Sea Turtle Interactions in the U.S. Pacific Longline and Drift Gillnet Fisheries

A Report Submitted to the Inter-American Tropical Tuna Commission as Required by the Resolution to Mitigate the Impact of Tuna Fishing Vessels on Sea Turtles (Resolution C-19-04)

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Preface

Under the July 2019 IATTC *Resolution to Mitigate the Impact of Tuna Fishing Vessels on Sea Turtles* (Resolution C-19-04), Parties agreed to submit available information on interactions of vessels flying their respective flag with sea turtles in fisheries under the competence of the Inter-American Tropical Tuna Commission (IATTC). Additionally, Parties agreed to report on both progress in the development of technology to reduce sea turtle bycatch and the actions taken to provide their vessels with the necessary equipment for appropriate release of incidentally caught sea turtles. Therefore, the United States has prepared this annual report on the interactions of U.S. fishing vessels with sea turtles in and adjacent to the eastern Pacific Ocean (EPO). The report also discusses the conservation measures taken by the United States to reduce sea turtle bycatch.

The United States has limited the scope of fishery interaction data discussed in this report to longline and drift gillnet fisheries in the Pacific Ocean. Some of these fisheries, such as Hawaii-based longline fisheries, range across the Pacific Ocean and include fishing effort that occurs outside the IATTC Convention Area. Where possible, this report attempts to distinguish and highlight activities that specifically occur within the IATTC Convention Area, or EPO, although it is not always possible to do so. The United States is also monitoring takes of sea turtles by large purse seine vessels in the EPO, including entanglement in fish aggregating devices. However, we obtain these data from the IATTC staff; therefore, we do not include this fishery in this report, as there is no benefit in providing these data back to the IATTC.

Lastly, this report is an update to the report submitted in 2025 pursuant to Resolutions C-04-05 and C-07-03. Unchanged background information is not repeated here.

Fishery Interactions

Swordfish/Tuna Longline Fisheries

Please refer to pages 3-6 of the report submitted in 2014 for thorough background information on the operation and management of West Coast and Hawaii U.S. longline fisheries targeting tunas and swordfish. Updates are described here:

U.S. West Coast-Based Deep-set Longline (DSLL) Fishery

There were no observed sea turtle interactions in the DSLL fishery operating out of California in the IATTC Convention Area in 2025 (NMFS West Coast Region observer program). In 2025, 1 vessel over 20 meters in length was active in this fishery. During this time, NMFS observed 2 trips out of 7 (29 percent coverage).

Hawaii-based Pelagic Longline Fishery

Shallow-Set Longline (SSLL)

NMFS monitors the Hawaii-based shallow set (SSLL) longline fishery through a mandatory observer program at 100 percent coverage. Per regulations, all of these vessels utilize a 18/0 minimum size circle hook with offset that does not exceed 10 degrees and finfish bait. In 2025, the SSLL fishery interacted with one loggerhead (*Caretta caretta*), two leatherback *(Dermocelys coriacea*), and one unidentified hardshell sea turtle within the IATTC Convention Area. In general, most sea turtles taken in this fishery are alive, as they can reach the surface to breathe and fishers are trained to de-hook and disentangle sea turtles. Currently there is no information on the fate of these sea turtles following their interactions.

Deep-Set Longline (DSLL)

The Hawaii-based deep set longline (DSLL) fishery is observed at approximately 5.60 percent coverage. These vessels utilize circle hooks with a maximum wire diameter of 4.5 mm with a maximum 10 degree offset. Baits are either squid or finfish. In 2025, there were no observed interactions of any sea turtle species within the IATTC Convention area.

Table 1. Estimates of the number of incidental interactions of sea turtles for the Hawai'i deep-set longline fishery in 2025, which had approximately 7% observer coverage. Estimates are provided for all species with an observed interaction in 2025 and species of concern because of their endangered status and history of previous interactions. Estimates are given for the entire fishing grounds and for waters within the IATTC Convention Area.

Species of Sea Turtle	Observed Takes	Point Estimates	Standard Error
Total Fishing Grounds			
Loggerhead	0	0	13.7
Leatherback	2	26	18.6
Olive Ridley	7	97	35.6
Green	0	9	13.7
Unidentified Hardshell	0	0	13.7
Within IATTC Convention Area			
Loggerhead	0	0	3.8
Leatherback	0	0	18.0
Olive Ridley	0	0	18.0
Green	0	0	3.8
Unidentified Hardshell	0	0	3.8

Table 2. Number of observed incidental interactions of sea turtles for the Hawai'i shallow-set longline fishery in 2025 where the fishery had 100% observer coverage. Counts are provided for all species with an observed interaction in 2025 and species of concern because of their endangered status and history of past interactions. Counts are given for the entire fishing grounds and for waters within the IATTC Convention Area.

