

The Hawaii-based Longline Logbook Summary Report January–December 2013¹

Pacific Islands Fisheries Science Center
Fisheries Monitoring Branch

This annual report summarizes data on fish catch and fishing effort by Hawaii-based longline vessels for calendar year 2013. Results are based on the date gear was hauled, as reported by vessel operators to the National Marine Fisheries Service in federal logbooks of daily fishing activity. The report covers all longline operations completed in 2013.

During 2013, 135 vessels were active in the Hawaii-based fleet, six more vessels than in 2012 (Table 1, Fig. 1); participation in the fishery has trended upward slightly since 2010. Longline fishers made 1,441 longline trips in 2013 (2 less than in 2012), including 1,383 using deep-set gear to target tuna (up 23 trips from 2012) and 58 using shallow-set gear to target swordfish (down 25 trips) (Table 1, Fig. 2). The Hawaii-based longline fishery deployed a record 48 million hooks in 2013, up 2.5 million hooks from 2012 (Table 1, Fig. 3). The number of hooks has been on an increasing trend, almost tripling since 1994 when the Hawaii longline limited entry program replaced the 1991-94 longline entry moratorium. A growing proportion of hooks are being set outside the U.S. Exclusive Economic Zone (EEZ) — 70% of the total hooks set in 2013. The remainder were deployed in the main Hawaiian Islands EEZ (20%), Northwestern Hawaiian Islands EEZ (7%), and in the EEZ of the Pacific Remote Island Areas (PRIA, consisting of U.S. possessions Wake Island, Jarvis Island, Howland Island, Baker Island, Kingman Reef, Palmyra Atoll, and Johnston Atoll) (3%).

In 2013, the Hawaii longline fleet caught a record 192,814 bigeye tuna (Table 1, Fig. 4), 20% more than in 2012. The trend of bigeye tuna catch has been upward, more than quadrupling since the first year of logbook monitoring in 1991. The albacore catch decreased to 15,086 fish in 2013; down 51% from 2012 and well below the record catch in 1997. The catch of yellowfin tuna also decreased by 31% in 2013 to 19,220 fish.

The 2013 swordfish catch was 14,989 fish (Table 1, Fig. 5); 16% lower than the 2012 catch. The catch of striped marlin was 12,923 fish in 2013, a 38% increase compared to 2012. The catch of blue marlin in 2013 was 4,011 fish, up 18% from 2012. The catch of swordfish has trended downward from 2007. Although striped marlin and blue marlin catches were considerably higher in 2013 than the previous year, increases of this magnitude were consistent with the observed range of inter-annual variation over the 22-year period of logbook records.

In 2013, the Hawaii longline fleet caught 63,895 sharks and kept just 1% of them (Table 1, Fig. 6). Blue shark comprised 82% of the total shark catch (52,155 fish). The fleet also caught 3,729 mako sharks and a 6,550 thresher sharks. Catches of mako and thresher sharks have trended upward, whereas those of blue shark have been relatively steady during the last eleven years (Fig. 6).

¹ PIFSC Data Report DR-14-016
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In 2013, the Hawaii longline catch of other key pelagic species included 80,357 mahimahi, record numbers of pomfret (78,719 fish) and moonfish (23,417 fish) and 33,556 oilfish, and 14,266 wahoo (Table 1, Fig. 7). Catches of mahimahi, moonfish, pomfrets, and oilfish (not shown in graph) have trended higher while the catches ono have remained relatively stable.

The longline logbook statistics reported above refer to all fishing areas combined. Summary catch and effort for 2013 were also compiled by several geographical sub-areas including: the MHI EEZ; the NWHI EEZ; the PRIA EEZ; the combined EEZ of MHI, NWHI and PRIA; and waters outside the U.S. EEZ. These statistics are presented in Tables 2-6. Summary statistics for the entire fishing area in 2013 are also presented for each distinct trip type: swordfish-targeted trips using shallow-set gear (Table 7) and tuna-targeted trips deploying deep-set gear (Table 8).

This report is available in both PDF and HTML formats on the PIFSC website at <http://www.pifsc.noaa.gov/fmb/reports.php>. The website site also provides quarterly and yearly charts and an archive of quarterly and annual summary tables of fish catch and fishing effort from 1991 to the present. The statistics in the online graphs and archived tables are updated periodically as new records are added to the database and corrections are made.

Table 1. Annual summary report of fishing effort and catch statistics for U.S. longline vessels landing in Hawaii as derived for NMFS Western Pacific Daily Longline Fishing Log records. [PIFSC Information Management System, Longline Logbook Data, 9/12/2014 7:38:00AM].

Report Coverage		Number of vessels active	
Time Period	2013		135
Fishing Area	All Areas	Number of trips	1,441
Trip Types	All Trip Types	Number of sets	19,734
		Number of hooks set	47,979,451

