



Initial Experiences and Considerations for Regulatory Implementation of a Crew Training Program

*Biological Opinion Reasonable and Prudent Measure Implementation Working Group
Report to the Pelagic Plan Team
May 2024*

Executive Summary

This report presents Working Group (WG) findings relative to the requirement to have at least one crew member on deck with training on protected species handling and release. This report summarizes the discussions of the WG around the specifics of pilot crew training program implementation, how collaboration by particularly NOAA and HLA will facilitate crew training, issues with implementing a full crew training program, as well as a proposed timeline for Council action. The report summarizes issues for Pelagic Plan Team and Council consideration, including crew certification, certification duration, training frequency, methods to demonstrate compliance with the crew training requirement, and regulatory needs and timing.



1. Introduction

The 2023 Hawaii deep-set longline (DSLL) and American Samoa longline (ASLL) Biological Opinions (BiOps), issued in May 2023, included a Reasonable and Prudent Measure (RPM) term and condition (T&C) requiring crew training on best practices for handling and release of incidentally captured protected species. In addition, a Supplemental BiOp for the Hawaii shallow-set longline (SSLL) fishery focused on loggerhead sea turtles issued in March 2024 included RPM and T&C regarding crew training. The T&C is the same in both 2023 BiOps and the 2024 Supplemental shallow-set BiOp, and requires the National Marine Fisheries Service Sustainable Fisheries Division (NMFS SFD) to:

(T&C 1.b. In 2023 BiOps & T&C 1.c. in the 2024 Supplemental BiOp) “To reduce post-release mortality, within two years NMFS SFD shall require species handling training for crew members and at a minimum have one trained person on deck who directs and oversees activities of the vessel when retrieving fishing gear. Training shall include best practices identified in 1.a above.”

This requirement references T&C 1.a. or 1.b., the full text of which is:

(T&C 1.a. In 2023 BiOps & T&C 1.b. in the 2024 Supplemental BiOp) “NMFS SFD shall implement measures to minimize the amount of trailing gear left on ESA-listed species to the maximum extent practicable to reduce the amount of injury and harm, the

likelihood of further gear entanglement or entrapment, and improve the post-release mortality of ESA-listed species. This may include using new technologies once proven, such as fighting lines (i.e., additional gear that reduces tension on the branchline), line cutting devices, and other gear modifications.”

The Council at the 195th meeting in June 2023 requested NMFS to work with Council staff and industry representatives from the Hawaii and American Samoa longline fisheries in addressing the RPMs in the deep-set longline (DSLL) and American Samoa (ASLL) BiOps. Following the 196th meeting, Pacific Island Regional Office (PIRO) staff requested that the Council form a working group to facilitate coordination on the RPM implementation. The Council at the 197th meeting in December 2023 directed staff to convene an interdisciplinary BiOp RPM Implementation Working Group (BiOp RPM WG) with appropriate participants from PIFSC, PIRO, Council staff, industry representatives, and other collaborative partners as necessary to facilitate coordination for implementing the 2023 Hawaii DSLL and ASLL fisheries BiOp RPMs. The BiOp RPM WG was tasked to focus initially on crew training in the DSLL and ASLL fisheries and the DSLL insular false killer whale overlap area observer coverage evaluation, but may also address implementation of other RPMs in the 2023 BiOps and new BiOps as needs arise. The BiOp RPM WG was directed to report annually to the Pelagic Plan Team (PPT).

Vessel owners and operators have been trained on protected species handling and release techniques and associated regulatory requirements since 2001, an approach to mitigate effects from protected species interactions with fishing gear. These protected species workshop (PSW) trainings are provided as often as weekly at the National Oceanic and Atmospheric Administration (NOAA) office at Pier 38. Vessel captains typically manage operations within the vessel such as navigation, directing crew, overseeing crew safety, cooking, maintenance tasks, and selecting fishing grounds. While vessel operator handle those tasks, fishing operations on deck are handled principally by fishing vessel crew as directed by a crew deck boss. As a result, crew training will immediately improve crew members’ knowledge of best handling practices during an interaction. The Hawai‘i DSLL fleet is made up of 150 currently active vessels out of a total of 165 permits. The number of crew members aboard these vessels account for nearly 800 individuals working in the fishery. Most Hawaii longline vessels have 5-6 crew onboard with some as many 9. The SSSL fishing vessels are permitted under the same permit as the DSLL, and so all of the crew participating in the SSSL fishery are accounted for under the estimated 800 crew.

