

The Hawaii-based Longline Logbook Summary Report January–December 2012¹

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 2012. 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 longline operations for fishing trips completed in 2012 and most, but not all, data from trips that began late in the fourth quarter of 2012 and continued into the first quarter of 2013. Therefore, the 2012 summary statistics reported here are preliminary.

During 2012, 129 vessels were active in the Hawaii-based fleet, the same number of vessels as in 2011 (Table 1, Fig. 1); participation in the fishery has been nearly constant over the past nine years. Longline fishers made 1,437 longline trips in 2012 (47 more than in 2011), including 1,356 using deep-set gear to target tuna (up 48 trips from 2011) and 81 using shallow-set gear to target swordfish (down 1 trip) (Table 1, Fig. 2). The Hawaii-based longline fishery deployed a record 45.4 million hooks in 2012, up 3.1 million hooks from 2011 (Table 1, Fig. 3). The number of hooks has increased every year since 1994, except in 2009 and 2010. A growing proportion of hooks are being set outside the U.S. Exclusive Economic Zone (EEZ) — 65% of the total hooks set in 2012. The remainder were deployed in the main Hawaiian Islands EEZ (22%), Northwestern Hawaiian Islands EEZ (9%), or 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) (4%).

In 2012, the Hawaii longline fleet caught a record 159,787 bigeye tuna (Table 1, Fig. 4), 2% more than in 2011. The trend of bigeye tuna catch has been generally upward since the first year of logbook monitoring in 1991. The albacore catch decreased to 30,752 fish in 2012, well below the record catch in 1997 but higher than the catches during 2002–2010. The catch of yellowfin tuna also decreased by 12% in 2012 to 27,955 fish.

The 2012 swordfish catch was 17,686 fish (Table 1, Fig. 5). This was 8% lower than the swordfish catch in 2011. The catch of striped marlin was 9,343 fish in 2012, a 44% decrease compared to 2011. The catch of blue marlin in 2012 was 3,391 fish, down 25% from 2011. The catch of swordfish has been declining gradually for the past five years. Although striped marlin and blue marlin catches were substantially lower in 2012, changes of this magnitude are consistent with the observed range of interannual variation over the 21-year period of logbook records.

In 2012, the Hawaii longline fleet caught 64,481 sharks and kept just 2% of them (Table 1, Fig. 6). Blue shark comprised 80% of the total shark catch (51,856 fish). The fleet also caught 2,918 mako sharks and a record 8,205 thresher sharks. Over the last 7 years, catches of

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thresher sharks have trended upward whereas those of mako shark increased and then declined. Catches of blue shark declined gradually over the same period (Fig. 6).

In 2012, the Hawaii longline catch of other key pelagic species included 81,786 mahimahi, 52,134 pomfret, 35,013 oilfish, 17,383 moonfish, and 11,445 wahoo (Table 1, Fig. 7). Catches of mahimahi, moonfish, pomfrets, and oilfish (not shown in graph) have trended higher while the catch of wahoo has remained relatively stable.

The longline logbook statistics reported above refer to all fishing areas combined. Summary catch and effort for 2012 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 2012 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 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, 2/13/2013 2:06:21PM].

Report Coverage		Number of vessels active		
Time Period	2012	129		
Fishing Area	All Areas	Number of trips 1,437		
Trip Types	All Trip Types	Number of sets 19,424		
		Number of hooks set 45,419,015		