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	4,011	3,977	34	0.08
Striped marlin	12,923	12,823	100	0.27
Shortbill spearfish	15,034	14,962	72	0.31
Swordfish	14,989	13,492	1,497	0.31
Other billfishes	467	453	14	0.01
Total	47,424	45,707	1,717	0.99
Sharks				
Blue shark	52,155	22	52,133	1.09
Mako sharks	3,729	582	3,147	0.08
Thresher sharks	6,550	72	6,478	0.14
Oceanic whitetip shark	487	3	484	0.01
Silky shark	271	1	270	0.01
Other sharks	703	3	700	0.01
Total	63,895	683	63,212	1.33
Tunas				
Albacore	15,086	14,934	152	0.31
Bigeye tuna	192,814	189,594	3,220	4.02
Yellowfin tuna	19,220	19,025	195	0.40
Bluefin tuna	7	7	0	0.00
Skipjack tuna	32,183	31,768	415	0.67
Other tunas	20	6	14	0.00
Total	259,330	255,334	3,996	5.41
Other PMUS				
Mahimahi	80,357	79,656	701	1.67
Moonfish	23,417	23,229	188	0.49
Wahoo	14,266	14,208	58	0.30
Oilfish	33,566	32,649	917	0.70
Pomfret	78,719	78,263	456	1.64
Total	230,325	228,005	2,320	4.80
Total PMUS	600,974	529,729	71,245	12.53
Total Non-PMUS	5,252	1,185	4,067	0.11
Total All Species	606,226	530,914	75,312	12.64

Table 2. Annual summary report of fishing effort and catch statistics for U.S. longline vessels landing in Hawaii as derived for NMFS Western Pacific Daily Longline Fishing Log records. [PIFSC Information Management System, Longline Logbook Data, 9/12/2014 7:38:00AM].

Report Coverage		Number of vessels active		132
Time Period	2013	Number of trips		637
Fishing Area	Main Hawaiian Islands EEZ	Number of sets		3,960
Trip Types	All Trip Types	Number of hooks set		9,642,200

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	889	873	16	0.09
Striped marlin	3,865	3,820	45	0.40
Shortbill spearfish	3,769	3,752	17	0.39
Swordfish	905	673	232	0.09
Other billfishes	134	131	3	0.01
Total	9,562	9,249	313	0.99
Sharks				
Blue shark	12,415	21	12,394	1.29
Mako sharks	502	129	373	0.05
Thresher sharks	667	27	640	0.07
Oceanic whitetip shark	116	2	114	0.01
Silky shark	16	1	15	0.00
Other sharks	100	1	99	0.01
Total	13,816	181	13,635	1.43
Tunas				
Albacore	1,590	1,583	7	0.16
Bigeye tuna	34,892	34,364	528	3.62
Yellowfin tuna	5,391	5,318	73	0.56
Bluefin tuna	0	0	0	0.00
Skipjack tuna	7,496	7,428	68	0.78
Other tunas	5	5	0	0.00
Total	49,374	48,698	676	5.12
Other PMUS				
Mahimahi	13,587	13,511	76	1.41
Moonfish	1,983	1,975	8	0.21
Wahoo	2,213	2,204	9	0.23
Oilfish	7,965	7,788	177	0.83
Pomfret	8,410	8,323	87	0.87
Total	34,158	33,801	357	3.54
Total PMUS	106,910	91,929	14,981	11.09
Total Non-PMUS	1,867	733	1,134	0.19
Total All Species	108,777	92,662	16,115	11.28

Table 3. Annual summary report of fishing effort and catch statistics for U.S. longline vessels landing in Hawaii as derived for NMFS Western Pacific Daily Longline Fishing Log records. [PIFSC Information Management System, Longline Logbook Data, 9/12/2014 7:38:00AM].

Report Coverage		Number of vessels active		95
Time Period	2013	Number of trips		204
Fishing Area	Northwestern Hawaiian Islands EEZ	Number of sets		1,427
Trip Types	All Trip Types	Number of hooks set		3,377,447

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	335	334	1	0.10
Striped marlin	2,069	2,047	22	0.61
Shortbill spearfish	1,696	1,685	11	0.50
Swordfish	1,526	1,423	103	0.45
Other billfishes	61	61	0	0.02
Total	5,687	5,550	137	1.68
Sharks				
Blue shark	7,201	0	7,201	2.13
Mako sharks	281	42	239	0.08
Thresher sharks	304	7	297	0.09
Oceanic whitetip shark	48	0	48	0.01
Silky shark	4	0	4	0.00
Other sharks	39	0	39	0.01
Total	7,877	49	7,828	2.33
Tunas				
Albacore	1,898	1,891	7	0.56
Bigeye tuna	14,247	13,785	462	4.22
Yellowfin tuna	2,394	2,341	53	0.71
Bluefin tuna	0	0	0	0.00
Skipjack tuna	2,979	2,955	24	0.88
Other tunas	0	0	0	0.00
Total	21,518	20,972	546	6.37
Other PMUS				
Mahimahi	4,761	4,725	36	1.41
Moonfish	976	976	0	0.29
Wahoo	705	701	4	0.21
Oilfish	2,688	2,640	48	0.80
Pomfret	2,595	2,565	30	0.77
Total	11,725	11,607	118	3.47
Total PMUS	46,807	38,178	8,629	13.86
Total Non-PMUS	138	47	91	0.04
Total All Species	46,945	38,225	8,720	13.90

Table 4. Annual summary report of fishing effort and catch statistics for U.S. longline vessels landing in Hawaii as derived for NMFS Western Pacific Daily Longline Fishing Log records. [PIFSC Information Management System, Longline Logbook Data, 9/12/2014 7:38:00AM].