The number of crew in the ASLL fisheries is much smaller. There are 23 active ASLL permits, of which a significant number also have Hawaii Limited Entry Longline Permits associated with their vessel. In recent years, there have been 9-11 longline vessels operating exclusively from American Samoa, with crew size per vessel similar to the DSLL fishery, or 3-5 individuals per vessel. Overall, the ASLL fishery adds about 40-50 crew members to the number that need training.

This crew training T&C (1.b.) defines a deadline for the crew training requirement of at least one trained crew member on each vessel by May 2025. Although the T&C implies that a regulation will need to be promulgated to ensure that vessels have “one trained person on deck who directs

and oversees activities of the vessel when retrieving fishing gear”, the WG has identified a goal of training all crew by 2025. Training all crew in handling best-practices would significantly exceed the requirements of the T&C and may result in a greater reduction in post-release mortality of protected species than having only one crew member trained. The 2025 requirement provides a fairly short window to pilot and review the training program to evaluate if the goal of training all crew members in the fleet is feasible in addition to developing and implementing a regulatory requirement.

The working group discussed several aspects of the crew training T&C, including the development of a training pilot program, collaboration between the Hawaii Longline Association (HLA) and NMFS SFD on the training overall, and identified issues that should be considered by the Pelagic Plan Team (PPT) and Council.

2. Pilot Crew Training

Initiated in April 2024, the goals of the training pilot program are:

- Refining the training program with stakeholder and participant input
- Maximizing training opportunities for crewmembers
- Evaluating if the goal of training all crew is possible by the 2025 deadline
- Based on outcomes, developing a regular training program

The first crew training event was held on April 19, 2024, with NMFS protected species workshop coordinator Jason Mehlinger and observer debriefer Michael Marsik. The Hawaii Longline Association (HLA) contributed funding to support real-time translation of the pilot training courses to three languages: Vietnamese, Indonesian, and Tagalog. Pilot training sessions were attended by PIRO protected resources and sustainable fisheries division staff, as well as HLA.

The pilot training on April 19, 2024 included three training sessions and a total of 25 crew from 8 vessels: 15 (58%) of the crew received training in Tagalog (two sessions), and 11 (42%) in Indonesian (one session). The Tagalog sessions trained all crew from three vessels, and the Indonesian session trained a portion of the crew from 5 vessels. The pilot training sessions are planned to continue roughly twice per month, and the next training is planned for May 10, 2024.

For each training day, there will be at least one training session. A session is one training course given in a single language (70 - 110 minutes). Each session will have a goal attendance of 10 crew members and will be available to as many as 20. In order to accommodate the various languages spoken by crew members, up to three sessions may occur in a single day. The frequency of each language-specific session will be based on language needs of registered vessels and is expected to reflect the language demographics of the fleet.

The training focuses on a simple and consistent pattern for handling and release of all protected species, and then within that pattern, a focus on different tools and techniques for small and large animals. Handouts detailing the handling and release pattern and small and large animal techniques and tools are provided in Appendix 1 and 2, respectively. The training is expected to include links to a handling best practices video, currently only available in english. The narration of the video will be translated to Vietnamese, Tagalog, and Indonesian, and training handouts

will eventually include QR-code links to those multi-language versions of the video. The english-only version of the video is available on YouTube (<https://m.youtube.com/watch?v=ydcG1y7oNhg>), and can be accessed using a QR-code.

