False Killer Whale Take Reduction Team
Handling and Safe Release Work Group Teleconference
Key Outcomes Memorandum
August 4, 2014

Attendees

Team Members:	Asuka Ishizaki (for Paul Dalzell), Michael Jasny, John La Grange, Ryan Steen
NMFS Staff:	Nancy Young, Amanda Bradford, Jamie Marchetti, Adam Bailey, Andrew Torres, Karin Forney
Facilitators:	Scott McCreary, Bennett Brooks

Work Group members unable to attend
John Hall, Andrew Read, Tory O'Connell

Call objective
The objective of the hour-long call was to initiate Work Group discussion regarding possible recommended changes to the current handling and safe release protocols for false killer whale interactions, including a review of existing placards and captain/crew trainings. The intent is to develop, if possible, protocols that make it more likely a false killer whale will safely straighten a weak hook and be released without serious injury. The goal of this call was to organize an approach to the Work Group, with the understanding that any recommendations would be brought back to the full TRT.

Background

N. Young briefly reminded participants of the Team's past discussions regarding handling and safe release protocols, including an overview of recommendations developed as part of the Take Reduction Team's early discussions, changes made by NMFS staff based on subsequent feedback from industry and, most recently, a Team call in April during which some industry members called for simpler, clearer protocols from NMFS regarding handling protocols (e.g., "just cleat it off").

N. Young explained to the call participants NMFS's reluctance to put forward a one-size-fits-all response (e.g., "just cleat it off'), for the following reasons: (1) each situation is highly dynamic (different sea states, animal response, etc.) and likely requires different procedures; and (2) NMFS does not sufficiently understand the mechanics at this point to recommend a single consistently reliable method. She also noted that NMFS is concerned that a "cleat it off" strategy could lead to capture myopathy or other conditions that could have the unwanted, unintended consequence of a serious injury determination. She also noted that at this point, since interactions are fairly rare, the agency does not have enough information to say with certainty what handling strategy (or strategies are) most likely to avoid a serious injury. That said, she emphasized NMFS's interest in better understanding Team members concerns and develop joint recommendations in going forward.

Discussion Summary

Team members had a brief, but focused and productive conversation that centered on the following key points:

- Cleating off an animal is preferred by industry as it is difficult for crew members using their bare hands to generate sufficient and consistent tension on a line to straighten a hook. Additionally, when industry suggests a "cleat it off" strategy, there is still an expectation that the captain will be actively maneuvering the vessel to control the line tension and facilitate a hook straightening. NMFS staff noted that, given the small difference between hook and line breaking strength, a nuanced approach to handling a hooked animal is essential if the line is to withstand sudden shocks and changes in tension. NMFS staff also suggested that, given the dynamic situation during an interaction (e.g., animal movements and diving), maneuvering the vessel may not be able to provide constant tension or control the line.

- Participants broadly agreed that, in addition to different crew and captain practices, the interplay between the hook and other terminal gear (wire leader, monofilament line) has a significant impact on the success of efforts to straighten a hook. There was also recognition that hook and line strength and characteristics can vary across manufacturers, within lots and after use (particularly for monofilament which can stretch and chafe).

- Participants broadly agreed that there is insufficient information available currently to identify reliable, situation-specific strategies for straightening a hook. All participants generally expressed interest in obtaining information to better identify effective protocols to foster hook-straightening. Specific suggestions focused on the following:

    - ***Experiments.*** Some participants recommended additional experiments that Bill McLellan at the University of North Carolina Wilmington can conduct to further test hook and terminal tackle combinations on marine mammal heads to better identify the most efficient ways to straighten hooks. Some Work Group participants recommended mechanical testing of branchlines to determine the effect of steady versus jerking pull on the hook, leader, and monofilament line. One participant suggested that this could include testing different gears (e.g., different weights or manufacturers of monofilament and hooks), if there is relevant variability.

    - ***Increase learnings from past and future interactions.*** Work Group participants strongly recommended that both industry and NMFS take steps to increase insights from all interactions. Recommendations included:

        - Convene industry-only discussions among captains/crew to gather insights into and strategies for handling approaches based on non-observed interactions. NMFS could prepare discussion questions to ensure conversations among captain/crew generate data that would inform further fact-finding. Work Group members recognized that this would have to be

a voluntary discussion, and perhaps that not all fleet members would contribute information.

- Sharpen the detail of feedback obtained from both observers and crew after any future interaction to ensure that NMFS is gleaning as much relevant information as possible. Observers could focus on better tracking actions taken during disentanglement effort (and the response of the animal), as well as following up with the crew/captain on the specifics of their behavior during an interaction. (For example: "What were you trying to accomplish during the interaction?[1] How many crew were involved and what were their roles? How was the line handled?)

- As possible, mine past Observer Program data (type of interactions, responses, results) to discern trends in past interactions (e.g., do certain types of hookings lend themselves to specific handling protocols). Such an evaluation could enable NMFS to identify best practices tied to different interaction scenarios (animal size, sea state, etc.). Some suggested that it would be worth characterizing two or three (or more) patterns of interaction.

In general, Work Group members expressed interest in NMFS pursuing several tracks of work (e.g., both controlled experiments and improving data gathering and sorting gleaned from past and future interactions) as an immediate way forward. Additionally, one industry participant strongly recommended, and some other participants agreed, that the TRT not consider or recommend significant gear changes before it ascertains whether the current management actions are proving successful, which will require more time and data. Furthermore, if changes are considered, this participant recommended that NMFS focus first on "low-hanging fruit" (e.g., smarter on-deck handling instructions) and then branchline requirements before considering additional hook modifications, which would be much more expensive and disruptive to the fleet.

Further discussion is needed to sharpen any of the above suggestions.

Next Steps

Based on the conversation, the Work Group agreed to the following next steps:

- B. Brooks/S. McCreary to produce a discussion synthesis (this document) summarizing key points, any areas of consensus or divergent view, and next steps.
- N. Young is to review Work Group feedback internally with NMFS and suggest possible next steps in a follow-on communication with the Work Group and/or Team. A follow on call is likely in several weeks, after the agency digests the results.

[1] Some Work Group members explained that this question is particularly important because it provides a gauge of whether and to what degree the training materials and handling instructions are being followed. For example, if a crew member states that he was trying to get the animal close to the boat for a tissue sample, rather than trying to get the hook to bend and release, then this indicates that the training and handling instructions were not effective in this instance.

Please contact Scott McCreary with CONCUR, Inc. (scott@concurinc.net, 510-649-8008) or Bennett Brooks with the Consensus Building Institute (bbrooks@cbuilding.org, 212-678-0078) if you have any questions regarding this summary.