Report Coverage		Number of vessels active		63
Time Period	2013	Number of trips		93
Fishing Area	Pacific Remote Island Areas (PRIA) EEZ	Number of sets		480
Trip Types	All Trip Types	Number of hooks set		1,217,002

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	203	202	1	0.17
Striped marlin	174	174	0	0.14
Shortbill spearfish	493	489	4	0.41
Swordfish	113	109	4	0.09
Other billfishes	33	33	0	0.03
Total	1,016	1,007	9	0.83
Sharks				
Blue shark	1,296	0	1,296	1.06
Mako sharks	82	9	73	0.07
Thresher sharks	248	1	247	0.20
Oceanic whitetip shark	159	0	159	0.13
Silky shark	226	0	226	0.19
Other sharks	317	0	317	0.26
Total	2,328	10	2,318	1.91
Tunas				
Albacore	1,478	1,467	11	1.21
Bigeye tuna	4,548	4,459	89	3.74
Yellowfin tuna	958	933	25	0.79
Bluefin tuna	0	0	0	0.00
Skipjack tuna	1,153	1,124	29	0.95
Other tunas	0	0	0	0.00
Total	8,137	7,983	154	6.69
Other PMUS				
Mahimahi	1,001	999	2	0.82
Moonfish	120	118	2	0.10
Wahoo	800	790	10	0.66
Oilfish	865	852	13	0.71
Pomfret	2,569	2,526	43	2.11
Total	5,355	5,285	70	4.40
Total PMUS	16,836	14,285	2,551	13.83
Total Non-PMUS	135	10	125	0.11
Total All Species	16,971	14,295	2,676	13.94

Table 5. Annual summary report of fishing effort and catch statistics for U.S. longline vessels landing in Hawaii as derived for NMFS Western Pacific Daily Longline Fishing Log records. [PIFSC Information Management System, Longline Logbook Data, 9/12/2014 7:38:00AM].

Report Coverage		Number of vessels active		135	
Time Period	2013	Number of trips		793	
Fishing Area	Hawaiian Islands EEZ + PRIA EEZ	Number of sets		5,867	
Trip Types	All Trip Types	Number of hooks set		14,236,649	

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	1,427	1,409	18	0.10
Striped marlin	6,108	6,041	67	0.43
Shortbill spearfish	5,958	5,926	32	0.42
Swordfish	2,544	2,205	339	0.18
Other billfishes	228	225	3	0.02
Total	16,265	15,806	459	1.14
Sharks				
Blue shark	20,912	21	20,891	1.47
Mako sharks	865	180	685	0.06
Thresher sharks	1,219	35	1,184	0.09
Oceanic whitetip shark	323	2	321	0.02
Silky shark	246	1	245	0.02
Other sharks	456	1	455	0.03
Total	24,021	240	23,781	1.69
Tunas				
Albacore	4,966	4,941	25	0.35
Bigeye tuna	53,687	52,608	1,079	3.77
Yellowfin tuna	8,743	8,592	151	0.61
Bluefin tuna	0	0	0	0.00
Skipjack tuna	11,628	11,507	121	0.82
Other tunas	5	5	0	0.00
Total	79,029	77,653	1,376	5.55
Other PMUS				
Mahimahi	19,349	19,235	114	1.36
Moonfish	3,079	3,069	10	0.22
Wahoo	3,718	3,695	23	0.26
Oilfish	11,518	11,280	238	0.81
Pomfret	13,574	13,414	160	0.95
Total	51,238	50,693	545	3.60
Total PMUS	170,553	144,392	26,161	11.98
Total Non-PMUS	2,140	790	1,350	0.15
Total All Species	172,693	145,182	27,511	12.13

Table 6. Annual summary report of fishing effort and catch statistics for U.S. longline vessels landing in Hawaii as derived for NMFS Western Pacific Daily Longline Fishing Log records. [PIFSC Information Management System, Longline Logbook Data, 9/12/2014 7:38:00AM].

Report Coverage		Number of vessels active	
Time Period	2013		132
Fishing Area	Outside U.S. EEZ	Number of trips	1,216
Trip Types	All Trip Types	Number of sets	13,867
		Number of hooks set	33,742,802

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	2,584	2,568	16	0.08
Striped marlin	6,815	6,782	33	0.20
Shortbill spearfish	9,076	9,036	40	0.27
Swordfish	12,445	11,287	1,158	0.37
Other billfishes	239	228	11	0.01
Total	31,159	29,901	1,258	0.92
Sharks				
Blue shark	31,243	1	31,242	0.93
Mako sharks	2,864	402	2,462	0.08
Thresher sharks	5,331	37	5,294	0.16
Oceanic whitetip shark	164	1	163	0.00
Silky shark	25	0	25	0.00
Other sharks	247	2	245	0.01
Total	39,874	443	39,431	1.18
Tunas				
Albacore	10,120	9,993	127	0.30
Bigeye tuna	139,127	136,986	2,141	4.12
Yellowfin tuna	10,477	10,433	44	0.31
Bluefin tuna	7	7	0	0.00
Skipjack tuna	20,555	20,261	294	0.61
Other tunas	15	1	14	0.00
Total	180,301	177,681	2,620	5.34
Other PMUS				
Mahimahi	61,008	60,421	587	1.81
Moonfish	20,338	20,160	178	0.60
Wahoo	10,548	10,513	35	0.31
Oilfish	22,048	21,369	679	0.65
Pomfret	65,145	64,849	296	1.93
Total	179,087	177,312	1,775	5.31
Total PMUS	430,421	385,337	45,084	12.76
Total Non-PMUS	3,112	395	2,717	0.09
Total All Species	433,533	385,732	47,801	12.85

Table 7. Annual summary report of fishing effort and catch statistics for U.S. longline vessels landing in Hawaii as derived for NMFS Western Pacific Daily Longline Fishing Log records. [PIFSC Information Management System, Longline Logbook Data, 9/12/2014 7:38:00AM].

