The Hawaii - California Longline Limited-entry Fishery Quarterly Report 1 July - 30 September, 2016¹

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 quarterly report for the period 1 July - 30 September, 2016, contains summary data summaries of fishing effort and catch statistics as reported on longline log sheets for the Hawaii - California longline limited-entry fishery. Data in this report originate from the PIFSC Information Management System (Oracle) table LLDS_REPORT_STATS_RFMO_HC, representing preliminary data received as of 15 March 2018. 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, etc.).

The following tables show fishery statistics for the stated time period, area, and set type, and includes effort (number of vessels, trips, sets, and hooks set), and 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 1,000 hooks.

 $^{^1\}mathrm{PIFSC}$ Data Report DR-19-017. Issued 06 March 2019 https://doi.org/10.25923/cdy0-fw32

Table 1.For the period 1 July - 30 September, 2016, Hawaii and California longline limited-entry fisheries quarterly
statistics for all fishing areas and all fishing categories (set types), including effort (number of vessels, trips,
sets, and hooks set), and for each listed species, organized by pelagic management unit species (PMUS)
groups of billfish, shark, tuna, and other, along with 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			Number of vessels active 133			
Time Period 1 July - Set Types All sets Fishing Area All Area		eptember, 2016	Number of vessels active Number of trips (partial or completed) Number of sets Number of hooks set		375 4,289 11,256,571	
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Pelagic Management (Species (PMUS)	Unit	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 hooks	
PMUS						
Billfish PMUS						
Blue marlin		992	982	10	0.09	
Striped marlin		1,410	1,375	35	0.13	
Shortbill spear	fish	3,122	3,070	52	0.28	
Swordfish		2,238	2,049	189	0.20	
Other billfishes	6	239	235	4	0.02	
	Total	8,001	7,711	290	0.71	
Shark PMUS						
Blue shark		19,193	0	19,193	1.71	
Mako sharks		1,211	221	990	0.11	
Thresher shark	ks	551	19	532	0.05	
Oceanic whitetip shark		143	0	143	0.01	
Silky shark		42	0	42	0.00	
Other Sharks		216	0	216	0.02	
	Total	21,356	240	21,116	1.90	
Tuna PMUS						
Albacore		1,102	1,101	1	0.10	
Bigeye tuna		46,304	45,546	758	4.11	
Yellowfin tuna		7,482	7,286	196	0.66	
Bluefin tuna		4	4	0	0.00	
Skipjack tuna		3,532	3,482	50	0.31	
Other tunas		0	0	0	0.00	
	Total	58,424	57,419	1,005	5.19	
Other PMUS						
Mahimahi		8,595	8,546	49	0.76	
Moonfish		9,259	9,230	29	0.82	
Wahoo		3,714	3,699	15	0.33	
Oilfish		4,166	3,815	351	0.37	
Pomfret		11,955	11,887	68	1.06	
	Total	37,689	37,177	512	3.35	
Total PMUS		125,470	102,547	22,923	11.15	
Total Non-PMUS		3,135	167	2,968	0.28	
Total All Species		128,605	102,714	25,891	11.42	

Table 2.For the period 1 July - 30 September, 2016, Hawaii longline limited-entry fishery quarterly statistics for fishing
within the U.S. EEZ (Main Hawaiian Islands, Northwest Hawaiian Islands, or the Pacific Remote Islands, and
with all fishing categories (set types), including effort (number of vessels, trips, sets, and hooks set), and for
each listed species, organized by pelagic management unit species (PMUS) groups of billfish, shark, tuna,
and other, along with 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.