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	3,391	3,370	21	0.07
Striped marlin	9,343	9,276	67	0.21
Shortbill spearfish	11,423	11,349	74	0.25
Swordfish	17,686	16,190	1,496	0.39
Other billfishes	381	372	9	0.01
Total	42,224	40,557	1,667	0.93
Sharks				
Blue shark	51,856	413	51,443	1.14
Mako sharks	2,918	755	2,163	0.06
Thresher sharks	8,205	172	8,033	0.18
Oceanic whitetip shark	681	18	663	0.01
Silky shark	253	0	253	0.01
Other sharks	568	12	556	0.01
Total	64,481	1,370	63,111	1.42
Tunas				
Albacore	30,752	30,560	192	0.68
Bigeye tuna	159,787	157,502	2,285	3.52
Yellowfin tuna	27,955	27,468	487	0.62
Bluefin tuna	27	26	1	0.00
Skipjack tuna	35,205	33,893	1,312	0.78
Other tunas	7	7	0	0.00
Total	253,733	249,456	4,277	5.59
Other PMUS				
Mahimahi	81,786	80,890	896	1.80
Moonfish	17,383	17,280	103	0.38
Wahoo	11,445	11,406	39	0.25
Oilfish	35,013	34,442	571	0.77
Pomfret	52,134	51,791	343	1.15
Total	197,761	195,809	1,952	4.35
Total PMUS	558,199	487,192	71,007	12.29
Total Non-PMUS	4,060	1,085	2,975	0.09
Total All Species	562,259	488,277	73,982	12.38

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, 2/13/2013 2:06:21PM].

Report Coverage		Number of vessels active	
Time Period	2012		128
Fishing Area	Main Hawaiian Islands EEZ	Number of trips	711
Trip Types	All Trip Types	Number of sets	4,334
		Number of hooks set	10,072,448

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	556	550	6	0.06
Striped marlin	2,635	2,624	11	0.26
Shortbill spearfish	2,613	2,591	22	0.26
Swordfish	907	793	114	0.09
Other billfishes	66	59	7	0.01
Total	6,777	6,617	160	0.67
Sharks				
Blue shark	11,688	207	11,481	1.16
Mako sharks	552	183	369	0.05
Thresher sharks	719	48	671	0.07
Oceanic whitetip shark	79	5	74	0.01
Silky shark	8	0	8	0.00
Other sharks	96	1	95	0.01
Total	13,142	444	12,698	1.30
Tunas				
Albacore	2,573	2,557	16	0.26
Bigeye tuna	34,930	34,341	589	3.47
Yellowfin tuna	7,133	7,010	123	0.71
Bluefin tuna	0	0	0	0.00
Skipjack tuna	8,460	8,289	171	0.84
Other tunas	0	0	0	0.00
Total	53,096	52,197	899	5.27
Other PMUS				
Mahimahi	12,828	12,689	139	1.27
Moonfish	1,939	1,926	13	0.19
Wahoo	1,555	1,548	7	0.15
Oilfish	7,899	7,758	141	0.78
Pomfret	8,835	8,741	94	0.88
Total	33,056	32,662	394	3.28
Total PMUS	106,071	91,920	14,151	10.53
Total Non-PMUS	1,152	659	493	0.11
Total All Species	107,223	92,579	14,644	10.65

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, 2/13/2013 2:06:21PM].

Report Coverage		Number of vessels active	
Time Period	2012		113
Fishing Area	Northwestern Hawaiian Islands EEZ	Number of trips	281
Trip Types	All Trip Types	Number of sets	1,771
		Number of hooks set	4,100,237

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	270	266	4	0.07
Striped marlin	1,553	1,537	16	0.38
Shortbill spearfish	1,060	1,053	7	0.26
Swordfish	2,259	1,951	308	0.55
Other billfishes	28	28	0	0.01
Total	5,170	4,835	335	1.26
Sharks				
Blue shark	8,247	39	8,208	2.01
Mako sharks	233	68	165	0.06
Thresher sharks	285	15	270	0.07
Oceanic whitetip shark	56	1	55	0.01
Silky shark	3	0	3	0.00
Other sharks	45	2	43	0.01
Total	8,869	125	8,744	2.16
Tunas				
Albacore	3,995	3,978	17	0.97
Bigeye tuna	13,930	13,591	339	3.40
Yellowfin tuna	3,553	3,468	85	0.87
Bluefin tuna	23	23	0	0.01
Skipjack tuna	6,683	6,314	369	1.63
Other tunas	2	2	0	0.00
Total	28,186	27,376	810	6.87
Other PMUS				
Mahimahi	4,206	4,179	27	1.03
Moonfish	1,123	1,120	3	0.27
Wahoo	670	666	4	0.16
Oilfish	3,850	3,797	53	0.94
Pomfret	3,263	3,235	28	0.80
Total	13,112	12,997	115	3.20
Total PMUS	55,337	45,333	10,004	13.50
Total Non-PMUS	71	43	28	0.02
Total All Species	55,408	45,376	10,032	13.51

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, 2/13/2013 2:06:21PM].

