## The Hawaii - California Longline Limited-entry Fishery Quarterly Report 1 January - 31 March, 2016<sup>1</sup>

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This quarterly report for the period 1 January - 31 March, 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.

<sup>&</sup>lt;sup>1</sup>PIFSC Data Report DR-19-015. Issued 06 March 2019 https://doi.org/10.25923/p0an-1y92

Table 1.For the period 1 January - 31 March, 2016, Hawaii and California longline limited-entry fisheries quarterly<br/>statistics for all fishing areas and all fishing categories (set types), including effort (number of vessels, trips,<br/>sets, and hooks set), and for each listed species, organized by pelagic management unit species (PMUS)<br/>groups of billfish, shark, tuna, and other, along with the number of fish caught, kept, and released, and the<br/>catch per unit effort (CPUE, number per 1,000 hooks, calculated as the sum of fish caught divided by the sum<br/>of hooks set). Data Source: PIFSC Information Management System, Longline Logbook Data.

Total All Species		206,620	177,336	29,284	15.42
Total Non-PMUS		658	294	364	0.05
Total PMUS		205,962	177,042	28,920	15.37
	Total	71,362	70,076	1,286	5.32
Pomfret		25,398	25,320	78	1.90
Oilfish		9,674	8,640	1,034	0.72
Wahoo		10,466	10,425	41	0.78
Moonfish		5,124	5,088	36	0.38
Mahimahi		20,700	20,603	97	1.54
Other PMUS					
	Total	88,673	87,092	1,581	6.62
Other tunas		1	1	0	0.00
Skipjack tuna	l	10,708	10,555	153	0.80
Bluefin tuna		0	0	0	0.00
Yellowfin tuna	a	12,330	12,137	193	0.92
Bigeye tuna		62,468	61,242	1,226	4.66
Albacore		3,166	3,157	9	0.24
Tuna PMUS					
	rotar	20,704	240	20,000	1.92
Other Sharks	Total	25,754	246	25,508	1.92
Other Sharks		44 166	1	44 165	0.00
Silky shark	oup shark	241 44	0	44	0.02
Thresher sharks Oceanic whitetip shark		4,430 241	3 0	4,435 241	0.02
	rke	4,438	230	4,435	0.11
Blue shark Mako sharks		1,485	4 238	19,376 1,247	1.45 0.11
Blue shark		19,380	4	10 376	1 45
Shark PMUS					
	Total	20,173	19,628	545	1.51
Other billfishe	es	169	163	6	0.01
Swordfish		5,427	5,069	358	0.40
Shortbill spea	arfish	8,630	8,539	91	0.64
Striped marlir	า	4,435	4,386	49	0.33
Blue marlin		1,512	1,471	41	0.11
Billfish PMUS					
PMUS					
Species (PMUS)		Caught	Kept	Released	Number Caugh per 1000 hooks
Pelagic Managemen <sup>.</sup>	t Unit	Number	Number	Number	CPUE
Fishing Area	All Areas			NOOKS SEL	13,402,008
Set Types All sets			Number of Number of		5,329
Time Period 1 January - 31 March, 2		31 March, 2016		trips (partial or completed)	474
	1 January - 3				· ·

Table 2.For the period 1 January - 31 March, 2016, Hawaii longline limited-entry fishery quarterly statistics for fishing<br/>within the U.S. EEZ (Main Hawaiian Islands , Northwest Hawaiian Islands, or the Pacific Remote Islands, and<br/>with all fishing categories (set types), including effort (number of vessels, trips, sets, and hooks set), and for<br/>each listed species, organized by pelagic management unit species (PMUS) groups of billfish, shark, tuna,<br/>and other, along with the number of fish caught, kept, and released, and the catch per unit effort (CPUE,<br/>number per 1,000 hooks, calculated as the sum of fish caught divided by the sum of hooks set). Data Source:<br/>PIFSC Information Management System, Longline Logbook Data.