The pilot crew training differs from the PSW training for owners and operators by increasing focus on practical application of the tools and equipment vessels are required to have on board the vessel to facilitate safe release and fishing gear removal from protected species. To achieve this in a relatively short format, the crew training curriculum is focused on a consistent pattern of actions when small and large protected species are captured and does not include the regulatory details provided to owners and operators.



Impressions from the initial training sessions have been very positive. It was valuable to see crew members from different vessels come together and appreciate the opportunity to learn and participate. It's easy to see the community that exists amongst the multinational crew members and the training sessions provided an opportunity for an exchange of information between trainers and crew, as well as between crew from different vessels. More experienced deck bosses and crew members were able to share their expertise and help educate some of the younger crew members in attendance.

One early finding of pilot training is that the full crew of a vessel can be reluctant to attend training at the same time as they prefer at least one to stay back on the vessel for security. Multiple sessions may be required to ensure all crew on a vessel can receive training.

An additional finding with relevance to the need for retraining frequency was information related to crew turn-over rate. Talking to crew and translators during initial training sessions suggests that crew contracts vary from one to two years, with some crew extending their contracts to continue to work in the fishery. Contract length and renewals vary by country of origin. Many fishermen return to work in the Hawaii longline fleet after stints in their home country. This information is relevant to decisions around the frequency of retraining and the length of time crew would be considered trained after attending a training session. For pilot training sessions, crew members received a training certification card with their name and photograph. They are currently the same training certificates provided to the owners and operators after completing the PSW, although no training expiration date is specified for the crew members cards. The PSW training requirement is annual, and so owners and operators must take the training at least once per year to remain compliant with regulations at [50 CFR 665.814](#), and PSW certificates indicate an expiry date.

3. Collaboration

An important part of WG discussions included solidifying the collaborative relationship between NMFS SFD, NMFS Protected Resources Division (PRD), HLA, and Council in development

and implementation of the crew training program. Although the BiOp T&C requires NMFS SFD to ensure the crew training requirements are met overall, NMFS PRD, Council, and particularly HLA are committed to contributing to the success of the pilot program and development of a regular crew training program. All partners agree that the goal is to provide training to all crew of longline vessels in the Hawaii and American Samoa longline fisheries.

NMFS PRD, HLA, and Council have contributed to the review of the pilot training curriculum and will continue to participate in the pilot program by assisting with individual session coordination and support. Through this WG, NMFS PRD and Council will also contribute to the continued development of the training program, using information gained during the pilot training program.

HLA plans to leverage their relationships with permit holders and crew to advertise and encourage participation in the pilot training program. One potential method that HLA is considering to encourage participation includes providing participants with some token of participation in the training, such as a t-shirt. HLA is also continuing their development and promotion of educational resources for longline permit holders and crew available on their website (<https://www.hawaiilongline.org/>).

Another key contribution by HLA was a commitment to help facilitate language translation of training into the three key languages spoken by crews in Hawaii. The process to develop contracts and other mechanisms to engage translation services takes time, and HLA's work to ensure that translators have been available for pilot training sessions have been key to their success to date.



4. Considerations for Regulatory Implementation

The pilot training program will evaluate the potential to reach the goal of all crew being trained as well as collecting information to identify issues that could assist or inhibit progress towards that goal. It will also facilitate continued input on the program curriculum from the Council, industry, and NMFS PRD. The lessons learned from the pilot program will also inform development of a crew training regulatory requirement to satisfy the requirement outlined in the RPM T&C.

The WG identified a list of topics that warrant further consideration for the regulatory requirements for a permanent crew training program, which would be developed through the Council process. These topics include:

- How long should crew training certification last, and what would be an appropriate recertification frequency?
- What are some appropriate incentives to encourage training of all crew members?
 - For owners and/or operators?
 - For crew members?

- What would a requirement to have one trained crew member include?
 - How would trained crew be certified?
 - How would trained crew be tracked relative to the T&C requirement?
 - Trip declaration reports to include trained crew summary?
 - Logbook reporting to include crew training information?
- What is needed to adapt the pilot training program for use in the ASLL?

