## The Hawaii - California Pelagic Longline Vessels Semi-annual Report 1 January-30 June 2020

Fisheries Research and Monitoring Division (FRMD)
Pacific Islands Fisheries Science Center (PIFSC), NOAA Fisheries
NOAA Inouye Regional Center
1845 Wasp Boulevard, Building 176, Honolulu, HI 96818

This semi-annual report for the 1 January-30 June 2020 period contains summary data of fishing effort and catch statistics as reported on longline log sheets for the Hawaii - California pelagic longline vessels. Data in this report originate from the PIFSC Information Management System (Oracle) table LLDS\_REPORT\_STATS\_PRELIM\_HC, representing RFMO data received as of 15 September 2021. Catch and effort statistics are based on date of longline haul. When a statistic (number of vessels, trips) involves dates of haul in two summary periods (i.e., years, semi-annual, quarters), the item is counted in both summary periods. Thus, a trip total is for "partial and completed" trips. As such, these statistics are not additive (i.e., sum of four quarters is not the total for the year).

The following tables show fishery statistics for the stated time period, area, and set type, and include 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), measured as the number of fish caught per 1000 hooks.

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. Some vessels operating in California had Hawaii limited-entry permits.

## References:

Pacific Islands Fisheries Science Center, 2021: Hawaii Longline Logbook, https://www.fisheries.noaa.gov/inport/item/2721

Southwest Fisheries Science Center, 2021: California Pelagic Longline Fishery, https://www.fisheries.noaa.gov/inport/item/12906

PIFSC Data Report DR-22-002. Issued  $16\,\mathrm{March}$  2022. https://doi.org/10.25923/23dd-4402

Table 1. Hawaii and California-based pelagic longline vessels semi-annual 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 1,000 hooks, calculated as the sum of fish caught divided by the sum of hooks set). Data Source: PIFSC Information Management System, Longline Logbook Data.

## Report Coverage

Time Period 1 January-30 June, 2020

Set Types All sets Fishing Area All Areas Number of vessels active 145
Number of trips (partial or completed) 899
Number of sets 10,508
Number of hooks set 29,796,160

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 Hooks
PMUS				
Billfish PMUS				
Blue marlin	4,035	4,000	35	0.14
Striped marlin	6,605	6,502	103	0.22
Shortbill spearfish	5,587	5,445	142	0.19
Swordfish	5,396	5,277	119	0.18
Other billfishes	178	171	7	0.01
Total	21,801	21,395	406	0.73
Shark PMUS				
Blue shark	45,752	0	45,752	1.54
Mako sharks	2,061	31	2,030	0.07
Thresher sharks	6,005	15	5,990	0.20
Oceanic whitetip shark	182	0	182	0.01
Silky shark	96	0	96	0.00
Total	54,096	46	54,050	1.82
Tuna PMUS				
Albacore	7,153	6,700	453	0.24
Bigeye tuna	108,706	105,922	2,784	3.65
Yellowfin tuna	21,970	21,235	735	0.74
Bluefin tuna	13	13	0	0.00
Skipjack tuna	10,751	10,673	78	0.36
Other tunas	0	0	0	0.00
Total	148,593	144,543	4,050	4.99
Other PMUS				
Mahimahi	6,533	6,487	46	0.22
Moonfish	8,322	8,221	101	0.28
Wahoo	13,397	13,341	56	0.45
Oilfish	6,431	4,648	1,783	0.22
Pomfret	18,326	18,185	141	0.62
Total	53,009	50,882	2,127	1.78
Total PMUS	277,499	216,866	60,633	9.31
Non-PMUS Sharks	140	0	140	0.00
Total Non-PMUS	3,170	88	3,082	0.11
Total All Species	280,669	216,954	63,715	9.42

Table 2. Hawaii and California-based pelagic longline vessels semi-annual 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 1,000 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	nort	Covi	erade
110		~~	u auc

Set Types All sets

Fishing Area Inside U.S. EEZ

Number of vessels active121Number of trips (partial or completed)335Number of sets2,241Number of hooks set6,266,790

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 Hooks
PMUS				
Billfish PMUS				
Blue marlin	1,045	1,041	4	0.17
Striped marlin	1,604	1,587	17	0.26
Shortbill spearfish	1,260	1,245	15	0.20
Swordfish	725	715	10	0.12
Other billfishes	41	39	2	0.01
Total	4,675	4,627	48	0.75
Shark PMUS				
Blue shark	9,347	0	9,347	1.49
Mako sharks	289	0	289	0.05
Thresher sharks	991	3	988	0.16
Oceanic whitetip shark	23	0	23	0.00
Silky shark	21	0	21	0.00
Total	10,671	3	10,668	1.70
Tuna PMUS				
Albacore	38	38	0	0.01
Bigeye tuna	17,973	17,650	323	2.87
Yellowfin tuna	2,830	2,814	16	0.45
Bluefin tuna	0	0	0	0.00
Skipjack tuna	2,592	2,587	5	0.41
Other tunas	0	0	0	0.00
Total	23,433	23,089	344	3.74
Other PMUS				
Mahimahi	933	921	12	0.15
Moonfish	706	705	1	0.11
Wahoo	2,194	2,189	5	0.35
Oilfish	1,196	961	235	0.19
Pomfret	4,025	3,990	35	0.64
Total	9,054	8,766	288	1.44
Total PMUS	47,833	36,485	11,348	7.63
Non-PMUS Sharks	24	0	24	0.00
Total Non-PMUS	530	12	518	0.08
Total All Species	48,363	36,497	11,866	7.72

Table 3. Hawaii and California-based pelagic longline vessels semi-annual 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 1,000 hooks, calculated as the sum of fish caught divided by the sum of hooks set). Data Source: PIFSC Information Management System, Longline Logbook Data.