Report CoverageTime Period1 January - 31 March, 2016Set TypesAll setsFishing AreaInside U.S. EEZ		Number of vessels active Number of trips (partial or completed) Number of sets Number of hooks set		108 239 1,434 3,653,576
Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 hooks
PMUS				
Billfish PMUS				
Blue marlin	434	418	16	0.12
Striped marlin	1,874	1,870	4	0.51
Shortbill spearfish	2,644	2,635	9	0.72
Swordfish	293	288	5	0.08
Other billfishes	44	44	0	0.01
Total	5,289	5,255	34	1.45
Shark PMUS				
Blue shark	4,680	0	4,680	1.28
Mako sharks	348	82	266	0.10
Thresher sharks	443	2	441	0.12
Oceanic whitetip shark	96	0	96	0.03
Silky shark	7	0	7	0.00
Other Sharks	39	0	39	0.01
Total	5,613	84	5,529	1.54
Tuna PMUS				
Albacore	485	483	2	0.13
Bigeye tuna	14,178	13,859	319	3.88
Yellowfin tuna	3,560	3,518	42	0.97
Bluefin tuna	0	0	0	0.00
Skipjack tuna	2,184	2,151	33	0.60
Other tunas	0	0	0	0.00
Total	20,407	20,011	396	5.59
Other PMUS				
Mahimahi	2,960	2,950	10	0.81
Moonfish	568	567	1	0.16
Wahoo	1,568	1,557	11	0.43
Oilfish	2,543	2,223	320	0.70
Pomfret	4,339	4,320	19	1.19
Total	11,978	11,617	361	3.28
Total PMUS	43,287	36,967	6,320	11.85
Total Non-PMUS	294	204	90	0.08
Total All Species	43,581	37,171	6,410	11.93

Table 3.For the period 1 January - 31 March, 2016, Hawaii and California longline limited-entry fisheries quarterly<br/>statistics for fishing outside the U.S. EEZ and with all fishing categories (set types), including effort (number of<br/>vessels, trips, sets, and hooks set), and for each listed species, organized by pelagic management unit<br/>species (PMUS) groups of billfish, shark, tuna, and other, along with the number of fish caught, kept, and<br/>released, and the catch per unit effort (CPUE, number per 1,000 hooks, calculated as the sum of fish caught<br/>divided by the sum of hooks set). Data Source: PIFSC Information Management System, Longline Logbook<br/>Data.

Report CoverageTime Period1 JanuarySet TypesAll setsFishing AreaOutside U	y - 31 March, 2016 J.S. EEZ	Number of Number of	Number of vessels active Number of trips (partial or completed) Number of sets Number of hooks set	
Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 hooks
PMUS				
Billfish PMUS				
Blue marlin	1,078	1,053	25	0.11
Striped marlin	2,561	2,516	45	0.26
Shortbill spearfish	5,986	5,904	82	0.61
Swordfish	5,134	4,781	353	0.53
Other billfishes	125	119	6	0.01
Total	14,884	14,373	511	1.53
Shark PMUS				
Blue shark	14,700	4	14,696	1.51
Mako sharks	1,137	156	981	0.12
Thresher sharks	3,995	1	3,994	0.41
Oceanic whitetip shark	145	0	145	0.01
Silky shark	37	0	37	0.00
Other Sharks	127	1	126	0.01
Total	20,141	162	19,979	2.07
Tuna PMUS				
Albacore	2,681	2,674	7	0.28
Bigeye tuna	48,290	47,383	907	4.95
Yellowfin tuna	8,770	8,619	151	0.90
Bluefin tuna	0	0	0	0.00
Skipjack tuna	8,524	8,404	120	0.87
Other tunas	1	1	0	0.00
Total	68,266	67,081	1,185	7.00
Other PMUS				
Mahimahi	17,740	17,653	87	1.82
Moonfish	4,556	4,521	35	0.47
Wahoo	8,898	8,868	30	0.91
Oilfish	7,131	6,417	714	0.73
Pomfret	21,059	21,000	59	2.16
Total	59,384	58,459	925	6.09
Total PMUS	162,675	140,075	22,600	16.69
Total Non-PMUS	364	90	274	0.04
Total All Species	163,039	140,165	22,874	16.72

Table 4.For the period 1 January - 31 March, 2016, Hawaii and California longline limited-entry fisheries quarterly<br/>statistics for all fishing areas and with shallow set type, including effort (number of vessels, trips, sets, and<br/>hooks set), and for each listed species, organized by pelagic management unit species (PMUS) groups of<br/>billfish, shark, tuna, and other, along with the number of fish caught, kept, and released, and the catch per unit<br/>effort (CPUE, number per 1,000 hooks, calculated as the sum of fish caught divided by the sum of hooks set).<br/>Data Source: PIFSC Information Management System, Longline Logbook Data.

