Pelagic Longline Take Reduction Team Webinar

September 18, 2020

Key Outcomes Memorandum

I. OVERVIEW

NOAA's National Marine Fisheries Service (NMFS) convened the Pelagic Longline Take Reduction Team (PLTRT or the Team) via webinar on September 18, 2020 to provide updates on the following:

- Southeast Fishery Science Center Updates
- Review previous terminal gear consensus recommendation

This summary, prepared by the meeting facilitators and NMFS, provides an overview of the meeting's key outcomes. It is presented in six main sections: (1) Overview; (2) Participants; (3) Presentations; (4) Rule Making and Implementation; (5) Next Steps, and (6) Attachments.

II. PARTICIPATION

The following team members or alternates participated in the call: Regina Asmutis-Silvia, Gib Brogan (alternate), Barbie Byrd, Jane Davenport, Glenn Delaney, Laura Engleby, Damon Gannon, Dennis Heinemann, Dewey Hemilwright, David Kerstetter, Kristy Long, Bill McIntyre, Jeff Oden, Andy Read (alternate), Marty Scanlon, and Tim Werner.

The following non-team members of the agency participated in the call: Larry Beerkircher (POP), Karyl Brewster-Geisz (HMS), Colleen Coogan (GARFO), Sascha Cushner (POP), Shepherd Grimes (GCSE), Diana Kramer (PIRO), Darius Thibodeaux (NMFS IT), Katherine Zamboni (GCSE), and Chao Zou (GARFO).

Several members of the public participated including: Robin Baird (Cascadia), Joe Fader (Duke University), Corie Grewal (Duke University), David Laist (retired from Marine Mammal Commission, and past member of the PLTRT), DeVonte Weems (USCG), and Alan Weiss (Blue Water Fishing Tackle Co.).

The webinar was convened by PLTRT Coordinator Erin Fougères; Scott McCreary with CONCUR Inc. facilitated the discussion. NMFS staff from the Southeast Regional Office (SERO) included, Kara Shervanick, Jessica Powell, David Hilton, Denise Johnson, Rosemary Abbitt and Jamie Brennan. Lance Garrison from the Southeast Fisheries Science Center (SEFSC) participated in the webinar as a presenter.

III. PRESENTATIONS

Below is a brief summary of the introductions, updates and presentations provided during the meeting. This summary is not intended to be a meeting transcript. Rather, it provides an overview of the main topics covered, any primary points and options raised in discussion, and any areas of full or emerging consensus.

A. Welcome, Introduction, and Agenda Review

After a review of participants, S. McCreary opened the meeting then provided an overview of the meeting agenda followed by the meeting purpose and objectives. He also reminded participants of the Team's operating protocols intended to foster productive dialogue.

B. Pelagic Longline Take Reduction Team/Plan Updates

E. Fougères welcomed newly-appointed members: R. Asmutis-Silvia (Whale and Dolphin Conservation) will take the place of Sharon Young (Humane Society), K. Dancy will take the place of Rich Seagraves (Mid-Atlantic Fishery Management Council), D. Heinemann will take the place of D. Laist (Marine Mammal Commission), B. Byrd will take the place of Red Munden (NC Division of Marine Fisheries), and G. Brogan (Oceana) will be an alternate for Beth Lowell.

After membership updates, E. Fougères reminded the team that the public comment period on the proposed rule for safely deterring marine mammals from damaging fishing gear or catch, damaging personal or public property, or endangering personal safety ends on 10/30/2020.

E. Fougères then reviewed the regulatory and non-regulatory consensus outcomes from the most recent meetings – December 2015 in-person and October 2016 webinar. E. Fougères stated that NMFS has developed a proposed rule and draft Environmental Assessment based on those consensus recommendations. Finally, E. Fougères updated the team that the rule package is currently under agency review, and publication is expected in the near future, though no precise timing is yet available.

C. Southeast Fishery Science Center Updates

L. Garrison presented the SEFSC update which included 1) general updates on pilot whales and PLL effort, 2) updates on mainline length data in the MAB, and 3) data on hook usage.

