Atlantic Scientific Review Group

June 20, 2019

Mr. Chris Oliver,
Assistant Administrator for Fisheries
National Marine Fisheries Service
1315 East-West Highway, Room 14564
Silver Spring, MD 20910

Dear Mr. Oliver,

The Atlantic Scientific Review Group (ASRG) held its annual meeting on 14, 15, and16 of May at the Northeast Fisheries Science Center in Woods Hole, MA. We appreciate the work done by the Science Centers, Headquarters, and Regional staff for both hosting and preparing for the meeting, as it was shifted around due to the government shutdown. We were pleased to welcome back returning members Randall Wells and James Powell. No new members were appointed this year. Eight out of our ten current members were able to attend the meeting.

The ASRG has several recommendations for the National Marine Fisheries Service (NMFS), presented below in approximate priority order.

1. The ASRG commends NMFS for their work developing methodologies for including cryptic mortality in the North Atlantic Right Humpback Whale Stock Assessment Reports (SARs). However, peer review and publication of this method should precede its application to SARs. Additionally, research to identify the percentage of deaths that are human-caused should precede publication of this method and should include an approach to assigning anthropogenic mortalities to specific fisheries. NMFS may wish to initiate a discussion of this approach with the Atlantic Large Whale Take Reduction Team to give them an advance notification that this could be used in future SARs. Additionally, we encourage a more detailed analysis of the relative sightability of vessel-struck versus entangled at sea mortalities, and the behavior of carcasses in terms of drift, buoyancy, sink versus float, shark scavenging, and other decomposition factors.

Additionally, the cryptic mortality adjustment assumes that all individuals that exit the population are mortalities (and all the entries into the population are births). Some of the "mortalities" could simply be individuals that left the study area. Thus, estimation of mortality and emigration could be confounded in this approach. Humpbacks, unlike North Atlantic Right Whales, spend a significant portion of their annual cycle well outside of the region where most survey effort and mortality investigations occur, and where the proportion of mortalities that are human-caused could be very different.

2. The ASRG agrees that the application of the Pace mark-recapture method for estimating Humpback abundance shows promise. However, it should be incorporated in the SAR only after publication in a peer-reviewed journal (or a NEFSC reference document) and include a more complete description of how the observations were taken, the design of the annual photoID sampling cruise, as well as model inputs, assumptions, and diagnostics. Referencing a book chapter in Pace et al. (Hamilton et al. 2007: "The Urban Whale") that has limited access obscures the reader's ability to interpret the validity of this application.

3. We strongly believe that, in the wake of the recent listing of the Gulf of Mexico Bryde's whale under the ESA, the agency should finalize designation of critical habitat and prioritize hiring of a recovery coordinator. This is essential in light of an increase in proposals for large scale oil and gas-related projects in or near their range in the eastern Gulf of Mexico. There is a need for this or a separate, designated staff person to track all of these projects and work closely with OPR (on MMPA permits, for example) in focusing on early engagement, identifying monitoring, mitigation/conservation measures, addressing noise, Section 7, tracking mitigation, etc. Addressing these gaps in capacity would enable staff to focus on core mandates for recovery and protection of Bryde's whales and other Gulf marine mammals.

4. The ASRG supports the efforts of the North Atlantic Right Whale Recovery Plan U.S. Implementation Team Population Evaluation Tool (PET) Subgroup to forecast North Atlantic right whale population dynamics. The proposed objectives and scope of work are appropriate and the plan for tool construction is well designed. The ASRG suggests that the final report clearly state how this tool differs from, and is an improvement over, other well-established population viability analysis (PVA) tools such as Vortex. The ASRG also suggests the PET Subgroup conduct a subset of comparison runs for several high priority scenarios using both the PET and a standard PVA package to compare performance. Given the volume of work planned in such a short time frame, the PET Subgroup may want to consider consulting the Implementation Team to prioritize scenarios for exploration. The ASRG requests the opportunity to review preliminary runs via webinar prior to completion of the project.

5. Abundance estimates for the Southern North Carolina Estuarine Stock System (SNCESS) stock of bottlenose dolphins are crucial for addressing fishery issues. The ASRG suggests that analyses should make use of the perspective provided by the Mid-Atlantic Bottlenose Dolphin Catalog (MABDC) to better define the stock before further efforts are made to

estimate abundance. The MABDC should be accessed through appropriate channels respecting the collaborative relationships involved.

6. Regarding the 2016 Cetacean Survey Report, the ASRG recommends including a table that compares estimates and CVs before and after the availability correction is applied. This would allow readers to understand how much the new additions have increased the estimates.

   Additionally, it should be noted that not all the Gulf of Maine was surveyed; and therefore, many of the estimated numbers are lower than they would otherwise be. This is because the area in the Bay of Fundy and area SW of Nova Scotia was not surveyed by NOAA. This is especially important given the apparent differences in the survey versus mark-recapture-based Humpback Whale abundance estimates.

7. The ASRG encourages NMFS to work on expanding and clarifying the maps used to identify the range of the species in each of the SARs. In the short term, the maps should be larger for ease of use by the reader, the symbology and legend should be easier to read, and the entire range of the species should be depicted in some way (not just where they were sighted on the surveys used within the SAR, perhaps also showing range of stranding locations). In the long term, NMFS should move to an electronic interactive version of the distribution maps that can include additional data layers, such as habitat characteristics and depth.

8. The ASRG wishes to highlight the importance of NMFS' continued support for, or renewed funding of, habitat data collection programs such as the full capacity of the Ecosystem Monitoring (ECOMON) surveys (four or more a year), Continuous Plankton Recorder survey data collection and analysis, and funding of other long-term time series programs for habitat and copepod sampling.

9. We would like to commend NMFS for expanding investigations to the Western Gulf of Mexico and working with the Mexican government to expand acoustic work. However, the ASRG was disappointed to learn that few attempts were made during recent Gulf cruises to obtain biopsy samples for genetic analyses. This information is crucial for sorting out stocks in the Gulf. While we understand that cruise logistics and safety factors come into play, we reiterate our recommendation that every effort be made to prioritize collection of biopsy samples during these cruises, and to identify ways to accomplish this without compromising cruise tracks.

10. Lastly, there are several matters of general operating procedures that the ASRG would like to highlight as guidelines to which the agency needs to adhere. As stated in some of the recommendations above, published data shall be used for SARs. SARs are used to make management decisions, and results reported without appropriate review should not be included in the SARs. SARs given to the members of the ASRG within two weeks of the meeting will not be reviewed. Additionally, any "in press" or "in review" documents that are fundamental to the SAR should be provided to the ASRG with the SAR at the time of review.

The Atlantic Scientific Review Group is pleased to announce that it has elected Geneviève Nesslage to be its new Chairperson. The ASRG would like to thank the authors of the SARs for their continued hard work. We continue to stand ready to assist NMFS with intersessional reviews as needed in addition to our annual meetings.

With best regards,

Erin Summers
Chair, Atlantic Scientific Review Group

Dr. Peter Thomas, Executive Director,
Marine Mammal Commission

Dr. Roy E. Crabtree, Regional Administrator,
Southeast Region

Michael Petony, Regional Administrator,
Greater Atlantic Region

Dr. Jon Hare, Science & Research Director,
Northeast Fisheries Science Center

Dr. Clay Porch, Director,
Southeast Fisheries Science Center

Ms. Donna Wieting, Director,
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Dr. Sean Hayes, ASRG Liaison
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