## Marine Mammal Commission 2017 Annual Meeting April 5-7, 2017, North Falmouth, Massachusetts

## **North Atlantic Right Whales Session Summary**

The right whale session focused on reviewing recent information on the status and trends of the population and identifying steps to reduce entanglement-related deaths and injuries in both U.S. and Canadian waters. This focus was chosen because although the incidence of ship strikes – the other major cause of human-related right whale mortality – has declined dramatically since vessel management measures were put in place in 2007 and 2008, entanglement-related deaths have increased sharply in spite of extensive management actions since the late 1990s (see below graph). Presentations summarized the alarming evidence that the right whale population is in serious trouble. For example:

- right whale abundance appears to have been decreasing since 2010;
- calf production since 2010 has declined to its lowest level in 38 years with just 3 calves known to have been born during the most recent calving season;
- the proportion of mature females giving birth has decreased significantly with 80% of mature females available to give birth since 2010 failing to produce calves;
- the health of adult whales, particularly lactating females and mature females generally, has declined significantly;
- 82 % of all living whales have scars or injuries from entanglement and up to a quarter of all whales become entangled at some point each year;
- the number of entanglement-related deaths is increasing, as is the number of moderate and severe entanglement injuries and high-risk entanglements; and
- entanglement injuries are contributing to an overall decline in whale health and calving success.

Based on these and other findings and after considering the existing management measures, the Commission concluded that entanglements in fishing gear now constitute the greatest anthropogenic threat to right whales, and that measures to reduce the lethal and sub-lethal effects of entanglement in both the United States and Canada are not adequate.

There were presentations on the development and testing of three new types of gear modification: (1) lower breaking-strength line that would allow whales to escape from entanglements with less severe injuries; (2) rope sleeves that can be used to join short lengths of high breaking-strength line so it will break under lower forces; and (3) an "on-call" buoy design that keeps vertical lines at the bottom between gear deployment and retrieval operations. Options to reduce the breaking strength of buoy lines were considered best suited for traps that are set in shallow water; such options may be available in the near future. On-call buoy systems are technically feasible but, due to their high cost, practical only for large fishing operations that involve long strings of traps set in deep water. Suggestions were made to (i) expand gear marking requirements to cover all traps in U.S. and Canadian waters to facilitate identification of

the sources of gear removed from entangled whales, (ii) promote use of low breakingstrength buoy lines in shallow water areas and on-call buoys in deepwater areas, (iii) strengthen cooperation between U.S. and

Canadian officials, and (iv) avoid testing gear modifications in closed fishing areas. The Commission will review the results of this session to identify follow-up actions.