<u>1) General Updates</u>

L. Garrison provided updates included short-finned pilot whale abundance and PBR, reported effort and observer coverage, and pilot whale interactions – locations as well as severity. He noted that there was no significant trend in population size over time (from 2004-2016) but that PBR from 2016 increased from 159 to 236 primarily due to the increased precision in the population estimate. He anticipates that the next survey will be conducted in summer 2021. The average estimated short-finned pilot whale mortality

and serious injury rate, from 2015-2019, was 135.8 compared to PBR of 236. L. Garrison noted that the bycatch rate has remained constant during the past several years.

L. Garrison noted that there was reduced observer effort in the North East Coastal (NEC) statistical area in 2017. This low effort in NEC continued throughout 2018, but returned to historical levels in 2019. Additionally, during 2017 and 2018, there was a notable amount of fishing effort in deeper waters off the shelf break in the Mid-Atlantic Bight (MAB). Although reported effort has declined, especially in the MAB, pilot whale interactions have not.

L. Garrison noted that there was a low probability that the interactions occurring in the MAB and NEC in recent years (2016-2019) were long-finned pilot whales. This is related to the low fishing effort in the NEC and more effort concentrated in the southern and offshore portions of the MAB. With regard to serious injuries, L. Garrison noted that most serious injuries involved hooks in the head and mouth. However, in 2018, there was an unusually high number of serious injuries due to interactions in which the whale being released with trailing and potentially entangling gear.

Team members posed several clarifying questions. In response to questions as to the cause of the2015 increase in bycatch or the apparent leveling of bycatch in recent years, L. Garrison responded that while no specific cause has been pinpointed, in general, bycatch rates have shown cyclical patterns over time.

Another Team member asked why the fishing effort in MAB has declined. A team member representing the fishing community noted that the decrease in effort might have been a result of the effects of implementation of HMS Amendment 7, closing the Northeast Canyons and Seamounts Marine National Monument to fishing, and boats going out of business.

A team member inquired about when pilot whales are interacting with the longline. A representative of the fishery suggested that interaction would be most likely on haulback and when gear is activated. A representative of the scientific community clarified that based on acoustic data, whales are heard the entire time when lines are deployed which likely means they interacting during entire fishing process, though pilot whales are more likely to be seen during haulback.

A member of the public, R. Baird inquired about the availability of a 2016 abundance estimate for PLL reporting. K. Shervanick provided a link to the report in the NOAA Institutional repository: https://repository.library.noaa.gov/view/noaa/22419.

2) Mainline Length Updates

L. Garrison reviewed mainline lengths and the prevalence of the “multi-set” fishing behavior that has been observed in the MAB since 2013. During 2019, there was a lower proportion of the fishery using this approach than in prior years. As in prior years, the first piece of gear deployed is typically longer and soaks longer than the second piece of gear. The total mainline length of the two sets together averages 28.5 miles, which is

consistent with the amount of gear deployed outside of the MAB. The data is mixed on the influence of these types of sets on bycatch rate.

3) Hook Usage Updates

L. Garrison reviewed the use of different hook types and associated bycatch and serious injury rates in the fishery from 2015-2019. The "weaker" hook types included EC-L2048-LM-16/0, MU-39960-10/0, and MU-39988D-16/0. The most common "standard" hook type consisted of EC-2048-16/0, LGPN-LPCIRBL-16/0, LGPN-LPCIRBL-18/0, and LGPN-LPCIRBL-18/0-O. He noted that there was an increased use of weaker hooks in MAB in recent years, with movement toward M-39960-16/0 (weaker) and EC-2040-16/0 (normal), and movement away from LGPN hooks.

L. Garrison summarized that the small sample size limits the ability to assess the impacts of weaker hooks on pilot whale bycatch rates. In several cases, small numbers of sets with a weaker hook type resulted in high bycatch rates. However, there are many confounding factors. He noted that in order to assess the impact of hook type on pilot whale take, a dedicated experiment would be needed.

A member of the public (A. Weiss) noted that the increase in frequency of use of Eagle Claw (EC) and Mustad (MU) hooks are in part a result of Lindgren-Pitman (LGPN) transitioning out of the hook business about a year and a half ago. Mr. Weiss now sells almost entirely EC-L2048 16/0 hooks. L. Garrison noted that pattern tracks with the tendency toward use of small hooks and with the bycatch data.

A team member representing the fishing community noted that one reason that the fishery is moving to a smaller hook size is that bait is expensive, and smaller hooks are used with smaller bait.

