# The Hawaii - California Pelagic Longline Vessels Quarterly Report 1 April—30 June 2022<sup>1</sup>

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The Hawaii - California pelagic longline logbook report for the second quarter of 2022 (1 April—30 June; PIFSC 2023) contains summary data of fishing effort and catch statistics as reported from electronic or paper longline log sheets submitted by Hawaii and California-based pelagic longline fishers. Catch and effort statistics are based on date of longline haul. Vessel and trips statistics can cross over two summary periods (i.e., years, semi-annual or quarters) and are counted in both summary periods. For example, a trip total is for "partial and complete" trips within a time period and these statistics are not additive since partial trips are counted in the present time period when the trip began and again in the following period when the trip ended (i.e., sum of four quarters or two semi-annual reports is not the total for the year).

Catch and effort summaries in this report were based on RFMO standards and business rules. Longline catch and effort statistics in this report consists of U.S. longline fisheries in the North Pacific Ocean, attributions from CNMI, Guam and American Samoa in the North Pacific Ocean. Longline vessels operating from California were also included in this report to satisfy RFMO data reporting and NOAA confidentiality standards.

Tables 1-5 show fishery statistics for the stated time period, area, and shallow sets (<15 hooks between floats) or deep sets ( $\ge15$  hooks between floats). The longline effort includes number of vessels, trips, sets, and hooks set. Fish species were organized into pelagic management unit species (PMUS) groups of billfish, shark, tuna and other PMUS. Each table includes the number of fish caught, kept and released. The catch per unit effort (CPUE) is measured as the number of fish caught per 1000 hooks.

#### References:

Pacific Islands Fisheries Science Center, 2023: Hawaii Longline Logbook, https://www.fisheries.noaa.gov/inport/item/2721

Southwest Fisheries Science Center, 2023: California Pelagic Longline Fishery, https://www.fisheries.noaa.gov/inport/item/12906

<sup>&</sup>lt;sup>1</sup>Data reported by fishers in electronic and paper logs were queried for the second quarter of 2022 (1 April–30 June) from the Pacific Islands Fishery Science Center Information Management System oracle database from table LLDS\_REPORT\_STATS\_RFMO\_HC.

Table 1. Hawaii and California-based pelagic longline vessels quarterly statistics for all fishing areas and all fishing categories (set types), including effort (number of vessels, trips, sets, and hooks set). For each listed species, organized by pelagic management unit species (PMUS) groups of billfish, shark, tuna, and other, the table includes the number of fish caught, kept, and released, and the catch per unit effort (CPUE, number per 1000 hooks, calculated as the sum of fish caught divided by the sum of hooks set). Data Source: PIFSC Information Management System, Longline Logbook Data.

Re	port	Cov	erage

Time Period 1 April-30 June 2022

Set Types All sets Fishing Area All Areas

Number of vessels active	138
Number of trips (partial or completed)	458
Number of sets	5,621
Number of hooks set	16,153,920

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 Hooks
PMUS				
Billfish PMUS				
Blue marlin	1,917	1,898	19	0.12
Striped marlin	2,543	2,510	33	0.16
Shortbill spearfish	2,383	2,345	38	0.15
Swordfish	3,375	3,322	53	0.21
Other billfishes	136	132	4	0.01
Total	10,354	10,207	147	0.64
Shark PMUS				
Blue shark	18,588	0	18,588	1.15
Mako sharks	374	3	371	0.02
Thresher sharks	3,318	15	3,303	0.21
Oceanic whitetip shark	111	0	111	0.01
Silky shark	82	0	82	0.01
Total	22,473	18	22,455	1.39
Tuna PMUS				
Albacore	3,501	3,264	237	0.22
Bigeye tuna	44,350	43,866	484	2.75
Yellowfin tuna	18,697	18,352	345	1.16
Bluefin tuna	1	1	0	0.00
Skipjack tuna	5,668	5,613	55	0.35
Other tunas	0	0	0	0.00
Total	72,217	71,096	1,121	4.47
Other PMUS				
Mahimahi	3,373	3,346	27	0.21
Moonfish	1,044	1,043	1	0.06
Wahoo	6,172	6,145	27	0.38
Oilfish	2,336	1,776	560	0.14
Pomfret	7,966	7,897	69	0.49
Total	20,891	20,207	684	1.29
Total PMUS	125,935	101,528	24,407	7.80
Non-PMUS Sharks	90	0	90	0.01
Total Non-PMUS	1,394	126	1,268	0.09
Total All Species	127,329	101,654	25,675	7.88

Table 2. Hawaii and California-based pelagic longline vessels quarterly statistics for fishing within the U.S. EEZ (main Hawaiian Islands, Northwestern Hawaiian Islands, or the Pacific Remote Islands, and with all fishing categories (set types), including effort (number of vessels, trips, sets, and hooks set). For each listed species, organized by pelagic management unit species (PMUS) groups of billfish, shark, tuna, and other, the table includes the number of fish caught, kept, and released, and the catch per unit effort (CPUE, number per 1000 hooks, calculated as the sum of fish caught divided by the sum of hooks set). Data Source: PIFSC Information Management System, Longline Logbook Data.