Report Coverage		Number of vessels active		77
Time Period	2012	Number of trips		130
Fishing Area	Pacific Remote Island Areas (PRIA) EEZ	Number of sets		766
Trip Types	All Trip Types	Number of hooks set		1,896,063

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	233	233	0	0.12
Striped marlin	288	286	2	0.15
Shortbill spearfish	614	613	1	0.32
Swordfish	192	182	10	0.10
Other billfishes	38	38	0	0.02
Total	1,365	1,352	13	0.72
Sharks				
Blue shark	1,837	11	1,826	0.97
Mako sharks	103	23	80	0.05
Thresher sharks	600	4	596	0.32
Oceanic whitetip shark	311	2	309	0.16
Silky shark	226	0	226	0.12
Other sharks	152	0	152	0.08
Total	3,229	40	3,189	1.70
Tunas				
Albacore	3,138	3,135	3	1.66
Bigeye tuna	6,475	6,431	44	3.41
Yellowfin tuna	5,063	4,955	108	2.67
Bluefin tuna	0	0	0	0.00
Skipjack tuna	2,045	1,811	234	1.08
Other tunas	0	0	0	0.00
Total	16,721	16,332	389	8.82
Other PMUS				
Mahimahi	1,987	1,984	3	1.05
Moonfish	235	235	0	0.12
Wahoo	1,189	1,188	1	0.63
Oilfish	1,402	1,394	8	0.74
Pomfret	2,780	2,778	2	1.47
Total	7,593	7,579	14	4.00
Total PMUS	28,908	25,303	3,605	15.25
Total Non-PMUS	283	17	266	0.15
Total All Species	29,191	25,320	3,871	15.40

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, 2/13/2013 2:06:21PM].

Report Coverage		Number of vessels active		128	
Time Period	2012	Number of trips		901	
Fishing Area	Hawaiian Islands EEZ + PRIA EEZ	Number of sets		6,871	
Trip Types	All Trip Types	Number of hooks set		16,068,748	

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	1,059	1,049	10	0.07
Striped marlin	4,476	4,447	29	0.28
Shortbill spearfish	4,287	4,257	30	0.27
Swordfish	3,358	2,926	432	0.21
Other billfishes	132	125	7	0.01
Total	13,312	12,804	508	0.83
Sharks				
Blue shark	21,772	257	21,515	1.35
Mako sharks	888	274	614	0.06
Thresher sharks	1,604	67	1,537	0.10
Oceanic whitetip shark	446	8	438	0.03
Silky shark	237	0	237	0.01
Other sharks	293	3	290	0.02
Total	25,240	609	24,631	1.57
Tunas				
Albacore	9,706	9,670	36	0.60
Bigeye tuna	55,335	54,363	972	3.44
Yellowfin tuna	15,749	15,433	316	0.98
Bluefin tuna	23	23	0	0.00
Skipjack tuna	17,188	16,414	774	1.07
Other tunas	2	2	0	0.00
Total	98,003	95,905	2,098	6.10
Other PMUS				
Mahimahi	19,021	18,852	169	1.18
Moonfish	3,297	3,281	16	0.21
Wahoo	3,414	3,402	12	0.21
Oilfish	13,151	12,949	202	0.82
Pomfret	14,878	14,754	124	0.93
Total	53,761	53,238	523	3.35
Total PMUS	190,316	162,556	27,760	11.84
Total Non-PMUS	1,506	719	787	0.09
Total All Species	191,822	163,275	28,547	11.94

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, 2/13/2013 2:06:21PM].