The WG developed a draft regulatory implementation timeline for PPT and Council consideration as follows:

- May 2024: WG Report to Pelagic PT
- June 2024: Council receives WG report and recommendations from Pelagic PT on next steps; Council considers action timeline and direction for staff and WG on next steps
- September 2024: Options paper to Council
- December 2024: Initial action
- June 2025: Final action (with full analysis and draft regulations)
- Target rulemaking completion by end of 2025.

5. Plan Team and Council Considerations

The BiOp RPM WG requests that the Pelagic Plan Team and the Council review the progress made with the pilot crew training program and consider recommendations for next steps in implementing the T&C requirement. Specifically, the WG requests:

- The **Pelagic PT** to review this report and issue list and make recommendations to the Council on next steps, including considerations for regulatory implementation and regulatory process timelines.
- The **Council** to review this report and Pelagic PT recommendations, and provide direction to staff and WG on next steps, including potential regulatory implementation.

6. Working Group Members

- Lynn Rassel, PIRO SFD (co-chair)
- David O'Brien, PIRO SFD
- Jason Mehlinger, PIRO SFD
- Melissa Snover, PIRO PRD
- Emily Crigler, PIFSC
- Rob Ahrens, PIFSC
- Erin Oleson, PIFSC
- Eric Kingma, HLA; FIAC Member
- Stuart Chikami, American Samoa longline fishery representative; FIAC Member
- Asuka Ishizaki, WPRFMC staff (co-chair)

Appendices

1) Pilot Training Handout - Handling and Release Pattern

HANDLING AND RELEASE PATTERN

1. ANNOUNCE

- a. STOP VESSEL
- b. ALERT CAPTAIN IF WHALE/DOLPHIN

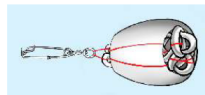


2. GRAB TOOLS

- a. SMALL TOOLS? / BIG TOOLS?
- b. WHALE/DOLPHIN? – TIE OFF TO VESSEL/FIGHT LINE

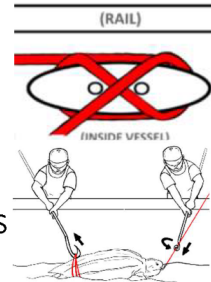
3. CHECK SAFETY/GRAB LINE

- a. FLYBACK / FLD



4. LOCATE HOOK

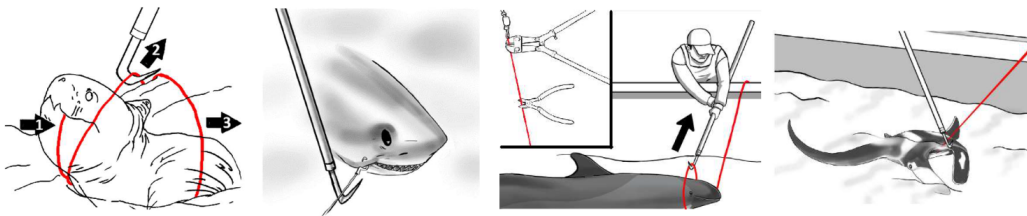
- a. IF HOOKED – REMOVE HOOK W/ TOOLS
- b. IF SWALLOWED – CUT LINE AS CLOSE TO THE HOOK AS POSSIBLE
- c. IF TANGLED – CUT LINE FROM HEAD/MOUTH TOWARD TAIL