Report Coverage		Number of vessels active		15
Time Period	2013	Number of trips		58
Fishing Area	All Areas	Number of sets		962
Trip Types	Swordfish Targeted Trips	Number of hooks set		1,060,341

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	63	62	1	0.06
Striped marlin	390	378	12	0.37
Shortbill spearfish	116	107	9	0.11
Swordfish	10,729	9,795	934	10.12
Other billfishes	8	8	0	0.01
Total	11,306	10,350	956	10.66
Sharks				
Blue shark	5,149	0	5,149	4.86
Mako sharks	1,033	86	947	0.97
Thresher sharks	50	0	50	0.05
Oceanic whitetip shark	29	0	29	0.03
Silky shark	0	0	0	0.00
Other sharks	18	0	18	0.02
Total	6,279	86	6,193	5.92
Tunas				
Albacore	561	469	92	0.53
Bigeye tuna	452	419	33	0.43
Yellowfin tuna	202	202	0	0.19
Bluefin tuna	3	3	0	0.00
Skipjack tuna	17	16	1	0.02
Other tunas	0	0	0	0.00
Total	1,235	1,109	126	1.16
Other PMUS				
Mahimahi	3,674	3,518	156	3.46
Moonfish	241	147	94	0.23
Wahoo	30	23	7	0.03
Oilfish	1,083	700	383	1.02
Pomfret	132	87	45	0.12
Total	5,160	4,475	685	4.87
Total PMUS	23,980	16,020	7,960	22.62
Total Non-PMUS	16	2	14	0.02
Total All Species	23,996	16,022	7,974	22.63

Table 8. Annual summary report of fishing effort and catch statistics for U.S. longline vessels landing in Hawaii as derived for NMFS Western Pacific Daily Longline Fishing Log records. [PIFSC Information Management System, Longline Logbook Data, 9/12/2014 7:38:00AM].

Report Coverage		Number of vessels active	
Time Period	2013		135
Fishing Area	All Areas	Number of trips	1,383
Trip Types	Tuna Targeted Trips	Number of sets	18,772
		Number of hooks set	46,919,110

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	3,948	3,915	33	0.08
Striped marlin	12,533	12,445	88	0.27
Shortbill spearfish	14,918	14,855	63	0.32
Swordfish	4,260	3,697	563	0.09
Other billfishes	459	445	14	0.01
Total	36,118	35,357	761	0.77
Sharks				
Blue shark	47,006	22	46,984	1.00
Mako sharks	2,696	496	2,200	0.06
Thresher sharks	6,500	72	6,428	0.14
Oceanic whitetip shark	458	3	455	0.01
Silky shark	271	1	270	0.01
Other sharks	685	3	682	0.01
Total	57,616	597	57,019	1.23
Tunas				
Albacore	14,525	14,465	60	0.31
Bigeye tuna	192,362	189,175	3,187	4.10
Yellowfin tuna	19,018	18,823	195	0.41
Bluefin tuna	4	4	0	0.00
Skipjack tuna	32,166	31,752	414	0.69
Other tunas	20	6	14	0.00
Total	258,095	254,225	3,870	5.50
Other PMUS				
Mahimahi	76,683	76,138	545	1.63
Moonfish	23,176	23,082	94	0.49
Wahoo	14,236	14,185	51	0.30
Oilfish	32,483	31,949	534	0.69
Pomfret	78,587	78,176	411	1.67
Total	225,165	223,530	1,635	4.80
Total PMUS	576,994	513,709	63,285	12.30
Total Non-PMUS	5,236	1,183	4,053	0.11
Total All Species	582,230	514,892	67,338	12.41