Species of Sea Turtle	Observed Takes
Total Fishing Grounds	
Loggerhead	35
Leatherback	9
Olive Ridley	0
Green	0
Unidentified Hardshell	1
Within IATTC Convention Area	
Loggerhead	1
Leatherback	2
Olive Ridley	0
Green	0
Unidentified Hardshell	1

Source: Tables 1 and 2 provided by Brett Cooper

Swordfish/Thresher Shark Drift Gillnet Fishery– West Coast

Please refer to pages 8-9 of the report submitted in 2014 for a thorough background on the operation and management of the U.S. drift gillnet fishery targeting swordfish and thresher shark. Updates are included here. In 2018, Senate Bill 1017 became law in the State of California. Regulations to implement the legislation establish a transition program for the drift gillnet fishery by providing funding to reimburse fishermen who surrender their permits and gear. In addition, on December 29, 2022, President Joseph Biden signed the Driftnet Modernization and Bycatch Reduction Act (Driftnet Act), which directs NMFS to "phase out the use of large mesh drift gillnets."

In 2025, one interaction was observed with a loggerhead sea turtle. The turtle was released dead. There were no other observed sea turtle interactions in 2025. Only 7 vessels were active in 2025. The use of large mesh drift gillnet gear off the U.S. West Coast will be prohibited after December 2027 under the Driftnet Act.

Deep-Set Buoy Gear Fishery

Deep-set buoy gear (DSBG) was tested off the West Coast under an exempted fishing permit (EFP) program beginning in 2015. Data from EFP fishing showed the gear to be highly selective for swordfish, with infrequent bycatch of bigeye thresher sharks and, rarely, other non-target species. On September 15, 2023, NMFS authorized the use of DSBG (including both standard and linked configurations) to target swordfish in federal waters off the U.S. west coast. This fishery was integrated into the Fishery Management Plan for West Coast Fisheries for Highly Migratory Species (HMS FMP; 88 Federal Register 29545). The regulations include information on active tending, gear deployment and retrieval timing, use of multiple gears on a single trip, species retention, and fishery monitoring. Generally, no more than 10 pieces of gear may be fished, and the gear must be actively tended, with all pieces of gear remaining within 5 nautical miles of the vessel at times. The table below shows total DSBG effort (in number of days fished) from 2015 through 2025. Each “day fished” corresponds to up to 10 pieces of gear and up to 30 hooks set over an 8-hour period; however, the actual number of buoys & hooks used in a given day is often lower than the allowed maximum.

Deep-set buoy gear effort, 2015-2025

Year	Days Fished	Vessels	Notes
2015	132	4	First EFPs issued to five vessels.
2016	283	7	
2017	324	5	
2018	626	27	EFP effort expanded to up to 60 permits.
2019	752	24	
2020	1082	27	
2021	675	27	
2022	411	29	
2023	434	26	DSBG authorized under the FMP in September.
2024	173	15	
2025	199	15	

No sea turtle interactions were observed in 2025.

Conservation Measures

Please refer to previous U.S. sea turtle reports for a thorough background on the history of sea turtle conservation and mitigation measures the United States has implemented in both the longline and drift gillnet fisheries. Those pages also include past trainings, outreach events, conferences, workshops, collaborations with other nations and organizations, as well as research publications.

Participation in Seminars, Meetings, Conferences, Symposiums, etc.

- 1st IATTC Workshop for Advancing Shark, Sea Turtle and Seabird BHRP Guidelines: The meeting was held virtually on December 12, 2025 and continued on January 26, 2026.

- 4th IATTC Ecosystem and Bycatch Working Group (EBWG) meeting: The meeting was held in La Jolla, California on June 1-2, 2026. The 44th International Sea Turtle Symposium was held in Hawaii, USA, February 28 - March 6, 2026.

- NMFS has included training on sea turtle safe handling, release, and identification as part of each Agreement on the International Dolphin Conservation Program (AIDCP) seminar for fishing captains. Attendance at this seminar is one of the requirements to receive an eastern tropical Pacific operator's permit and be placed upon the AIDCP list of qualified captains. Several workshops are offered each year, both in-person or via webinar.

- NMFS provides training to skippers and new observers on sea turtle safe handling, release, and resuscitation to participants in the California drift gillnet fishery, deep-set buoy gear and deep-set linked buoy gear targeting swordfish in the U.S. west coast EEZ, and the California-based and Hawaii-based longline fishery, when needed (i.e., new fishermen or refresher training).

- NMFS provides environmental compliance training to its scientists participating in research cruises, specifically, safe handling and resuscitation guidelines, sea turtle identification, and reporting requirements.

- During 2025, NMFS personnel participated in Western and Central Pacific Fisheries Commission (WCPFC) Scientific Committee (SC21), and co-convened the WCPFC SC's Ecosystem and Bycatch Theme section where conservation measures for all protected species, including sea turtles, were discussed.

Gear Experiments

NOAA NMFS Pacific Islands Fisheries Science Center scientists are involved in testing satellite tag attachment technologies on leatherback sea turtles to better understand post-release mortality after their release from fishing gear. During the past year, scientists successfully applied satellite tags using a direct application to the carapace of leatherback turtles that were nesting in the West Pacific Ocean (December 2024). The same technology was tested on turtles foraging off of North Carolina during Spring 2025.

In 2025, NMFS published a final environmental impact statement analyzing the effects of issuing exempted fishing permits (EFPs) to test alternative HMS fishing practices in Federal waters offshore California and Oregon. The first of these permits were issued in 2025. Approaches tested under EFPs in 2025 include midwater snap gear and extended linked buoy gear. These EFPs are subject to numerous terms and conditions and a menu of mitigation

measures aimed at minimizing the risk of protected species interactions. No sea turtle interactions in HMS EFP gears were observed in 2025.

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