5. REMOVE LINE AND HOOK

- a. CUT AS MUCH GEAR OFF AS POSSIBLE AND AS CLOSE TO THE HOOK AS POSSIBLE

6. RELEASE ANIMAL WITH NO GEAR REMAINING



Handling and Release Video Link

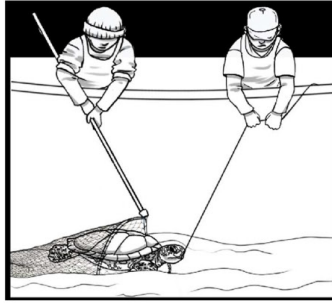


2) Pilot Training Handout - Small and Large Animal Techniques

SMALL ANIMALS = SMALL TOOLS

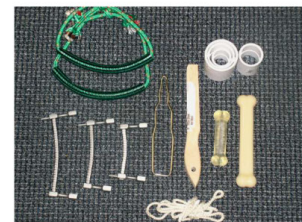
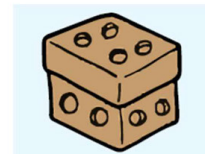
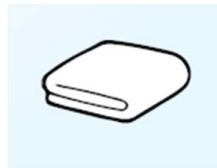
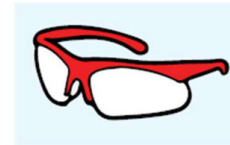
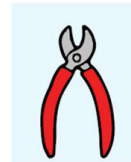
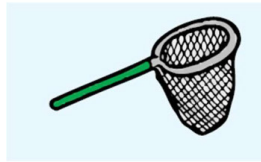
SMALL ANIMALS

- TURTLES
- BIRDS



SMALL TOOLS

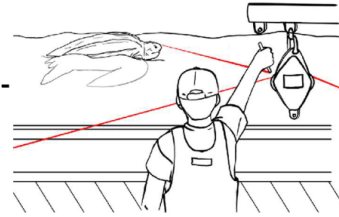
- Dip Net
- Bolt Cutters
- Dehooker
- Long Nose Pliers
- Snips
- Turtle mouth gags
- Gloves
- Towel
- Safety glasses
- Tire (Turtle hospital)
- Box (Bird hospital)



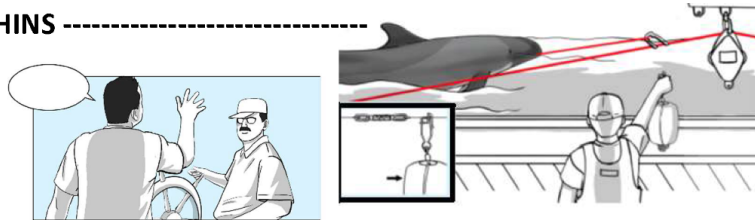
BIG ANIMALS = BIG TOOLS

BIG ANIMALS

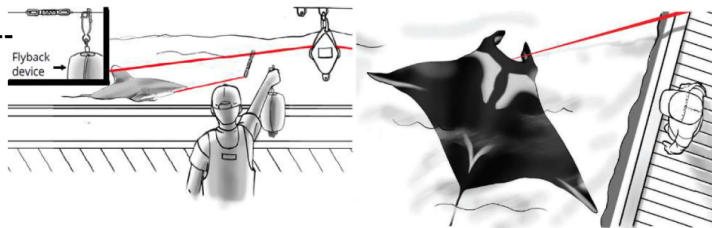
- **LARGE TURTLES** -----



- **WHALES/DOLPHINS** -----

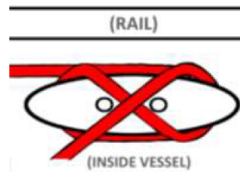
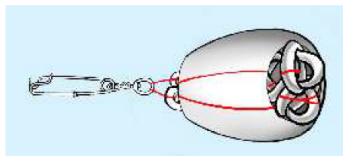
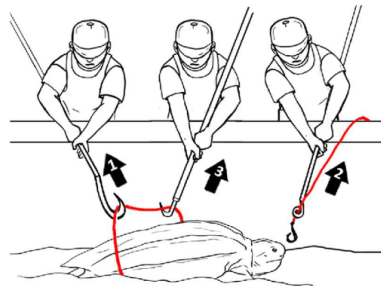


- **SHARKS/MANTA** ---



BIG TOOLS

- Long handled Gaff (1)
- Long handled dehooker (2)
- Long handled Line cutter (3)
- Safety tools
 - Flyback prevention – Buoy/Water Jugs
 - Fight line
 - FLD



3) Photos from crew training #1 - 04/19/2024