Set Types All se	y - 30 September, 2016 ets e U.S. EEZ	Number of vessels active Number of trips (partial or completed) Number of sets Number of hooks set		46 57 259 662,445	
Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 hooks	
PMUS					
Billfish PMUS					
Blue marlin	116	115	1	0.18	
Striped marlin	57	57	0	0.09	
Shortbill spearfish	202	199	3	0.30	
Swordfish	64	43	21	0.10	
Other billfishes	42	42	0	0.06	
Т	otal 481	456	25	0.73	
Shark PMUS					
Blue shark	1,468	0	1,468	2.22	
Mako sharks	86	4	82	0.13	
Thresher sharks	41	0	41	0.06	
Oceanic whitetip sha	ark 54	0	54	0.08	
Silky shark	30	0	30	0.05	
Other Sharks	11	0	11	0.02	
Т	otal 1,690	4	1,686	2.55	
Tuna PMUS					
Albacore	217	217	0	0.33	
Bigeye tuna	1,092	1,037	55	1.65	
Yellowfin tuna	1,202	1,157	45	1.81	
Bluefin tuna	0	0	0	0.00	
Skipjack tuna	681	664	17	1.03	
Other tunas	0	0	0	0.00	
Т	otal 3,192	3,075	117	4.82	
Other PMUS					
Mahimahi	518	515	3	0.78	
Moonfish	224	223	1	0.34	
Wahoo	283	281	2	0.43	
Oilfish	150	133	17	0.23	
Pomfret	551	547	4	0.83	
Т	otal 1,726	1,699	27	2.61	
Total PMUS	7,089	5,234	1,855	10.70	
Total Non-PMUS	279	105	174	0.42	
Total All Species	7,368	5,339	2,029	11.12	

Table 3. For the period 1 July - 30 September, 2016, Hawaii and California longline limited-entry fisheries 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), and for each listed species, organized by pelagic management unit species (PMUS) groups of billfish, shark, tuna, and other, along with 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 CoverageTime Period1 July - 30 SSet TypesAll setsFishing AreaOutside U.S	September, 2016 5. EEZ	Number of vessels active Number of trips (partial or completed) Number of sets Number of hooks set		133 354 4,030 10,594,126	
Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 hooks	
PMUS					
Billfish PMUS					
Blue marlin	876	867	9	0.08	
Striped marlin	1,353	1,318	35	0.13	
Shortbill spearfish	2,920	2,871	49	0.28	
Swordfish	2,174	2,006	168	0.21	
Other billfishes	197	193	4	0.02	
Total	7,520	7,255	265	0.71	
Shark PMUS					
Blue shark	17,725	0	17,725	1.67	
Mako sharks	1,125	217	908	0.11	
Thresher sharks	510	19	491	0.05	
Oceanic whitetip shark	89	0	89	0.01	
Silky shark	12	0	12	0.00	
Other Sharks	205	0	205	0.02	
Total	19,666	236	19,430	1.86	
Tuna PMUS					
Albacore	885	884	1	0.08	
Bigeye tuna	45,212	44,509	703	4.27	
Yellowfin tuna	6,280	6,129	151	0.59	
Bluefin tuna	4	4	0	0.00	
Skipjack tuna	2,851	2,818	33	0.27	
Other tunas	0	0	0	0.00	
Total	55,232	54,344	888	5.21	
Other PMUS					
Mahimahi	8,077	8,031	46	0.76	
Moonfish	9,035	9,007	28	0.85	
Wahoo	3,431	3,418	13	0.32	
Oilfish	4,016	3,682	334	0.38	
Pomfret	11,404	11,340	64	1.08	
Total	35,963	35,478	485	3.39	
Total PMUS	118,381	97,313	21,068	11.17	
Total Non-PMUS	2,856	62	2,794	0.27	
Total All Species	121,237	97,375	23,862	11.44	