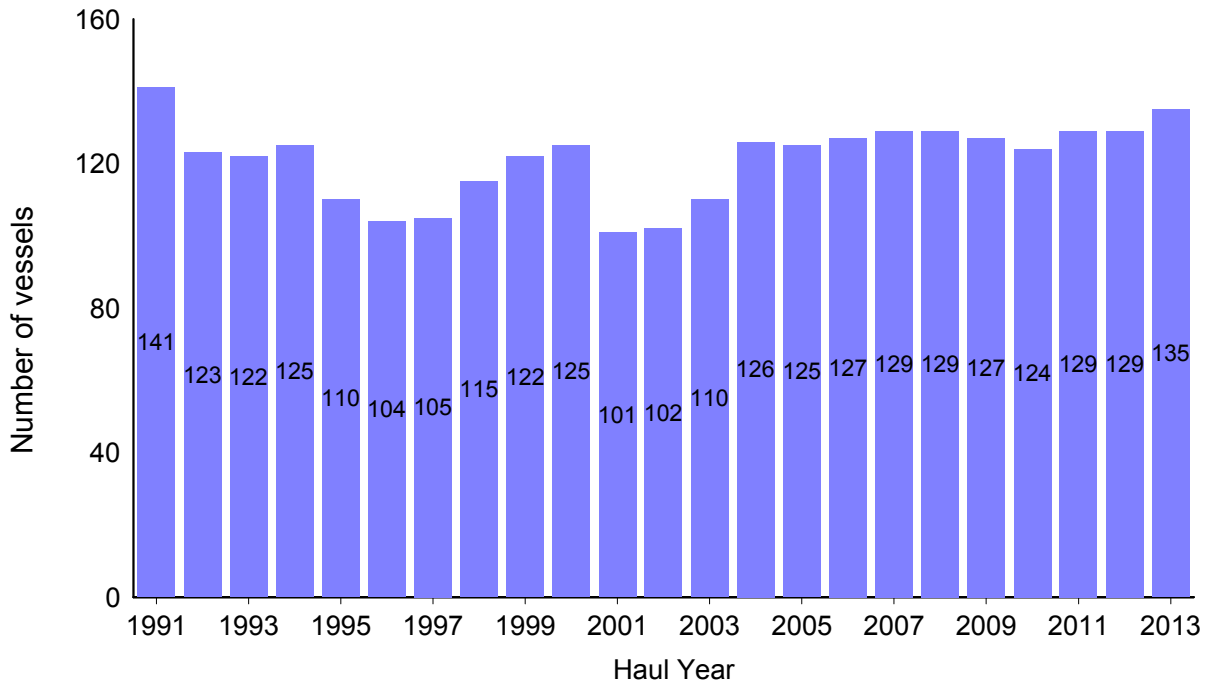


Figure 1. Number of active longline vessels based in Hawaii, 1991-2013. [PIFSC IMS, Longline Logbook Data, 10/23/2014 3:21:49PM].

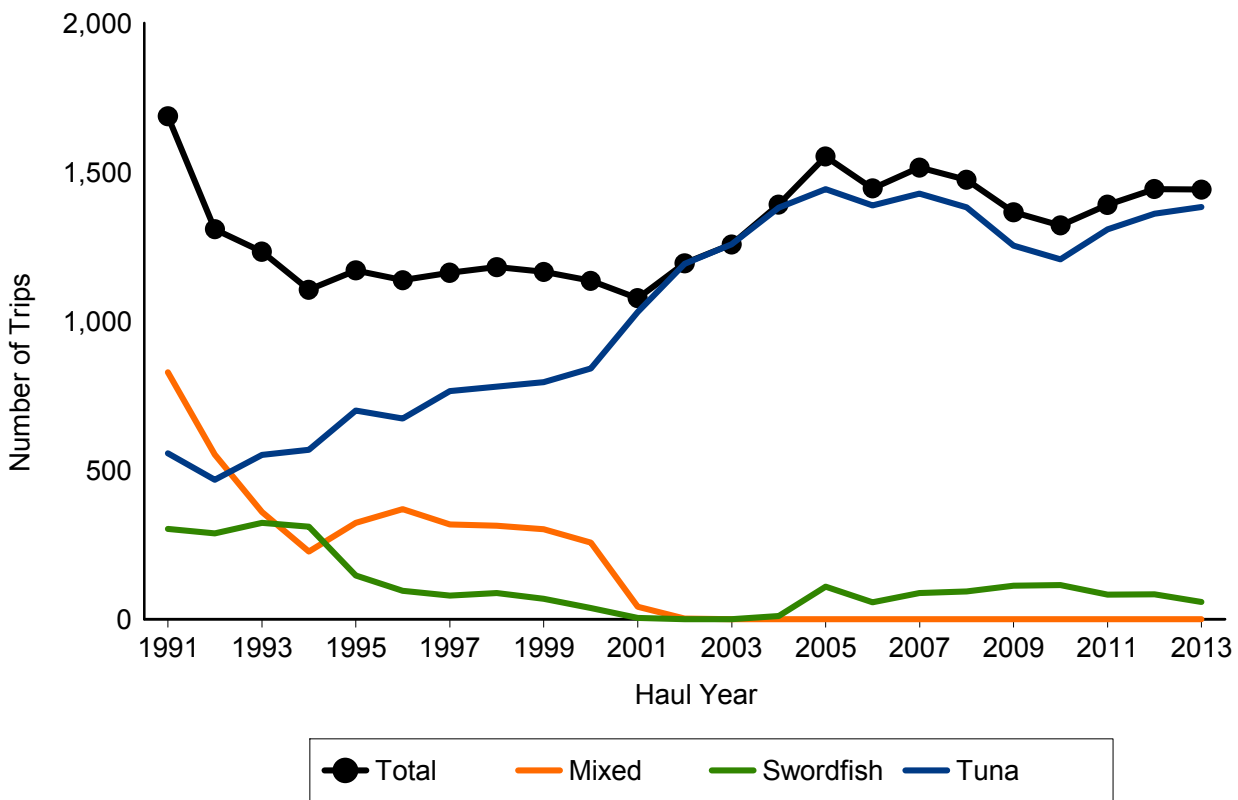


Figure 2. Number of fishing trips by longline vessels based in Hawaii, by trip type, 1991-2013. [PIFSC IMS, Longline Logbook Data, 10/23/2014 3:21:49PM].