Report Coverage		Number of	11	
Time Period 1 Janua Set Types Shallow Fishing Area All Area		Number of vessels active Number of trips (partial or completed) Number of sets Number of hooks set		22 303 317,779
Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 hooks
PMUS				
Billfish PMUS				
Blue marlin	2	0	2	0.01
Striped marlin	43	24	19	0.14
Shortbill spearfish	59	38	21	0.19
Swordfish	4,277	3,976	301	13.46
Other billfishes	0	0	0	0.00
Tot	al 4,381	4,038	343	13.79
Shark PMUS				
Blue shark	4,437	0	4,437	13.96
Mako sharks	470	46	424	1.48
Thresher sharks	35	0	35	0.11
Oceanic whitetip shark	с О	0	0	0.00
Silky shark	0	0	0	0.00
Other Sharks	29	0	29	0.09
Tot	al 4,971	46	4,925	15.64
Tuna PMUS				
Albacore	40	38	2	0.13
Bigeye tuna	717	678	39	2.26
Yellowfin tuna	112	105	7	0.35
Bluefin tuna	0	0	0	0.00
Skipjack tuna	7	6	1	0.02
Other tunas	0	0	0	0.00
Tot	al 876	827	49	2.76
Other PMUS				
Mahimahi	369	354	15	1.16
Moonfish	120	97	23	0.38
Wahoo	4	4	0	0.01
Oilfish	159	127	32	0.50
Pomfret	9	7	2	0.03
Tot	al 661	589	72	2.08
Total PMUS	10,889	5,500	5,389	34.27
Total Non-PMUS	0	0	0	0.00
Total All Species	10,889	5,500	5,389	34.27

Table 5.For the period 1 January - 31 March, 2016, Hawaii and California longline limited-entry fisheries quarterly<br/>statistics for all fishing areas and with deep set type, including effort (number of vessels, trips, sets, and hooks<br/>set), and for each listed species, organized by pelagic management unit species (PMUS) groups of billfish,<br/>shark, tuna, and other, along with the number of fish caught, kept, and released, and the catch per unit effort<br/>(CPUE, number per 1,000 hooks, calculated as the sum of fish caught divided by the sum of hooks set). Data<br/>Source: PIFSC Information Management System, Longline Logbook Data.

Report CoverageTime Period1 January - 3Set TypesDeep setsFishing AreaAll Areas	31 March, 2016	Number of vessels active Number of trips (partial or completed) Number of sets Number of hooks set		129 452 5,026 13,084,229
Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE Number Caught per 1000 hooks
PMUS				
Billfish PMUS				
Blue marlin	1,510	1,471	39	0.12
Striped marlin	4,392	4,362	30	0.34
Shortbill spearfish	8,571	8,501	70	0.66
Swordfish	1,150	1,093	57	0.09
Other billfishes	169	163	6	0.01
Total	15,792	15,590	202	1.21
Shark PMUS				
Blue shark	14,943	4	14,939	1.14
Mako sharks	1,015	192	823	0.08
Thresher sharks	4,403	3	4,400	0.34
Oceanic whitetip shark	241	0	241	0.02
Silky shark	44	0	44	0.00
Other Sharks	137	1	136	0.01
Total	20,783	200	20,583	1.59
Tuna PMUS				
Albacore	3,126	3,119	7	0.24
Bigeye tuna	61,751	60,564	1,187	4.72
Yellowfin tuna	12,218	12,032	186	0.93
Bluefin tuna	0	0	0	0.00
Skipjack tuna	10,701	10,549	152	0.82
Other tunas	1	1	0	0.00
Total	87,797	86,265	1,532	6.71
Other PMUS				
Mahimahi	20,331	20,249	82	1.55
Moonfish	5,004	4,991	13	0.38
Wahoo	10,462	10,421	41	0.80
Oilfish	9,515	8,513	1,002	0.73
Pomfret	25,389	25,313	76	1.94
Total	70,701	69,487	1,214	5.40
Total PMUS	195,073	171,542	23,531	14.91
Total Non-PMUS	658	294	364	0.05
Total All Species	195,731	171,836	23,895	14.96