Table 4.For the period 1 July - 30 September, 2016, Hawaii and California longline limited-entry fisheries quarterly
statistics for all fishing areas and with shallow set type, including effort (number of vessels, trips, sets, and
hooks set), and for each listed species, organized by pelagic management unit species (PMUS) groups of
billfish, shark, tuna, and other, along with 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			Number of vessels active		5	
Time Period 1 July - 30 September, 2016			Number of trips (partial or completed)		6	
Set Types S	Shallow sets		Number of	96		
Fishing Area A	All Areas		Number of hooks set		111,924	
Pelagic Management U	nit	Number	Number	Number	CPUE	
Species (PMUS)		Caught	Kept	Released	Number Caught per 1000 hooks	
PMUS						
Billfish PMUS						
Blue marlin		3	3	0	0.03	
Striped marlin		70	68	2	0.63	
Shortbill spearfis	sh	12	12	0	0.11	
Swordfish		1,299	1,231	68	11.61	
Other billfishes		0	0	0	0.00	
	Total	1,384	1,314	70	12.37	
Shark PMUS						
Blue shark		2,389	0	2,389	21.34	
Mako sharks		51	23	28	0.46	
Thresher sharks	5	21	1	20	0.19	
Oceanic whitetip	o shark	3	0	3	0.03	
Silky shark		0	0	0	0.00	
Other Sharks		1	0	1	0.01	
	Total	2,465	24	2,441	22.02	
Tuna PMUS						
Albacore		2	2	0	0.02	
Bigeye tuna		42	21	21	0.38	
Yellowfin tuna		48	47	1	0.43	
Bluefin tuna		0	0	0	0.00	
Skipjack tuna		2	2	0	0.02	
Other tunas		0	0	0	0.00	
	Total	94	72	22	0.84	
Other PMUS						
Mahimahi		312	312	0	2.79	
Moonfish		1	1	0	0.01	
Wahoo		5	5	0	0.04	
Oilfish		100	59	41	0.89	
Pomfret		1	0	1	0.01	
	Total	419	377	42	3.74	
Total PMUS		4,362	1,787	2,575	38.97	
Total Non-PMUS		1	0	1	0.01	
Total All Species		4,363	1,787	2,576	38.98	

Table 5.For the period 1 July - 30 September, 2016, Hawaii and California longline limited-entry fisheries quarterly
statistics for all fishing areas and with deep set type, including effort (number of vessels, trips, sets, and hooks
set), and for each listed species, organized by pelagic management unit species (PMUS) groups of billfish,
shark, tuna, and other, along with 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			Number of vessels active 133		
Time Period 1 July - 30 Set Types Deep sets		eptember, 2016	Number of trips (partial or completed) Number of sets Number of hooks set		369 4,193
	All Areas				11,144,647
Pelagic Management Uni	t	Number	Number	Number	CPUE
Species (PMUS)		Caught	Kept	Released	Number Caught per 1000 hooks
PMUS					
Billfish PMUS					
Blue marlin		989	979	10	0.09
Striped marlin		1,340	1,307	33	0.12
Shortbill spearfish	า	3,110	3,058	52	0.28
Swordfish		939	818	121	0.08
Other billfishes		239	235	4	0.02
	Total	6,617	6,397	220	0.59
Shark PMUS					
Blue shark		16,804	0	16,804	1.51
Mako sharks		1,160	198	962	0.10
Thresher sharks		530	18	512	0.05
Oceanic whitetip shark		140	0	140	0.01
Silky shark		42	0	42	0.00
Other Sharks		215	0	215	0.02
	Total	18,891	216	18,675	1.70
Tuna PMUS					
Albacore		1,100	1,099	1	0.10
Bigeye tuna		46,262	45,525	737	4.15
Yellowfin tuna		7,434	7,239	195	0.67
Bluefin tuna		4	4	0	0.00
Skipjack tuna		3,530	3,480	50	0.32
Other tunas		0	0	0	0.00
	Total	58,330	57,347	983	5.23
Other PMUS					
Mahimahi		8,283	8,234	49	0.74
Moonfish		9,258	9,229	29	0.83
Wahoo		3,709	3,694	15	0.33
Oilfish		4,066	3,756	310	0.36
Pomfret		11,954	11,887	67	1.07
	Total	37,270	36,800	470	3.34
Total PMUS		121,108	100,760	20,348	10.87
Total Non-PMUS		3,134	167	2,967	0.28
Total All Species		124,242	100,927	23,315	11.15