

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
1201 NE Lloyd Boulevard, Suite 1100
PORTLAND, OREGON 97232-1274

June 29, 2026

Dr. Arnulfo Franco, Executive Director
Inter-American Tropical Tuna Commission (IATTC)
8901 La Jolla Shores Drive
La Jolla, California 92037-1509

Subject: Data Submissions under IATTC Resolutions Related to Elasmobranchs

Dear Dr. Franco,

The United States is submitting this letter and enclosed report on information for calendar year 2025, pursuant to the following IATTC resolutions:

- Resolution C-11-10: *Resolution on the Conservation of Oceanic Whitetip Sharks Caught in Association with Fisheries in the Antigua Convention Area*
- Resolution C-15-04: *Resolution on the Conservation of Mobulid Rays Caught in Association with Fisheries in the IATTC Convention Area*
- Resolution C-25-09: *Conservation Measures for Shark Species, with Special Emphasis on the Silky Shark (*Carcharhinus falciformis*) for the Years 2026 - 2028*
- Resolution C-25-08: *Conservation measures for the Protection and Sustainable Management of Sharks*

Please contact Lucille Bulkeley at (858) 546-5620 or lucille.bulkeley@noaa.gov with any questions. Thank you for your attention to this matter.

Sincerely,

Rachael Wadsworth

Rachael Wadsworth
Highly Migratory Species Branch Chief

Cc: C. Colin Brinkman, U.S. Department of State
Ryan J. Wulff, Assistant Regional
Administrator for Sustainable Fisheries Division
Administrative File:151418WCR2021SF00217:LB



2025 U.S. SHARK REPORT TO THE INTER-AMERICAN TROPICAL TUNA COMMISSION: AS REQUIRED PER RESOLUTION C-25-08

The IATTC adopted Resolution C-25-08 (*Conservation Measures for the Protection and Sustainable Management of Sharks*) in 2025. Under paragraph 21, the Resolution requires that members and cooperating non-members (CPCs) provide the IATTC Secretariat with a comprehensive annual report that includes data on sharks caught in association with fisheries managed by the IATTC. These data include “*catches, effort by gear type, landing, and trade of sharks by species, where possible, in accordance with IATTC reporting procedures, including available historical data.*” In addition, the Resolution encourages CPCs to conduct research on sharks to identify ways to increase the selectivity of fishing gears, improve knowledge of shark life history traits, identify shark nursery areas, and ways to improve best handling and release practices. This report is being submitted to the IATTC Secretariat to provide updates on relevant shark research conducted by the United States in 2025, to fulfill the U.S. reporting obligations for 2026, and to provide updates on any domestic U.S. regulations that could impact sharks and shark fisheries in the IATTC Convention Area.

DATA SUBMITTED SEPARATELY

The United States submits catch, effort, and landings data on sharks caught by U.S.-flagged vessels in fisheries for tuna and tuna-like species in the IATTC Convention Area as part of its annual report to the IATTC as required under Resolution C-03-05 (*Resolution on Data Provision*). The United States provides catch and effort data by fishing gear at Level 3, the international standard for such data. The United States also provides longline catch data on sharks annually through C-19-08, which includes required disposition data. The IATTC maintains all observer information for U.S. purse seine vessels and as such already has access to reports of observed interactions with mobulids and sharks caught in that fishery.

VOLUNTARY TRADE DATA

This report also contains voluntary trade data on sharks and rays, per paragraph 22 of Resolution C-25-08.

U.S. REGULATORY CHANGES IN 2025

U.S. National Level Updates

There were no new rules pertaining to shark conservation implemented in 2025 in the United States.

U.S. West Coast States Updates



There were no new rules pertaining to shark conservation implemented in 2025 in California, Oregon or Washington.

