

Estimation of Bycatch with Bony Fish, Sharks, and Rays in the 2025 Hawai‘i Permitted Deep-set Longline Fishery

Brett Cooper¹, Robert Ahrens², Jenny Suter²

¹ Pacific States Marine Fisheries Commission
205 SE Spokane Street
Suite 100
Portland, Oregon 97202

² Pacific Islands Fisheries Science Center
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
1845 Wasp Boulevard, Building #176
Honolulu, Hawai‘i 96818

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Data Summary

The supplemental Excel Workbook (pir.hi.dssl.fish.2025.xlsx) includes annual bycatch estimates for 2025. The workbook includes a worksheet labeled “key” that provides definitions of the column headings and the variables being estimated. McCracken (2019) describes the methods used to sample the deep-set fleet and estimators of bycatch. The observed and estimated numbers were derived using Hawai‘i Longline Logbook Data Set (Pacific Islands Fisheries Science Center, 2026) and the Longline Observer Data System (Pacific Islands Regional Office, 2026).

Observer coverage of the deep-set fleet declined from 13% in 2024 to 7% in 2025, reflecting the ongoing reduction of the human observer program (NOAA Fisheries, 2024). EM data were not incorporated into the 2025 estimates presented here; all point estimates and standard errors are derived solely from observer-collected data under this reduced coverage rate. As a result, a larger share of estimated bycatch for 2025 is attributable to statistical expansion rather than direct observation, and standard errors generally increased relative to 2024, consistent with the reduced sampling rate. Future data reports are expected to incorporate EM-derived observations as that program comes online, which should improve coverage and reduce estimator uncertainty.

Literature Cited

- McCracken, M. L. (2019). *Sampling the Hawaii deep-set longline fishery and point estimators of bycatch* (Technical Memorandum Series, NOAA-TM-NMFS-PIFSC-89). Pacific Islands Fisheries Science Center.
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