

RIGHT WHALE NEWS

*An independent forum for right whale conservation and recovery,
published quarterly each year.*

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Since the two previous issues of Right Whale News (March 2017, June 2017), the bad news continues. This issue reports on a reduced calving rate, an increased calving interval, the absence of first-time mothers, an increase in mortalities, and a declining population. These reports are supplemented by links to a number of documents and excellent videos. In response, a number of actions are taking place or proposed. Right whale history is being written. It is happening on our watch. While history is replete with failures when human behavior has interacted with wildlife and the environment, there are also successes. For the right whales and the right whale community—which will it be? (Ed.)

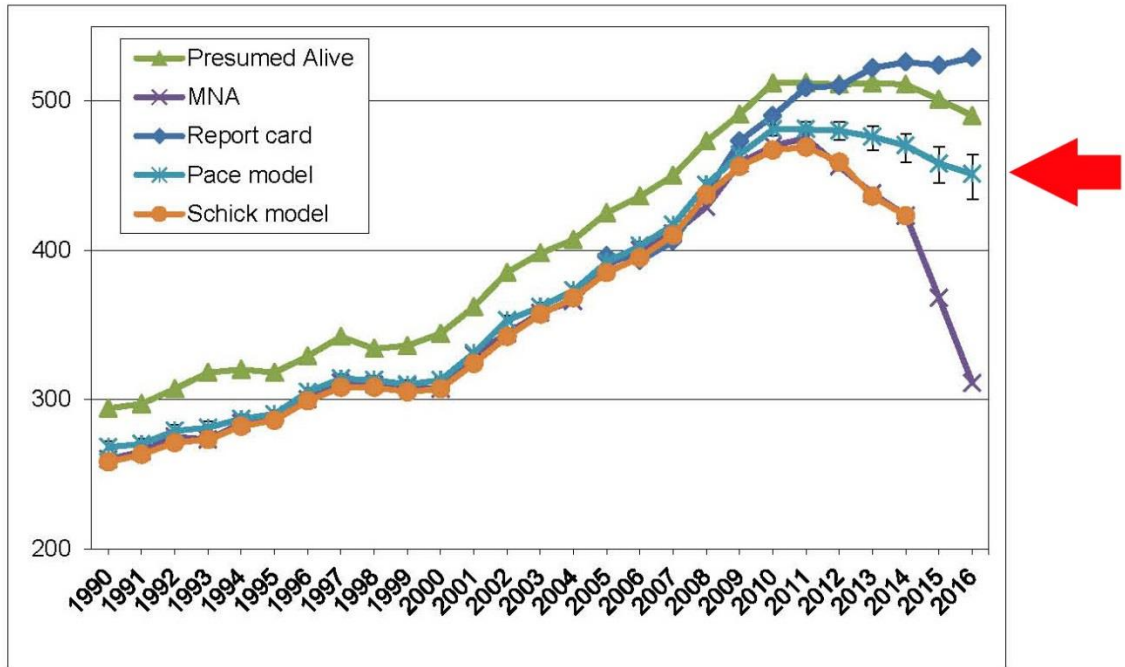
North Atlantic Right Whales: An Endangered Species in Decline

On Sunday, 22 October 2017, the North Atlantic Right Whale Consortium held its annual meeting. The arrangements were different from past years. The change resulted from two factors: 1) the desire to parallel the Consortium meeting with the Society for Marine Mammalogy's 22nd Biennial Conference on the Biology of Marine Mammals, and 2) to take advantage of the location opportunity (Halifax, Nova Scotia) to engage increased Canadian participation. Therefore, at 08:00 on Sunday morning, 250 participants and 15 media assembled in the McNally auditorium at St. Mary's University in Halifax. The prevailing theme throughout the day was a universal concern about the population status of the North Atlantic right whale.

In keeping with past practice, Heather Pettis and co-authors reported on the assessment based on the photographed whales in the right whale Catalog. As of 1 September 2017, the catalogued population through the end of 2016 was estimated at 529 individuals (previous estimates were 524 for 2015 and 526 for 2014). In comparison, Richard Pace, Northeast Fisheries Science Center, based on modeling results, estimated the population through 2016 as 451 individuals. (see full citation in Scientific Literature and Reports at the end of this newsletter).