UPDATES ON SHARK RESEARCH IN 2025

The SWFSC's shark research program focuses on shark species that occur along the U.S. Pacific coast, including Shortfin Mako (*Isurus oxyrinchus*), Blue Shark (*Prionace glauca*), Basking Shark (*Cetorhinus maximus*), and three species of thresher sharks: Common Thresher (*Alopias vulpinus*), Bigeye Thresher (*Alopias superciliosus*), Pelagic Thresher (*Alopias pelagicus*), California Horn Sharks (*Heterodontus francisci*), and Leopard Shark (*Triakis semifasciata*). Center scientists have studied the sharks' life history, foraging ecology, distribution, movements, stock structure, and potential vulnerability to fishing pressure. This information is provided to international, national, and regional fisheries conservation and management bodies having stewardship for sharks.

Identifying climate refugia and bright spots for highly mobile species.

Climate-driven shifts in species distributions can undermine the effectiveness of protected areas. We present a framework to facilitate climate change adaptation planning by identifying where highly migratory species habitats will persist (climate refugia), emerge (bright spots), disappear (dark spots), or remain unsuitable based on model analysis by 2100. When applied to eight species in the California Current System, we found that, on average, 37% of habitats are expected to be climate refugia, 9% are bright spots, and 13% are dark spots within National Marine Sanctuaries by 2100. Species responses differ: leatherback turtles may find refuge near U.S. coastal waters (18%), blue whales may show increased bright spots (41%), and humpback whales may exhibit more dark spots (44%).

These findings highlight the need to integrate species projections into spatial planning to enhance species conservation. Our approach can be applied globally to evaluate the effectiveness of protected areas in safeguarding biodiversity under climate change.



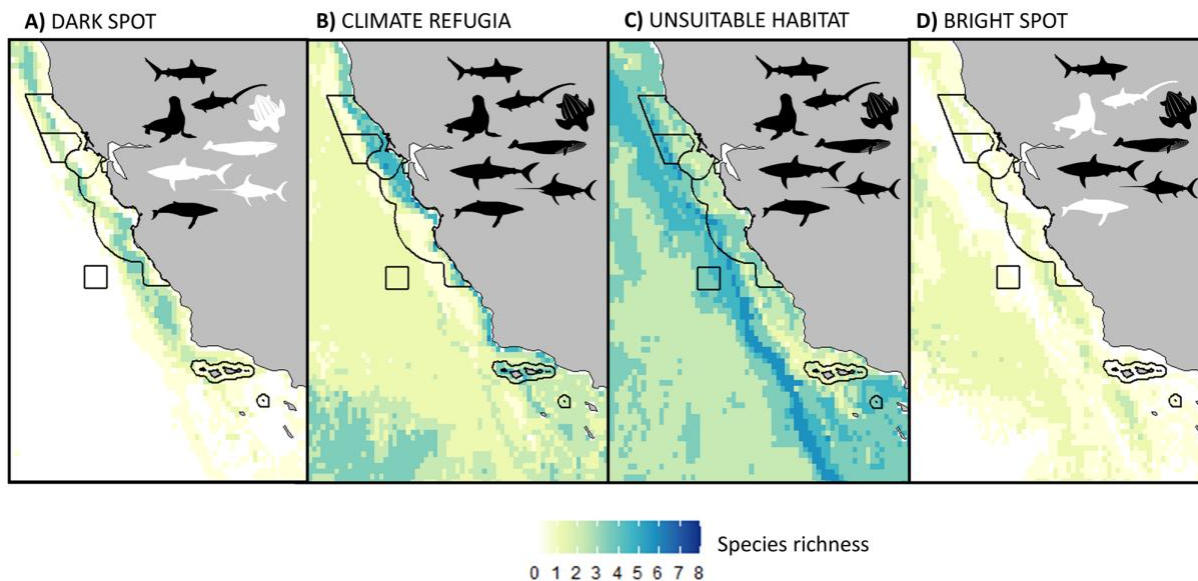


Fig. 4 | Four categories of projected habitat suitability changes (dark spot, climate refugia, unsuitable habitat, bright spot) in the CCS for eight highly mobile species. A Dark spot, B climate refugia, C unsuitable habitat and D bright spot. The color represents the number of species within each category (from 0 in white to 8 in dark blue). Species represented by silhouettes; white silhouettes indicate species with no location within a given climate-smart area (e.g., there are no areas classified as dark spots for swordfish).