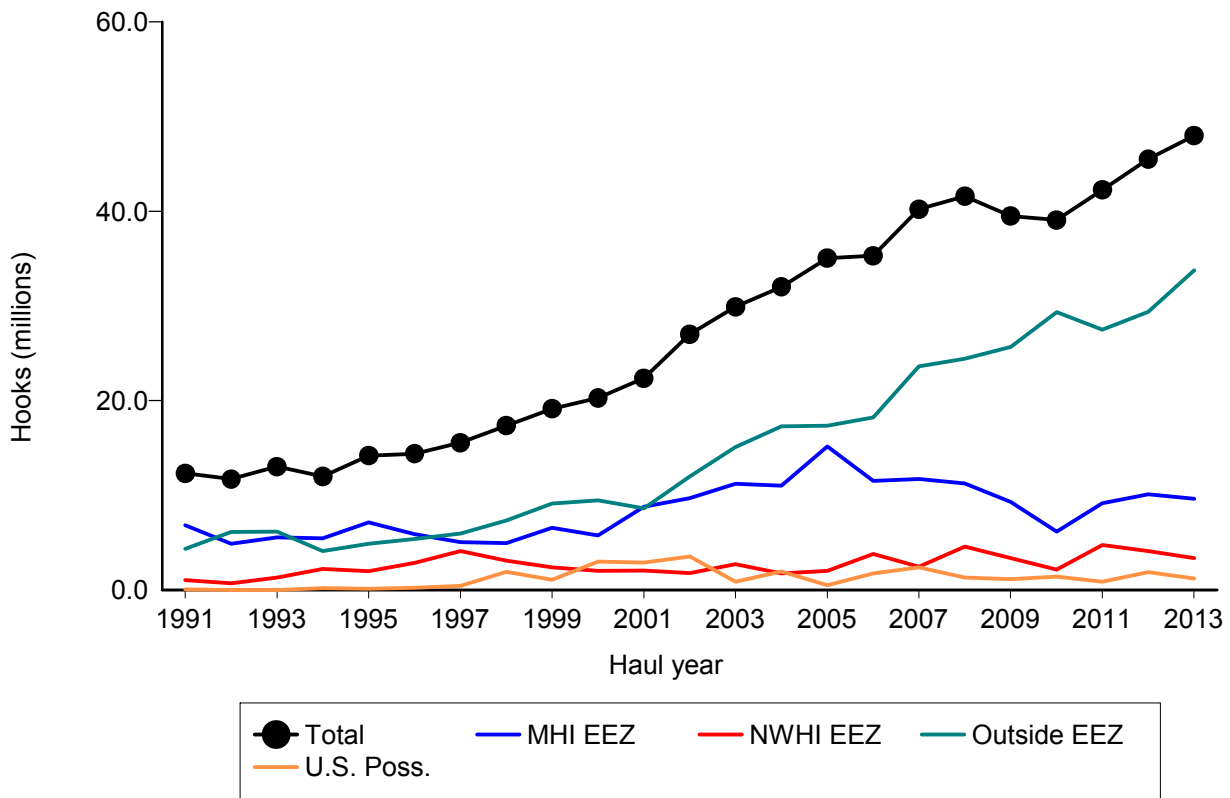


Figure 3. Number of hooks set by longline vessels based in Hawaii, by fishing area, 1991-2013. [PIFSC IMS, Longline Logbook Data, 10/23/2014 3:22:16PM]

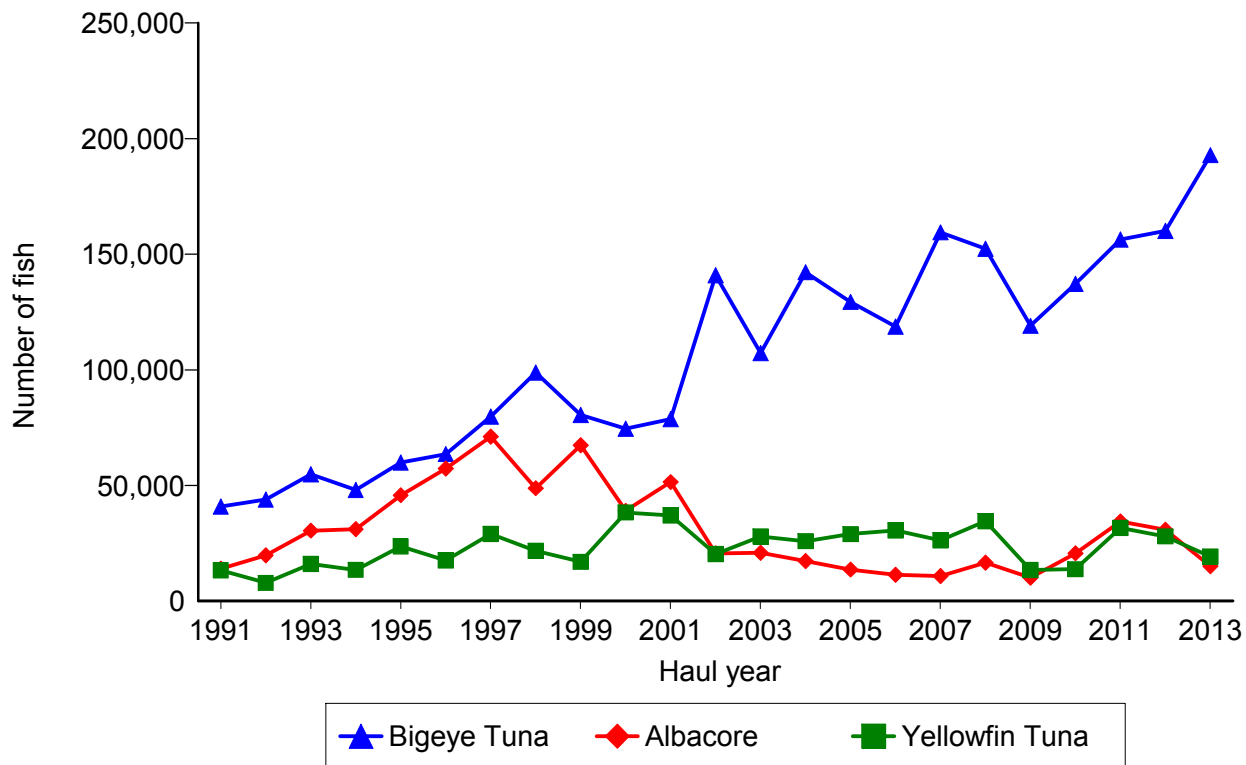


Figure 4. Annual catch of albacore, bigeye tuna, and yellowfin tuna by longline vessels based in Hawaii, 1991-2013 [10/23/2014 3:22:41PM]

