

## **Marine Mammal Commission 2015 Annual Meeting**

### **Marine Mammal and Fisheries Interactions – A Review of Take Reduction Teams in the Atlantic.**

#### **Session Summary**

Moderator: Meagan Dunphy-Daly, Duke University Marine Lab.

Presentations:

- Sara McDonald, Duke University Marine Lab.  
Research findings regarding the performance of Atlantic TRTs.
- Patrice McCarron, Maine Lobstermen's Association (MLA).  
Successes and challenges of the Large Whale TRT.
- Sharon Young, Humane Society of the United States (HSUS).  
Successes and challenges of the Atlantic TRTs.

Panelists: Sara McDonald, Patrice McCarron, Sharon Young, Andy Read (Duke University), David Gouveia (NMFS GARFO), Rich Seagraves (Mid-Atlantic Fishery Management Council)

Focal Questions:

- 1) Which factors most influence the performance of the Atlantic TRTs?
- 2) What factors beyond the scope of the TRTs limit NMFS's ability to implement the TRT's recommendations?
- 3) What changes could be made to TRTs and the TRT process to improve their performance and further reduce fisheries interactions?

Bycatch and entanglement in fishing gear remain the greatest source of direct marine mammal mortality in the United States and around the world. Legislative mandates in the United States have resulted in measures to address marine mammal bycatch and entanglement through science, gear research, and restrictions on fishing gear and practices. Take Reduction Teams (TRTs) around the United States review and recommend specific bycatch reduction measures for particular fisheries.

Sara McDonald described the findings of her PhD dissertation on the performance of TRTs. She described how TRTs were well designed to conduct consensus-based, multi-stakeholder negotiations, but that they have had mixed success. Dr. McDonald found that the perceived effectiveness of TRTs was related to factors such as the size of the team, length of operation, shared learning, fairness, effective facilitation, regulation complexity and compliance. She also reported that team effectiveness affects team performance at achieving take reduction goals.

Patrice McCarron provided background on the lobster fishery and operating realities for the fishery that can make implementing take reduction measures difficult. Although one of the great strengths of the TRT system is the participation of active fishermen, Patrice pointed out the sacrifice required by fishermen to participate, and how difficult and intimidating the process can be for them. She highlighted TRT members being leaders for their constituency, the contributions of NMFS staff, willingness to compromise, and the skills of the facilitators as key factors leading to TRT success.

Sharon Young analyzed the history of the harbor porpoise TRT and the factors that had contributed to their initial success at reducing bycatch significantly and those that led to recent failure of the process and large increases in bycatch. In addition, she echoed many of the issues that the previous speakers had identified, and added that success requires the participation of all members and that those members believe that there is no better alternative to a negotiated agreement.

The panelists who hadn't given presentations gave their perspective on the issue of TRT performance. Andy Read suggested although the TRTs are not perfect they are the best alternative available in most cases. He emphasized the importance of monitoring and compliance, having fishermen on the teams, and using highly skilled facilitators. Andy suggested that the TRT is well designed to address situations in which PBR is very small. Rich Seagraves argued that the largest factor limiting the performance of TRTs is the availability of key scientific data and findings. He suggested also that the TRTs need more resources to ensure they can meet sufficiently often in person. David Gouveia argued that process works, but needs improvements in some areas, and agreed with Rich that availability of key data is a critical factor. David also suggested that crafting effective take reduction measures requires understanding how marine mammals interact with gear, which requires greater allocation of resources to research.

Take-away messages:

- 1) TRTs generally work well as stakeholder-, consensus-based processes, and have had success at achieving take-reduction goals
- 2) Team structure and processes contain several features that are necessary to achieve success
- 3) Challenges faced by the Harbor Porpoise and Atlantic Large Whale teams have been related to agency intervention without consultation, and a range of problems such as large size and scope, and data limitations, respectively.
- 4) Solutions to these challenges may not be readily apparent, and in some cases may only be possible through actions taken outside the teams.