Lezama-Ochoa, N., Welch, H., Brown, J.A., Benson, S.R., Forney, K.A., Abrahms, B., Buil, M.P., Jacox, M.G., Muhling, B.A., Liu, O.R. and Clay, T.A., 2025. Identifying climate refugia and bright spots for highly mobile species. *npj Ocean Sustainability*, 4(1), p.35.

Nearshore use increases propensity to accumulate persistent organic pollutants in two thresher shark species.

Predator tissues can accumulate specific signatures of persistent organic pollutants (POPs) based on their feeding ecology. Likewise, stable isotopes, which are also incorporated into tissues via diet, are complementary to POPs as they provide additional geographic and trophic information into the ecology of consumers. The Common Thresher Shark (*Alopias vulpinus*) and the Bigeye Thresher (*Alopias superciliosus*) are closely related but have distinct spatial habitat use, with Common Threshers having shallower and more coastal distributions compared to Bigeye Threshers, which occur in deeper offshore waters. This study used two types of chemical markers (stable isotopes and POPs) to understand how ecological differences in nearshore use may influence their propensity to accumulate PCBs and DDXs. Liver samples were obtained from thresher sharks incidentally captured in southern California (a known hotspot for DDX and its metabolites) and analyzed for a suite of organic contaminants and two stable isotopes ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$). Common Thresher Sharks had significantly higher concentrations for every contaminant group examined compared to Bigeye Threshers, and species were distinguishable based on their contaminant signatures.

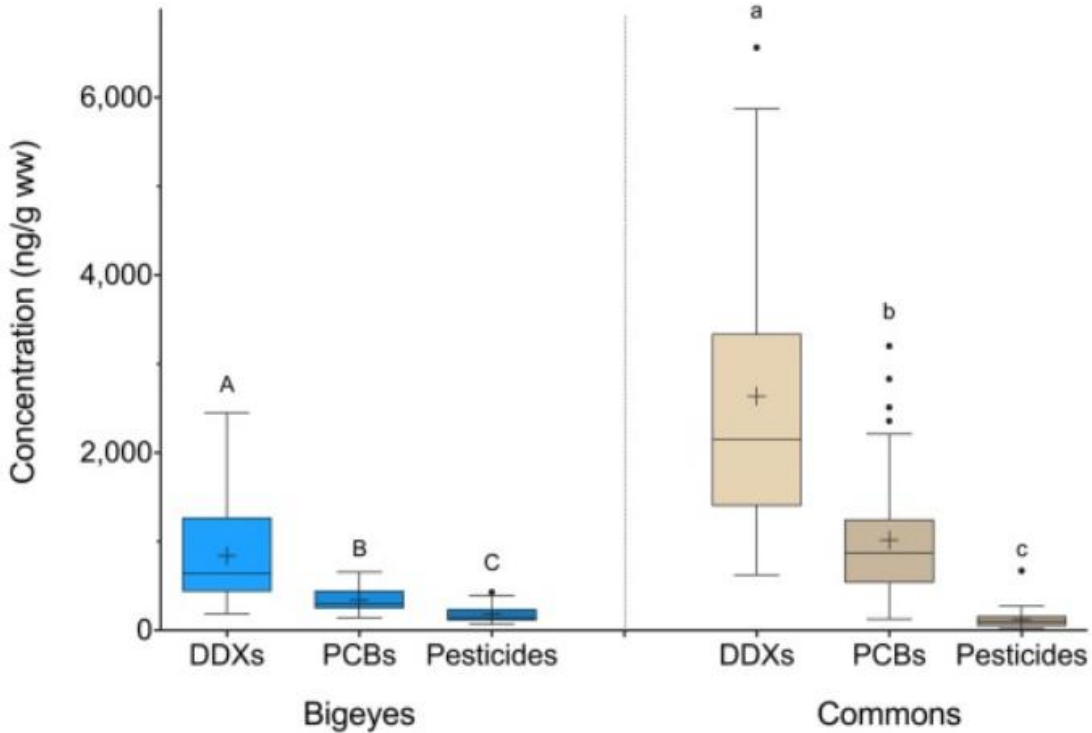


Fig. 1. Contaminant concentrations of DDXs, PCBs and non-DDT-pesticides (“Pesticides”) in livers of Bigeye Threshers (blue tones, left panel) and Common Thresher Sharks (brown tones, right panel). Mean concentrations within groups are represented by crosses, box plots represent 25–75 percentiles, and outliers as black circles. Contaminant concentrations were statistically compared between species with upper and lower case denoting significant differences within each contaminant group via Mann-Whitney U tests.