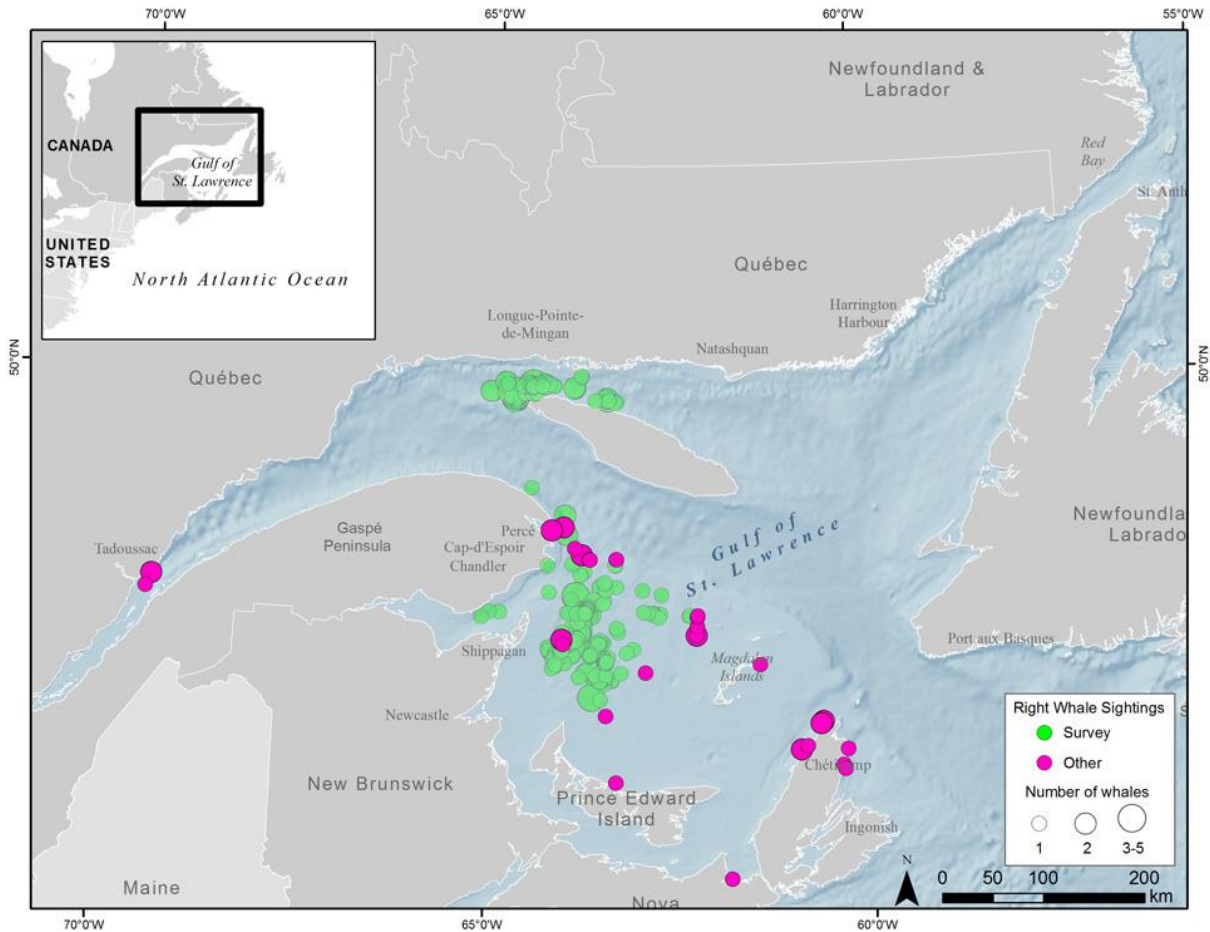
Factors contributing to uncertainty in both methods are the shift in whale distribution that has reduced both the number of sightings contributed to the Catalog and the percent of the population seen annually since 2011. However, Pace (personal communication, 26 October 2017) described that his model takes into account many factors, including whales not sighted, to produce an estimate associated with some confidence. Indeed, for the year ending in 2016, the

Consortium right whale report card elected to prioritize the Pace model estimate of 451 individuals alive over the traditional Catalog estimate.



Assessments of the North Atlantic right whale population based on five assessment methods. The Pace model (red arrow) shows a point estimate along with error bars representing the 95% probability range. By general agreement, the most reliable population number through 2016 is 451 right whales, based on the Pace model. For details on calculations and further information, please see the full Right Whale Report Card at www.narwc.org.