Time Period 1 April-30 June 2022

Set Types All sets

Fishing Area Inside U.S. EEZ

Number of vessels active112Number of trips (partial or completed)248Number of sets1,613Number of hooks set4,738,379

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 Hooks
PMUS				
Billfish PMUS				
Blue marlin	475	471	4	0.10
Striped marlin	744	740	4	0.16
Shortbill spearfish	832	818	14	0.18
Swordfish	575	567	8	0.12
Other billfishes	28	27	1	0.01
Total	2,654	2,623	31	0.56
Shark PMUS				
Blue shark	5,311	0	5,311	1.12
Mako sharks	123	0	123	0.03
Thresher sharks	1,295	4	1,291	0.27
Oceanic whitetip shark	58	0	58	0.01
Silky shark	28	0	28	0.01
Total	6,815	4	6,811	1.44
Tuna PMUS				
Albacore	73	73	0	0.02
Bigeye tuna	11,251	11,116	135	2.37
Yellowfin tuna	4,830	4,750	80	1.02
Bluefin tuna	0	0	0	0.00
Skipjack tuna	2,239	2,218	21	0.47
Other tunas	0	0	0	0.00
Total	18,393	18,157	236	3.88
Other PMUS				
Mahimahi	552	550	2	0.12
Moonfish	133	132	1	0.03
Wahoo	1,691	1,684	7	0.36
Oilfish	761	538	223	0.16
Pomfret	1,371	1,345	26	0.29
Total	4,508	4,249	259	0.95
Total PMUS	32,370	25,033	7,337	6.83
Non-PMUS Sharks	29	0	29	0.01
Total Non-PMUS	637	47	590	0.13
Total All Species	33,007	25,080	7,927	6.97

Table 3. Hawaii and California-based pelagic longline vessels quarterly statistics for fishing outside the U.S. EEZ and with all fishing categories (set types), including effort (number of vessels, trips, sets, and hooks set). For each listed species, organized by pelagic management unit species (PMUS) groups of billfish, shark, tuna, and other, the table includes the number of fish caught, kept, and released, and the catch per unit effort (CPUE, number per 1000 hooks, calculated as the sum of fish caught divided by the sum of hooks set). Data Source: PIFSC Information Management System, Longline Logbook Data.

Time Period 1 April-30 June 2022

Set Types All sets

Fishing Area Outside U.S. EEZ

Number of vessels active 135
Number of trips (partial or completed) 394
Number of sets 4,008
Number of hooks set 11,415,541

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 Hooks
PMUS				
Billfish PMUS				
Blue marlin	1,442	1,427	15	0.13
Striped marlin	1,799	1,770	29	0.16
Shortbill spearfish	1,551	1,527	24	0.14
Swordfish	2,800	2,755	45	0.25
Other billfishes	108	105	3	0.01
Total	7,700	7,584	116	0.67
Shark PMUS				
Blue shark	13,277	0	13,277	1.16
Mako sharks	251	3	248	0.02
Thresher sharks	2,023	11	2,012	0.18
Oceanic whitetip shark	53	0	53	0.00
Silky shark	54	0	54	0.00
Total	15,658	14	15,644	1.37
Tuna PMUS				
Albacore	3,428	3,191	237	0.30
Bigeye tuna	33,099	32,750	349	2.90
Yellowfin tuna	13,867	13,602	265	1.21
Bluefin tuna	1	1	0	0.00
Skipjack tuna	3,429	3,395	34	0.30
Other tunas	0	0	0	0.00
Total	53,824	52,939	885	4.71
Other PMUS				
Mahimahi	2,821	2,796	25	0.25
Moonfish	911	911	0	0.08
Wahoo	4,481	4,461	20	0.39
Oilfish	1,575	1,238	337	0.14
Pomfret	6,595	6,552	43	0.58
Total	16,383	15,958	425	1.44
Total PMUS	93,565	76,495	17,070	8.20
Non-PMUS Sharks	61	0	61	0.01
Total Non-PMUS	757	79	678	0.07
Total All Species	94,322	76,574	17,748	8.26

Table 4. Hawaii and California-based pelagic longline vessels quarterly statistics for all fishing areas and with shallow set type, including effort (number of vessels, trips, sets, and hooks set). For each listed species, organized by pelagic management unit species (PMUS) groups of billfish, shark, tuna, and other, the table includes the number of fish caught, kept, and released, and the catch per unit effort (CPUE, number per 1000 hooks, calculated as the sum of fish caught divided by the sum of hooks set). Data Source: PIFSC Information Management System, Longline Logbook Data.