Contaminant levels significantly declined with length in Common Thresher Sharks, although the dataset was biased towards mature females, but levels significantly increased with length in Bigeye Threshers, which were skewed towards more mature males. Isotopic niche space had little overlap between species, and DDX concentrations positively correlated with $\delta^{13}\text{C}$ (a proxy of nearshore use). The results suggest that proximity to shore may play a key role in hepatic POP accumulation, but intrinsic factors, such as sex, may also be influential.

Lyons, K., Rackley, P., Preti, A. and Carlisle, A.B., 2025. Nearshore use increases propensity to accumulate persistent organic pollutants in two thresher shark species. Science of the Total Environment, 982, p.179673.

Resource partitioning among pelagic predators remains stable despite annual variability in diet composition.

Diet data are critical for describing predator resource use and partitioning among competitors. However, time series needed to properly assess variability in resource use and partitioning are limited, especially in pelagic (open ocean) ecosystems where predators and prey make broad use of horizontal and vertical habitats.



We examined a diet time series spanning two decades (1998–2018) consisting of 2749 stomachs from 10 pelagic predators in the southern California Current Ecosystem (SCCE): albacore tuna (*Thunnus alalunga*), Pacific bluefin tuna (*Thunnus orientalis*), swordfish (*Xiphias gladius*), blue shark (*Prionace glauca*), shortfin mako (*Isurus oxyrinchus*), common thresher shark (*Alopias vulpinus*), bigeye thresher shark (*Alopias superciliosus*), short-beaked common dolphin (*Delphinus delphis*), long-beaked common dolphin (*Delphinus capensis*) and northern right whale dolphin (*Lissodelphis borealis*). We quantified feeding habits with respect to prey taxonomy, length, vertical habitat and horizontal habitat.

From 1998 to 2015, each predator exhibited diet variability but maintained consistent resource partitioning with the other predators. Across years, the diets of predators feeding mostly on shallow-living prey (<200 m) were more variable than those feeding on deeper-dwelling prey (>200 m).