Report (	Coverage
----------	----------

Set Types All sets

Fishing Area Outside U.S. EEZ

Number of vessels active144Number of trips (partial or completed)786Number of sets8,267Number of hooks set23,529,370

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 Hooks
PMUS				
Billfish PMUS				
Blue marlin	2,990	2,959	31	0.13
Striped marlin	5,001	4,915	86	0.21
Shortbill spearfish	4,327	4,200	127	0.18
Swordfish	4,671	4,562	109	0.20
Other billfishes	137	132	5	0.01
Total	17,126	16,768	358	0.73
Shark PMUS				
Blue shark	36,405	0	36,405	1.55
Mako sharks	1,772	31	1,741	0.08
Thresher sharks	5,014	12	5,002	0.21
Oceanic whitetip shark	159	0	159	0.01
Silky shark	75	0	75	0.00
Total	43,425	43	43,382	1.85
Tuna PMUS				
Albacore	7,115	6,662	453	0.30
Bigeye tuna	90,733	88,272	2,461	3.86
Yellowfin tuna	19,140	18,421	719	0.81
Bluefin tuna	13	13	0	0.00
Skipjack tuna	8,159	8,086	73	0.35
Other tunas	0	0	0	0.00
Total	125,160	121,454	3,706	5.32
Other PMUS				
Mahimahi	5,600	5,566	34	0.24
Moonfish	7,616	7,516	100	0.32
Wahoo	11,203	11,152	51	0.48
Oilfish	5,235	3,687	1,548	0.22
Pomfret	14,301	14,195	106	0.61
Total	43,955	42,116	1,839	1.87
Total PMUS	229,666	180,381	49,285	9.76
Non-PMUS Sharks	116	0	116	0.00
Total Non-PMUS	2,640	76	2,564	0.11
Total All Species	232,306	180,457	51,849	9.87

Table 4. Hawaii and California-based pelagic longline vessels semi-annual 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 1,000 hooks, calculated as the sum of fish caught divided by the sum of hooks set). Data Source: PIFSC Information Management System, Longline Logbook Data.

Report Coverage	Re	port	Cov	erag	e
-----------------	----	------	-----	------	---

Set Types Shallow sets Fishing Area All Areas Number of vessels active13Number of trips (partial or completed)19Number of sets256Number of hooks set318,701

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 Hooks
PMUS				
Billfish PMUS				
Blue marlin	22	21	1	0.07
Striped marlin	20	15	5	0.06
Shortbill spearfish	22	22	0	0.07
Swordfish	2,815	2,755	60	8.83
Other billfishes	0	0	0	0.00
Total	2,879	2,813	66	9.03
Shark PMUS				
Blue shark	2,640	0	2,640	8.28
Mako sharks	167	6	161	0.52
Thresher sharks	1	0	1	0.00
Oceanic whitetip shark	0	0	0	0.00
Silky shark	0	0	0	0.00
Total	2,808	6	2,802	8.81
Tuna PMUS				
Albacore	258	210	48	0.81
Bigeye tuna	620	612	8	1.95
Yellowfin tuna	230	220	10	0.72
Bluefin tuna	2	2	0	0.01
Skipjack tuna	1	1	0	0.00
Other tunas	0	0	0	0.00
Total	1,111	1,045	66	3.49
Other PMUS				
Mahimahi	23	23	0	0.07
Moonfish	70	68	2	0.22
Wahoo	7	6	1	0.02
Oilfish	35	21	14	0.11
Pomfret	8	8	0	0.03
Total	143	126	17	0.45
Total PMUS	6,941	3,990	2,951	21.78
Non-PMUS Sharks	1	0	1	0.00
Total Non-PMUS	1	0	1	0.00
Total All Species	6,942	3,990	2,952	21.78

Table 5. Hawaii and California-based pelagic longline vessels semi-annual 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 1,000 hooks, calculated as the sum of fish caught divided by the sum of hooks set). Data Source: PIFSC Information Management System, Longline Logbook Data.

Report	Coverage
--------	----------

Set Types Deep sets Fishing Area All Areas Number of vessels active144Number of trips (partial or completed)880Number of sets10,252Number of hooks set29,477,459

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 Hooks
PMUS				
Billfish PMUS				
Blue marlin	4,013	3,979	34	0.14
Striped marlin	6,585	6,487	98	0.22
Shortbill spearfish	5,565	5,423	142	0.19
Swordfish	2,581	2,522	59	0.09
Other billfishes	178	171	7	0.01
Total	18,922	18,582	340	0.64
Shark PMUS				
Blue shark	43,112	0	43,112	1.46
Mako sharks	1,894	25	1,869	0.06
Thresher sharks	6,004	15	5,989	0.20
Oceanic whitetip shark	182	0	182	0.01
Silky shark	96	0	96	0.00
Total	51,288	40	51,248	1.74
Tuna PMUS				
Albacore	6,895	6,490	405	0.23
Bigeye tuna	108,086	105,310	2,776	3.67
Yellowfin tuna	21,740	21,015	725	0.74
Bluefin tuna	11	11	0	0.00
Skipjack tuna	10,750	10,672	78	0.36
Other tunas	0	0	0	0.00
Total	147,482	143,498	3,984	5.00
Other PMUS				
Mahimahi	6,510	6,464	46	0.22
Moonfish	8,252	8,153	99	0.28
Wahoo	13,390	13,335	55	0.45
Oilfish	6,396	4,627	1,769	0.22
Pomfret	18,318	18,177	141	0.62
Total	52,866	50,756	2,110	1.79
Total PMUS	270,558	212,876	57,682	9.18
Non-PMUS Sharks	139	0	139	0.00
Total Non-PMUS	3,169	88	3,081	0.11
Total All Species	273,727	212,964	60,763	9.29