D. Review Terminal Gear Consensus Recommendation

E. Fougères reviewed the 2015 consensus recommendation on terminal gear which included (a) monofilament nylon leaders and/or branch lines that have a diameter of 1.8 mm or larger of "at least 300 lbs. breaking force" and (b) hooks with "no more than 300 lbs. straightening force." She relayed that hooks currently meeting the "300 lbs. straightening force" specifications include: 16/0 Mustad 39960D, 16/0 L- 2048-LM Eagle Claw, 16/0 Mustad 39988D, and experimental Lindgren-Pitman 18/0 with no offset. She then invited clarifying comments from team members on the rationale behind these recommendations. E. Fougères stressed that the Team's decision was based on the goal of making the hooks the weakest part of the terminal gear.

E. Fougères clarified that the Agency's intent is to better understand from the Team how they decided on 300lbs breaking force and 300lbs straightening force in their consensus recommendation.

Team members representing the fishing community expressed continued support for the consensus recommendation as stated. Several team members requested clarification on

the logic of the consensus recommendations, noting that the 300 lb figure was listed for both the straightening force of hooks and the breaking strength of line.

A team member representing the fishing community noted that as fishermen are very conscious of maintaining their gear at all times, line weakening over time is not a factor. A number of team members from the fishing community noted that line breaking strength in specifications provided by the manufacturer is the absolute minimum. Line that is considered to be 300 lb test breaks closer to 380 lb, the tensile strength of that is closer to 400 lb. As well, line in the water cools, which makes it stronger.

A. Weiss, a member of the public, confirmed that monofilament line being used for leader material is stronger than the published breaking strength. He also noted that industry has a strong preference for using materials stronger than the minimum breaking strength so they can retain their target catch.

A team member representing the conservation community asked if the force applied to the line is the same as the force applied to the hook (i.e., are both actually experiencing 300 lbs. of force), which resulted in a discussion of the hook breaking strengths. The results from Bill McLellan's experiments on pilot whale heads were discussed and E. Fougères agreed to resend the spreadsheet containing the results of those studies and comparing the hook types in the attachments to the Key Outcomes Memo.

A team member representing the fishing community reiterated the point about the relative tendency of the leader to stretch. A member of the public, A. Weiss, noted that a hook and the leader are composed of different materials so the breaking strength is only one factor; it is important to consider other characteristics of each material. A monofilament leader has a fair bit of stretch to it, 35-40% elongation whereas a steel hook does not have much stretch to it. A. Weiss also noted that straightening force of hooks is not a specification published by manufacturers.

A team member representing the fishing community noted that the agency should think about the supply chain and how readily hooks will be available to fishermen once the rule publishes, in order to support timely implementation. E. Fougères reiterated that the Agency will convene a webinar during the public comment period and at that time encourage a discussion on thoughts about the appropriate duration of a cooling off period.

In response to a query from a fishery representative as to whether NMFS has tested the breaking strength of branch lines and hook breaking together as one entity, the agency clarified that such a test has not been conducted.

IV. RULE MAKING AND IMPLEMENTATION

Some team members expressed concern about the elapsed time between deliberations and rule drafting and requested a forecast of the timeline for implementing the rule. Another team member underscored that timing required in the supply chain for manufacturers to fabricate new gear is a key consideration that must be factored into the implementation timeline.

K. Long reminded TRT members that the rulemaking process typically takes at least two years.

V. NEXT STEPS

- Facilitation team will work with the Agency to prepare and distribute a Key Outcomes Memorandum (this document).
- NMFS SERO will keep the Team apprised of status and timing of publication of the Proposed Rule and will plan to convene another meeting of the TRT during the public comment period.
- NMFS and the Facilitation Team will include cited materials in the Key Outcomes Memorandum.

VI. ATTACHMENTS

- L. Garrison “Pilot Whale Bycatch Updates” PowerPoint presented at the Pelagic Longline Take Reduction Team on September 18, 2020
- McLellan, W. A., et al. 2014. “Longline hook testing in the mouths of pelagic odontocetes.” ICES Journal of Marine Science. doi:10.1093/icesjms/fsu181.
- PLL Hook Summary Table prepared by NFMS SERO, December 3, 2015