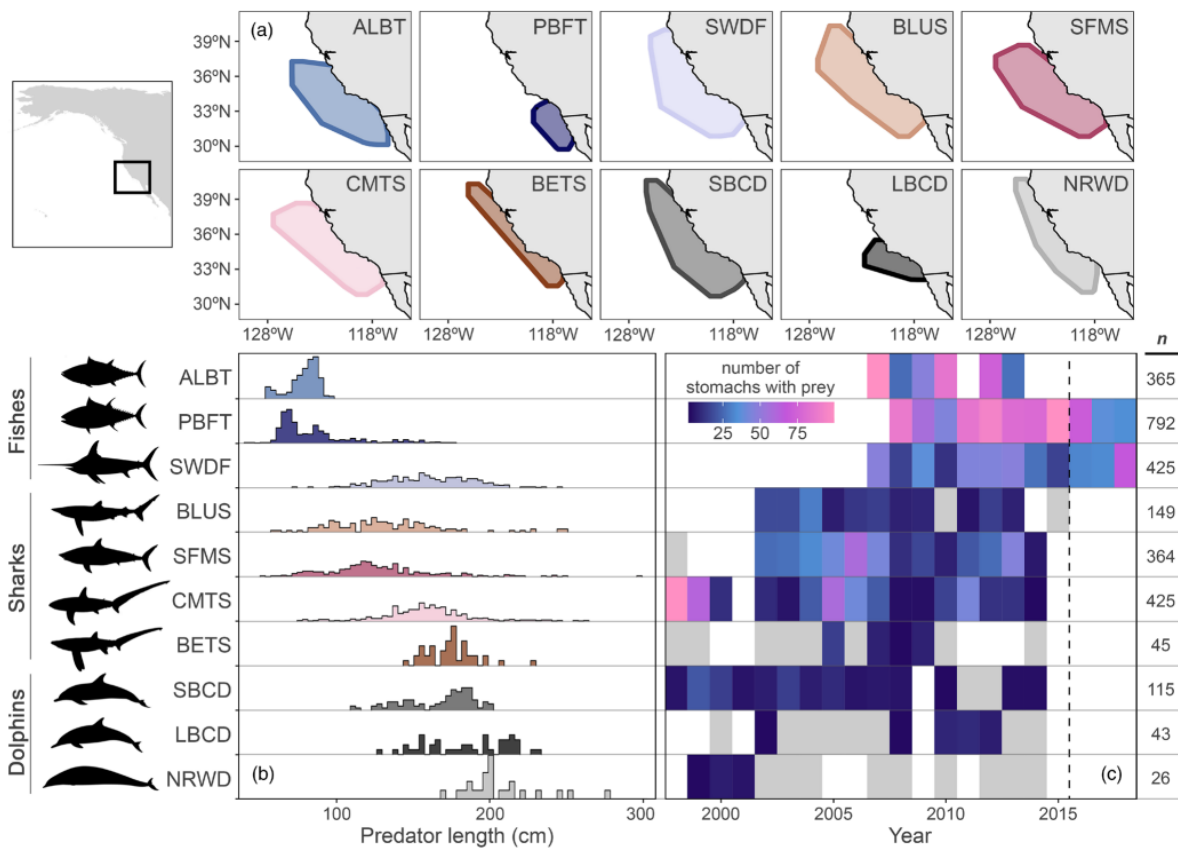


FIGURE 1 (a) The collection regions for each predator (albacore tuna [ALBT], Pacific bluefin tuna [PBFT], swordfish [SWDF], blue shark [BLUS], shortfin mako [SFMS], common thresher shark [CMTS], bigeye thresher shark [BETS], short-beaked common dolphin [SBCD], longbeaked common dolphin [LBCD] and northern right whale dolphin [NRWD]) are given as unweighted polygons describing the maximum extent of capture locations to protect the confidentiality of fishing locations for specimens collected by commercial fishers. (b) Predators ranged from 42 to 298 cm long, with histograms of predator lengths representing fork lengths for the tunas and sharks, eye-to-fork lengths(EFL) for swordfish and total lengths for the dolphins. (c) Heat maps show the number of stomachs

with prey per year for each predator (the total number of stomachs with prey (n) is given per predator on the right). Grey cells indicate years with fewer than three stomachs, which were excluded from diet time series analyses. Samples collected prior to 2016 (vertical dashed line) were included in the annual time series analyses. Samples collected after 2016 were used to examine changes in the niches of swordfish and Pacific bluefin tuna following an increased abundance of northern anchovy (*Engraulis mordax*).

Following an increase in the abundance of northern anchovy (*Engraulis mordax*) in the SCCE starting in 2015, the ecological niches of Pacific bluefin tuna and swordfish converged. During 2016–2018, both predators fed more heavily on northern anchovy and other prey that occupy shallow nearshore habitats.

We show that pelagic predators can maintain resource partitioning under a wide range of conditions. However, we also observe that drastic changes in resource availability can alter the degree of niche partitioning among competitors, providing new perspectives on the flexibility of predator niches. As climate change continues to alter food webs, understanding how predators forage will be essential for anticipating changes to pelagic ecosystem structure and services.

Portner, E.J., Muhling, B.A., Preti, A., Snodgrass, O.E., Richards, T.M., Nickels, C.F., Dewar, H., Hazen, E.L. and Choy, C.A., 2025. Resource partitioning among pelagic predators remains stable despite annual variability in diet composition. Journal of Animal Ecology, 94(5), pp.1014-1030.