The numbers of births and mortalities contribute to the concern. In 2017, there were five calves born (the 10-year average is 20), with an average calving interval of 10 years (the 10-year average is 4 years). There were no first-time mothers in 2017, another unusual and worrisome element. Heather Pettis, New England Aquarium, reported that, of the reproductive females available to calve in 2017, only 7% actually did calve. Again, a worrisome finding. For mortalities, 16 mortalities have been reported thus far in 2017, 4 in U.S. waters and 12 in Canadian waters. The report on the Canadian mortalities (Incident Report: North Atlantic Right Whale Mortality Event in the Gulf of St. Lawrence, 2017) was released by the Marine Animal Response Society, Halifax, Nova Scotia, on 5 October and can be found at www.marineanimals.ca under publications. Likewise, an excellent video of Right Whale Incidents and Necropsy Results in the Gulf of St. Lawrence, 2017 (runtime 3:06) can be found on the Marine Animal Response Society site: <http://marineanimals.ca/site/visuals/>



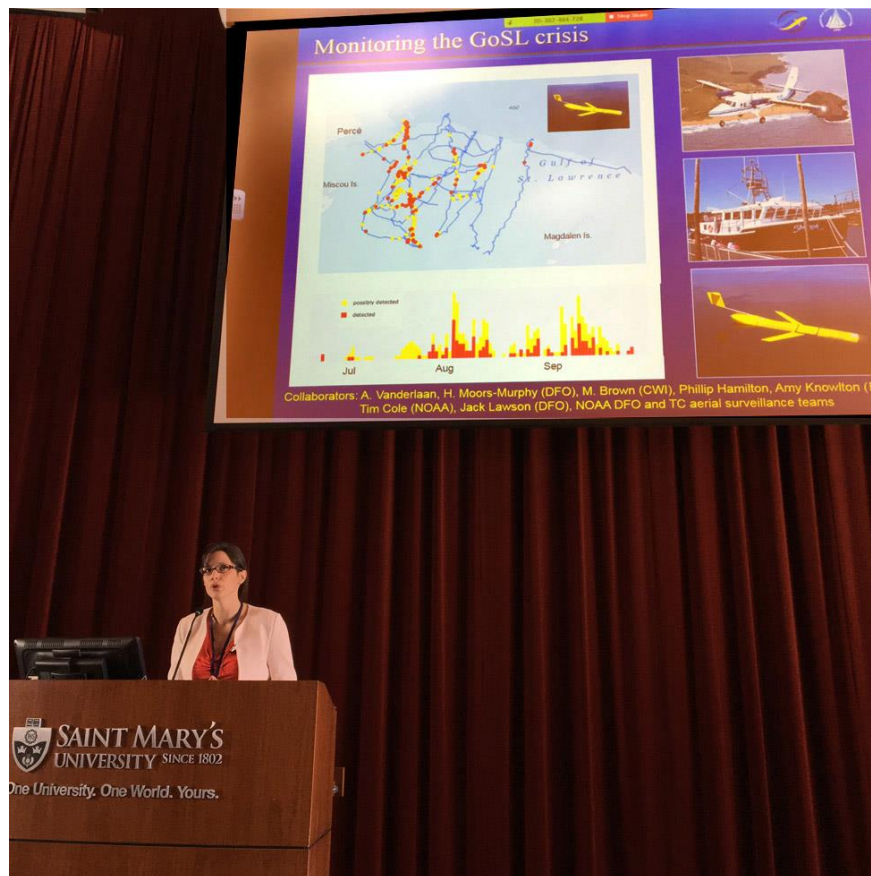
Sightings of right whales in the Gulf of St. Lawrence, 2015–2017. While this plot gives a general impression, it does not include the dead whales or the DFO sightings from August through October 2017. Records show that right whale sightings in this area extend back to 1954. (Graphic: Brooke Hodge, New England Aquarium)

On the U.S. side, the National Marine Fisheries Service/Greater Atlantic Regional Fisheries Office (NMFS/GARFO) released the North Atlantic Right Whale 5-Year Review on 20 October 2017 (the document is available at:

https://www.greateratlantic.fisheries.noaa.gov/protected/final_narw_5-year_review_2017.pdf).

This 5-Year review includes recommended actions to help the species recover—some of which are underway. These include convening or participating in a bilateral U.S./Canadian transboundary working group to reduce ship strikes and fishing gear entanglements, and reinitiating consultation on the Biological Opinions for several Fishery Management Plans under the Endangered Species Act (an update that considers new information on right whale biology and possible effects on fisheries). The recommendations also include evaluating the effectiveness of the Atlantic Large Whale Take Reduction Plan and the Ship Speed Rule to determine whether it may be necessary to modify or extend these protections for right whales.

Additional responses and actions are underway. GARFO announced that a dedicated Right Whale Recovery Coordinator in the Greater Atlantic Region has been appointed to focus efforts on recovery—Diane Borggaard, a biologist with 20 years of experience in species recovery. Identifying the mission and members for the North Atlantic Right Whale Recovery Team is underway.