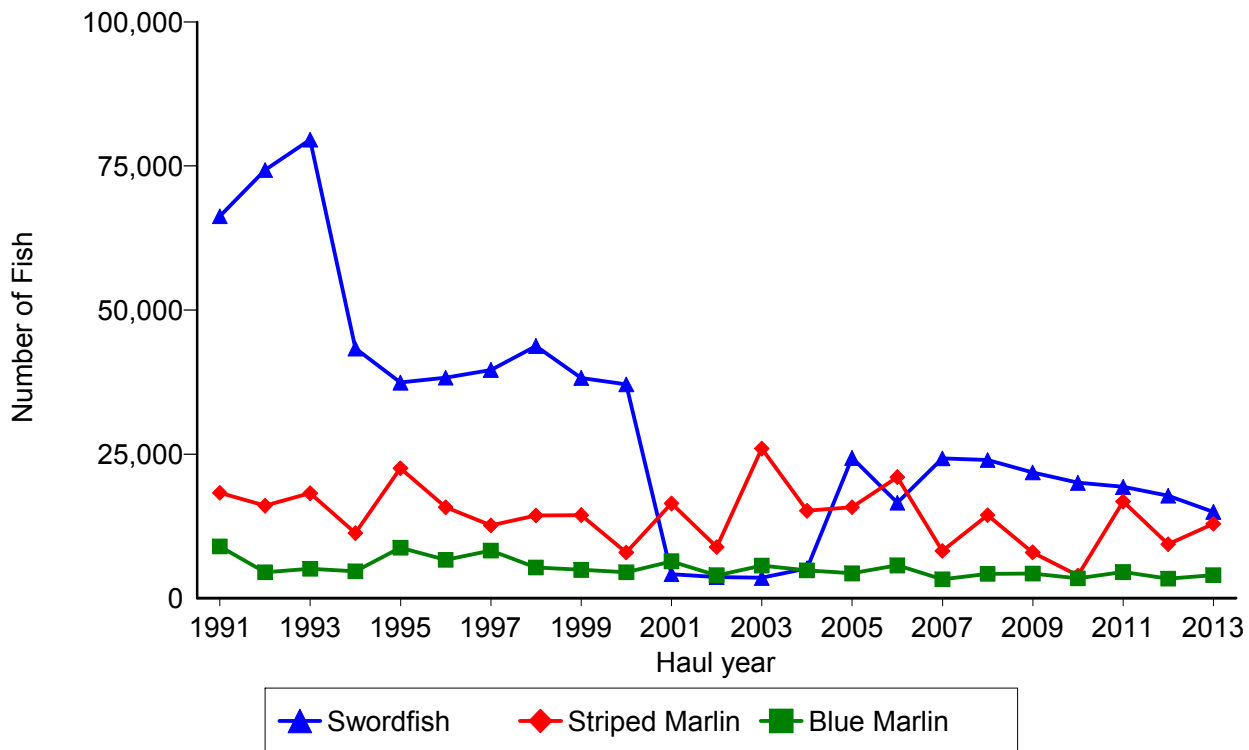


Figure 5. Annual catch of blue marlin, striped marlin, and swordfish by longline vessels based in Hawaii, 1991-2013. [PIFSC IMS, Longline Logbook Data, 10/23/2014 3:22:41PM]

