

# Assessment of Incidental Interactions with Marine Mammals in the Hawaii Longline Deep- and Shallow-set Fisheries from 2015 through 2019

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The attached Excel Workbook (DR-20-024\_srg.ceta.1519.xlsx) includes information requested by the Pacific Scientific Review Group (SRG) for use in preparing and reviewing marine mammal stock assessments.

The Excel Workbook provides numbers by species and geographical region for observed interactions and injury determinations in the 100% observed shallow-set Hawaii longline fishery, and observed and estimated total interactions and interactions resulting in death or a serious injury (DSI) classification for the deep-set Hawaii longline fishery. Numbers for years 2015 through 2019 and the average over these 5 years are provided. The regions are (1) within the Hawaiian Islands Exclusive Economic Zone (EEZ) and (2) outside the U.S. EEZ. Statistics for the regions defined by the EEZs of Palmyra Atoll and Kingman Reef, Johnston Atoll, Baker Island, Howland Island, and Jarvis Island are not provided because there has been so little effort in these regions that there are issues with confidential data. From 2015 to 2019, there were no observed interactions with marine mammals in these regions.

The workbook includes a worksheet labeled 'key' that provides definitions of the column headings and the items being estimated. The workbook has a worksheet for all marine mammal species that have been observed bycaught at least once since 2011 in the fishery (deep or shallow) being tabulated.

McCracken (in prep c) describes the sample design used to sample the deep-set fleet and point estimators used, McCracken (in prep b) describes the estimators of standard error for the estimated number of incidental interactions, and McCracken (in prep a) describes the estimators for number of DSI and the estimators used for subgeographical estimates. The observed and estimated numbers were derived using Hawaii Longline Logbook Data Set (Pacific Islands Fisheries Science Center, 2020) and the Longline Observer Data System (Pacific Islands Regional Office, 2020).

## References

McCracken ML. (in prep a). Domain Estimators for Subgeographical Areas and the Total Number of Cetacean Bycatch Events resulting in a Dead or Serious Injury Classification, Technical Report, PIFSC, NOAA, U.S. Department of Commerce.

McCracken ML. (in prep b). Interval Estimation of Annual Bycatch in the Hawaii Deep-set Longline Fishery, Technical Report, PIFSC, NOAA, U.S. Department of Commerce.

McCracken ML (in prep c). Sampling the Hawaii Deep-set Longline Fishery and Point Estimators of Bycatch, Technical Report, PIFSC, NOAA, U.S. Department of Commerce.

Pacific Islands Fisheries Science Center. 2020. Hawaii Longline Logbook.  
<https://inport.nmfs.noaa.gov/inport/item/2721>.

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