During the course of the day on 22 October 2017, 12 talks were presented to attendees at the North Atlantic Right Whale Consortium annual meeting. Here, Kim Davies, Dalhousie University, Halifax, Nova Scotia, describes a system to continuously monitor right whales in near real-time from autonomous ocean platforms. (Photo: Jazmine Hayden, Fisheries and Oceans Canada.)

Lastly, at the end of the day, Mark Baumgartner, Woods Hole Oceanographic Institution, and President of the Consortium, put forward a proposal for an International Working Group to Reduce Human-Caused Right Whale Mortality. The sole function of this independent group will be to recommend actions to reduce human-caused right whale mortality. The trans-boundary recommendations will be presented to both Canadian and U.S. governments. The discussion that followed was aimed at contributing to the formation and structure of the group.

Marine Mammal Commission Addresses Entanglements and Take Reduction Plan Failure in Letter to NMFS.

The U.S. Marine Mammal Commission has weighed in on the current status of right whales. Following on the annual meeting of the Marine Mammal Commission in North Falmouth, Massachusetts, on 5-7 April 2017, and the Atlantic Large Whale Take Reduction Team meeting in Providence, Rhode Island, on 25-27 April, the Commission provided a detailed letter and recommendations to NMFS (see www.mmc.gov under Letters).

Based on details provided, the Commission believes that entanglement has not only replaced ship strikes as the leading anthropogenic constraint on NARW recovery, but is getting worse. Thus, reducing fishing-related deaths and injuries is now the single highest priority for this species' recovery. The Commission, therefore, considers it imperative that NMFS move quickly and decisively to significantly modify the Large Whale Plan, including its current regulatory provisions. (Note that this letter preceded the majority of 2017 mortalities, *Ed.*) The Commission goes on to make a number of recommendations, including: 1) improving mitigation measure regulations (including gear and fishing area modifications), 2) expanding gear reporting, 3) conducting additional research, 4) expanding outreach and enforcement, and 5) modifying the take reduction team process.

The agency response, from the new Assistant Administrator Chris Oliver, mentions some disagreement with the Commission's characterization of Team effectiveness, but agrees that changes can be made. The changes included ideas such as webinars in advance of Team meetings and convening a series of work groups. (The response letter is available, under agency response, adjacent to the Commission's letter.)

A Meeting Highlight: The Calvineers Sing

On Monday evening, 23 October 2017, the 7th generation of Calvineers from the Adams School in Castine, Maine, gave a welcome and engaging presentation at the Biennial Marine Mammal Conference in Halifax, Nova Scotia. Under the wing of Bill McWeeny, 11 of the 13 middle schoolers presented their Declaration of Inter-Dependence: their wish that humans and whales (and other animals) could share the oceans and live in harmony. Next, Calvineer alumni were recognized for the work they followed after graduation (an impressive list: a neuroscience laboratory, medical school, biochemical engineering, a maritime academy, science education, and an acoustics program at the University of Edinberg). Finally, in unison, accompanied by ukuleles and guitar, they sang Calvin's Song (author Penny Nichols). The full meeting room rose to sing along and provided a standing ovation. The video (runtime 2:54) can be viewed at:

<https://www.youtube.com/watch?v=ANTMA01gESg&sns=em>

People and Changes

On 19 June 2017, Chris Oliver became the Assistant Administrator for NOAA Fisheries, taking the helm from Acting Assistant Administrator Samuel Rauch who will return to his position as the Deputy Assistant Administrator for Regulatory Programs. Oliver most recently served as the Executive Director of the North Pacific Fisheries Management Council, a position he held for the past 16 years. Oliver will oversee the protection of marine mammals and marine protected species. He will also manage an agency with 3,200 people in five regional offices, six science centers, and 24 labs and fish stations in 15 states and U.S. territories. On 12 June, Dr. Cisco Werner became the Director of Scientific Programs and Chief Science Advisor to NOAA Fisheries. Prior to this appointment, he was the Director of the Southwest Fisheries Science Center.

Calendar

15–16 November 2017. Fall meeting of the Southeast U.S. Implementation Team (SEIT). Guana Tolomato Matanzas National Estuarine Research Reserve, Education Center, 505 Guana River Road, Ponte Vedra Beach, Florida. For further information, contact Thomas.Pitchford@MyFWC.com.

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Right Whale News

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An index to *Right Whale News*, subject and author, for the period 2014-2004 is posted at the North Atlantic Right Whale Consortium website, www.narwc.org—under the *Right Whale News* tab. Indexing for the period 2004-1994 is underway.