortened lifespan of the rope (due to mud and sand getting into the weave), the increased likelihood of becoming snared on the bottom (*i.e.*, gear loss), the associated expense of this gear, and the reduced opportunity for recycling due to the composition of the ropes. These concerns, compared with the potential to reduce NARW entanglement risk, raised doubt about the value of this mitigation measure.
3. Media Focus – The causes of NARW deaths are vessel strikes and entanglement, but participants perceived an excessive focus in the media on the entanglement in fishing gear rather than vessel strikes, leaving commercial fishermen to feel disproportionately blamed. It was recommended that future meetings include the shipping industry so that both activities can be discussed collectively.
4. Location of Acoustic Devices – Autonomous gliders and fixed hydrophones must be placed in key areas of concern such as shipping lanes to listen for whales. There is an obvious gap in monitoring of the Cabot Strait, a busy shipping corridor through which NARW are believed to use entering and exiting the Gulf of St. Lawrence.
5. Rules for Seasonal Closures – The value of the potentially long duration of seasonal fisheries closures was discussed in detail. A proposed option to reduce the unnecessary duration of the closures was to establish specific surveys that can determine if an area can be opened to fishing again (*e.g.*, after a whale is not spotted with a specific period). Further research is needed to determine if this is a reasonable option.
 - a. UPDATE: 2021 DFO NARW measures will establish seasonal closures only if a second sighting occurs between Day 9 and 15 of a dynamic closure.
6. Rules for Dynamic Closures – Similarly, the value of closing an area with a single whale sighting was also discussed. One suggestion was that more than 1 whale (*e.g.*, 3) should be the trigger for a closure if they are exhibiting feeding or socializing behaviours. This idea also requires more detailed analysis.
7. Fishing Patterns due to Closures – Closures in one area can increase fishing density in other areas. It was suggested that region-specific preventive measures in the Gulf could help prevent this, rather than measures that are implemented across the entire Gulf. There is a need to consider the effect of closures on fisheries as well as the effect on the risk to the whales.
8. Fishing Season Start Date – In some areas of the Gulf of St. Lawrence, an earlier season start date could mean that fishing would end before the arrival of NARW.

This may also mitigate the issue of increased fishing density in some areas due to fishers being moved out of their traditional areas due to closures.

Throughout the discussions during the day, seven research questions were identified:

1. Which (if any) individual whales trigger fishery closures? Is there a pattern?
2. How often are whales re-sighted in seasonally closed areas?
3. What number of whales indicate stable aggregation/persistence?
4. What acoustic metrics indicate stable aggregation/persistence?
5. Can we use data (sightings, acoustic) from the three previous years to evaluate different management strategies we may want to use in the future? For example, based on the sightings of whales in 2017, how much area we would have closed if we used different closures rules, how much risk would have been reduced, and how would fishing have been affected?
6. What is the level of entanglement risk by fishing in Maritime and Gulf fisheries?
7. What is the movement patterns of groundlines and endlines for Gulf fisheries?

Conclusions and Future Opportunities

Several topics were widely supported by the participants. These include the following:

1. There is a need to find a way to share more broadly the scientific reasoning and selection process for conservation measures to protect NARW.
2. There was support for ensuring measures to protect NARW are based on evidence and that evidence supporting these measures are widely shared.
3. The value of creating a report to record the discussions and recommendations of this workshop was broadly supported by participants.
4. The outcome of this meeting should contribute to the co-existence of fishers and whales. The best metric to determine whether we are successful in our efforts to protect NARW while enabling commercial fishing to continue is that fishers are sustaining their livelihoods and no whales are killed or injured by fishing gear.
5. This problem has no 'silver bullet' solution, so a collaborative and cooperative approach to address it is essential.
6. Participants expressed willingness to meet again soon to discuss how to proceed as a group in contributing to solutions and plans for addressing this issue.

Acknowledgements

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