Time Period 1 April-30 June 2022 Set Types Shallow sets Fishing Area All Areas Number of vessels active13Number of trips (partial or completed)19Number of sets231Number of hooks set281,956

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 Hooks
PMUS				
Billfish PMUS				
Blue marlin	28	28	0	0.10
Striped marlin	247	246	1	0.88
Shortbill spearfish	41	41	0	0.15
Swordfish	1,864	1,819	45	6.61
Other billfishes	11	10	1	0.04
Total	2,191	2,144	47	7.77
Shark PMUS				
Blue shark	1,408	0	1,408	4.99
Mako sharks	79	2	77	0.28
Thresher sharks	21	0	21	0.07
Oceanic whitetip shark	24	0	24	0.09
Silky shark	1	0	1	0.00
Total	1,533	2	1,531	5.44
Tuna PMUS				
Albacore	0	0	0	0.00
Bigeye tuna	103	102	1	0.37
Yellowfin tuna	231	230	1	0.82
Bluefin tuna	1	1	0	0.00
Skipjack tuna	20	20	0	0.07
Other tunas	0	0	0	0.00
Total	355	353	2	1.26
Other PMUS				
Mahimahi	542	541	1	1.92
Moonfish	1	1	0	0.00
Wahoo	18	18	0	0.06
Oilfish	141	85	56	0.50
Pomfret	3	1	2	0.01
Total	705	646	59	2.50
Total PMUS	4,784	3,145	1,639	16.97
Non-PMUS Sharks	3	0	3	0.01
Total Non-PMUS	14	10	4	0.05
Total All Species	4,798	3,155	1,643	17.02

**Table 5.** Hawaii and California-based pelagic longline vessels quarterly statistics for all fishing areas and with deep set type, including effort (number of vessels, trips, sets, and hooks set). For each listed species, organized by pelagic management unit species (PMUS) groups of billfish, shark, tuna, and other, the table includes the number of fish caught, kept, and released, and the catch per unit effort (CPUE, number per 1000 hooks, calculated as the sum of fish caught divided by the sum of hooks set). Data Source: PIFSC Information Management System, Longline Logbook Data.

Time Period 1 April-30 June 2022

Set Types Deep sets Fishing Area All Areas Number of vessels active 136
Number of trips (partial or completed) 440
Number of sets 5,390
Number of hooks set 15,871,964

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 Hooks
PMUS				
Billfish PMUS				
Blue marlin	1,889	1,870	19	0.12
Striped marlin	2,296	2,264	32	0.14
Shortbill spearfish	2,342	2,304	38	0.15
Swordfish	1,511	1,503	8	0.10
Other billfishes	125	122	3	0.01
Total	8,163	8,063	100	0.51
Shark PMUS				
Blue shark	17,180	0	17,180	1.08
Mako sharks	295	1	294	0.02
Thresher sharks	3,297	15	3,282	0.21
Oceanic whitetip shark	87	0	87	0.01
Silky shark	81	0	81	0.01
Total	20,940	16	20,924	1.32
Tuna PMUS				
Albacore	3,501	3,264	237	0.22
Bigeye tuna	44,247	43,764	483	2.79
Yellowfin tuna	18,466	18,122	344	1.16
Bluefin tuna	0	0	0	0.00
Skipjack tuna	5,648	5,593	55	0.36
Other tunas	0	0	0	0.00
Total	71,862	70,743	1,119	4.53
Other PMUS				
Mahimahi	2,831	2,805	26	0.18
Moonfish	1,043	1,042	1	0.07
Wahoo	6,154	6,127	27	0.39
Oilfish	2,195	1,691	504	0.14
Pomfret	7,963	7,896	67	0.50
Total	20,186	19,561	625	1.27
Total PMUS	121,151	98,383	22,768	7.63
Non-PMUS Sharks	87	0	87	0.01
Total Non-PMUS	1,380	116	1,264	0.09
Total All Species	122,531	98,499	24,032	7.72