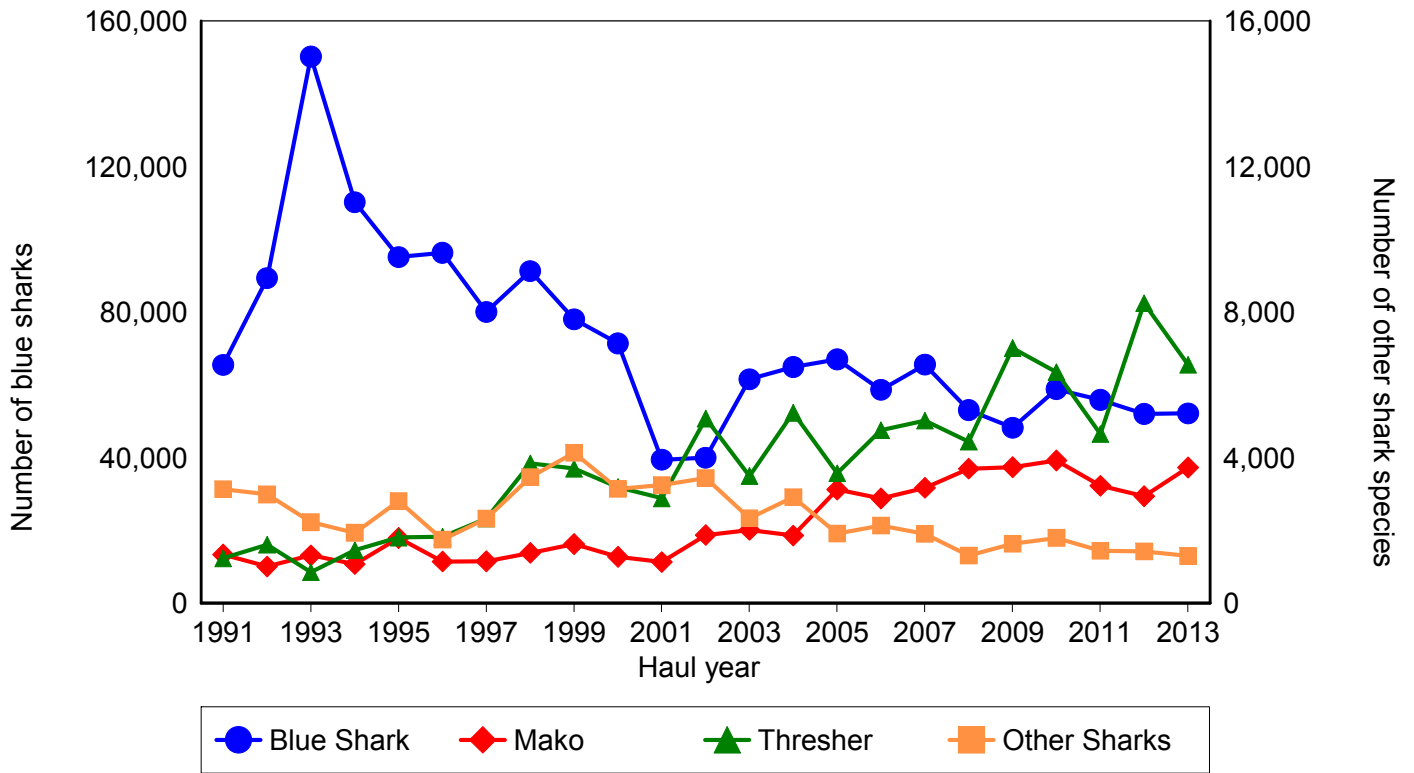


Figure 6. Annual catch of blue shark, mako shark, thresher shark, and other sharks by longline vessels based in Hawaii, 1991-2013. [PIFSC IMS, Longline Logbook Data, 10/23/2014 3:22:41PM]

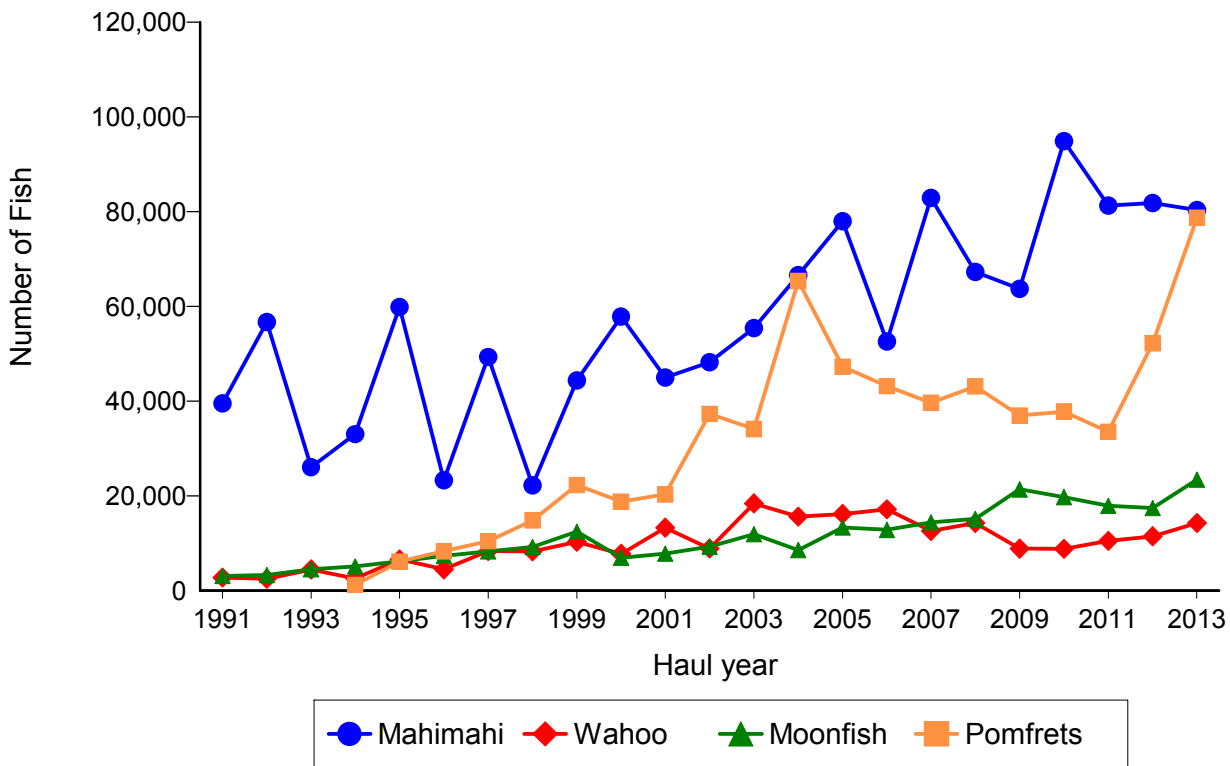


Figure 7. Annual catch of mahimahi, moonfish, pomfret, and wahoo by longline vessels based in Hawaii, 1991-2013. [PIFSC IMS, Longline Logbook Data, 10/23/2014 3:22:41PM]