



COPE^o Working Group on Marine Debris and Entanglement Meeting Minutes

5 March 2024
12pm EST

Attendees

- Wayne Macdougall, *Working Group Chair*
- Clayton A. Burke, *Working Group Chair*
- Edward Trippel
- Sebastien Blanchard
- Hannah Dawicki, *COPE^o Administrator*
- Sophie Banas, *COPE^o Administrator*

Agenda Items

- Welcome and Introductions
- Introduction to WG Topic
 - Marine Debris and Entanglement
- Discussion
 - What are the main problems we are looking to address?
 - Ghost fishing gear
 - Entanglements
 - Disruption to migratory patterns (i.e. North Atlantic Right Whales)
 - What are the main objectives?
 - What is currently being done?
 - Gear innovations and trials
 - Utilization of different types of rope
 - University research and potential for partnerships
- Next Steps



Discussion Summary

- Hannah Dawicki opened the meeting thanking the participants for attending and welcoming them to the [COPE° Working Group on Marine Debris and Entanglement](#).
- COPE was launched in 2022 by the Northeast Maritime Institute – a private maritime college located in Fairhaven, Massachusetts – to provide a safe and transparent digital platform for a diverse group of individuals and organizations to collaborate on finding solutions to different maritime and ocean related problems.
- Hannah Dawicki initiated the discussion by explaining the purpose of the working group, which is to identify focus areas based on the expertise of the participants.
- Wayne and Clayton provided insights into their interest in addressing ghost gear and ghost fishing. They emphasized the need for technological solutions such as radio signals, controls, and GPS not only to reduce entanglements, but also to reduce carbon emissions and improve efficiency in the fishing fleet.
- Sébastien Blanchard shared his perspective on the entanglement of whales and the need for solutions to address this issue. Sébastien highlighted the importance of understanding entanglement risks, especially in areas like the Gulf of Saint Lawrence. Sébastien mentioned the prevalence of fisheries in their area, particularly focusing on crab and lobster industries, which are prone to entanglement issues.
- Wayne brought up the recent sightings of North Atlantic right whales in Maine and Massachusetts, which is abnormal considering their usual winter migration patterns. The group discussed potential factors for this behavior, such as milder winters and warmer water temperatures in the region. The group also discussed other systems and technologies that require further research to better understand their impact on whales' migratory patterns, including offshore wind farms and the building of causeways. Wayne referenced a documentary called "Sonics Ease" documenting issues with offshore wind farms in Norway and Sweden affecting migratory species.
- The group began to discuss fishing gear and its role in entanglement.
- The group discussed weak links in fishing gear and Wayne suggested the implementation of GPS or EPIRB systems on weak links to aid in tracking entangled whales and lost gear. Edward mentioned the "rescue unit," a tool used for locating lost fishing gear, but noted DFO's cautious approach to its implementation. The group spent some time considering the integration of tracking systems into fishing gear to aid in gear recovery and whale rescue efforts.



- Wayne highlighted the importance of GPS marking and tracking for future developments and Sébastien emphasized the importance of minimizing rope in the water to reduce entanglement risks for marine animals.
- The group discussed the potential benefits of engaging with universities and other research institutions on research and innovation. Sébastien discussed his involvement in discussions with engineering students regarding ropeless gear trials and expressed interest in future collaborations. Wayne discussed previous trials conducted with the University of New Hampshire and the North Atlantic Right Whale consortium.
- Wayne provided updates on patent applications for his and Clayton's ropeless gear and the tautline system.
- The group discussed the pros and cons of using both floating and sinking lines in ropeless gear. Trippel highlighted the importance of niche solutions for different fisheries.
- Edward Trippel elaborated on his role as a gear specialist and his involvement in gear trials initiated by Fisheries and Oceans Canada's (DFO) national headquarters in Ottawa. Trippel discussed his involvement in various gear trials and research projects aimed at reducing ghost gear and supporting large whale conservation efforts. He highlighted the need for collaboration and information sharing among stakeholders.
- Wayne provided additional context about the DFO, mentioning the collaboration between DFO and NOAA and emphasizing the importance of standardized frequency ranges for on-demand and ropeless gear to address communication issues and radio interference.
- Wayne outlined future topics for discussion, including the approval of lubricants and electronics by the International Maritime Organization (IMO) and addressing issues related to maritime training and equipment development.
- Hannah Dawicki provided context about the relationship between COPE and Northeast Maritime Institute (NMI), suggesting the possibility of hosting educational resources on NMI's online platform, NEMO.
- Participants were encouraged to reach out to Hannah with any questions or concerns.

Next Steps

- Participants will continue to discuss and identify specific focus areas within the working group, considering the expertise and interests of all members.
- Further exploration of technological solutions and strategies to address entanglement issues, particularly in the context of the crab and lobster industries, will be pursued.
- Preparation for the next meeting to discuss intended outcomes and the potential development of educational resources.



Action Items

- Participants will research additional information related to their respective focus areas for future discussions.
- Wayne and Clayton will provide more details on their tautline fishing technology.
- Investigate the feasibility and cost-effectiveness of implementing GPS or EPIRB systems on weak links in fishing gear.
- Explore further research on the potential impact of offshore wind farms and associated cables on whale navigation.
- Consider incorporating tracking systems such as the "rescue unit" into fishing gear to aid in gear recovery efforts.
- Explore potential partnerships with universities for ropeless gear trials.
- Research the use of floating and sinking lines in different fisheries.
- All attendees to continue discussions and research for future collaborations and developments.