Report Coverage		Number of vessels active	
Time Period	2012		127
Fishing Area	Outside U.S. EEZ	Number of trips	1,157
Trip Types	All Trip Types	Number of sets	12,553
		Number of hooks set	29,350,267

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	2,332	2,321	11	0.08
Striped marlin	4,867	4,829	38	0.17
Shortbill spearfish	7,136	7,092	44	0.24
Swordfish	14,328	13,264	1,064	0.49
Other billfishes	249	247	2	0.01
Total	28,912	27,753	1,159	0.99
Sharks				
Blue shark	30,084	156	29,928	1.02
Mako sharks	2,030	481	1,549	0.07
Thresher sharks	6,601	105	6,496	0.22
Oceanic whitetip shark	235	10	225	0.01
Silky shark	16	0	16	0.00
Other sharks	275	9	266	0.01
Total	39,241	761	38,480	1.34
Tunas				
Albacore	21,046	20,890	156	0.72
Bigeye tuna	104,452	103,139	1,313	3.56
Yellowfin tuna	12,206	12,035	171	0.42
Bluefin tuna	4	3	1	0.00
Skipjack tuna	18,017	17,479	538	0.61
Other tunas	5	5	0	0.00
Total	155,730	153,551	2,179	5.31
Other PMUS				
Mahimahi	62,765	62,038	727	2.14
Moonfish	14,086	13,999	87	0.48
Wahoo	8,031	8,004	27	0.27
Oilfish	21,862	21,493	369	0.74
Pomfret	37,256	37,037	219	1.27
Total	144,000	142,571	1,429	4.91
Total PMUS	367,883	324,636	43,247	12.53
Total Non-PMUS	2,554	366	2,188	0.09
Total All Species	370,437	325,002	45,435	12.62

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, 2/13/2013 2:06:21PM].

Report Coverage		Number of vessels active		18
Time Period	2012	Number of trips		81
Fishing Area	All Areas	Number of sets		1,355
Trip Types	Swordfish Targeted Trips	Number of hooks set		1,453,234

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	102	101	1	0.07
Striped marlin	286	266	20	0.20
Shortbill spearfish	142	130	12	0.10
Swordfish	14,308	13,062	1,246	9.85
Other billfishes	2	1	1	0.00
Total	14,840	13,560	1,280	10.21
Sharks				
Blue shark	6,106	12	6,094	4.20
Mako sharks	787	150	637	0.54
Thresher sharks	39	2	37	0.03
Oceanic whitetip shark	5	1	4	0.00
Silky shark	0	0	0	0.00
Other sharks	33	1	32	0.02
Total	6,970	166	6,804	4.80
Tunas				
Albacore	1,185	1,069	116	0.82
Bigeye tuna	836	774	62	0.58
Yellowfin tuna	281	265	16	0.19
Bluefin tuna	2	1	1	0.00
Skipjack tuna	33	31	2	0.02
Other tunas	0	0	0	0.00
Total	2,337	2,140	197	1.61
Other PMUS				
Mahimahi	4,493	4,273	220	3.09
Moonfish	282	228	54	0.19
Wahoo	40	37	3	0.03
Oilfish	1,689	1,480	209	1.16
Pomfret	346	259	87	0.24
Total	6,850	6,277	573	4.71
Total PMUS	30,997	22,143	8,854	21.33
Total Non-PMUS	11	4	7	0.01
Total All Species	31,008	22,147	8,861	21.34

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, 2/13/2013 2:06:21PM].

Report Coverage		Number of vessels active	
Time Period	2012		128
Fishing Area	All Areas	Number of trips	1,356
Trip Types	Tuna Targeted Trips	Number of sets	18,069
		Number of hooks set	43,965,781

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	3,289	3,269	20	0.07
Striped marlin	9,057	9,010	47	0.21
Shortbill spearfish	11,281	11,219	62	0.26
Swordfish	3,378	3,128	250	0.08
Other billfishes	379	371	8	0.01
Total	27,384	26,997	387	0.62
Sharks				
Blue shark	45,750	401	45,349	1.04
Mako sharks	2,131	605	1,526	0.05
Thresher sharks	8,166	170	7,996	0.19
Oceanic whitetip shark	676	17	659	0.02
Silky shark	253	0	253	0.01
Other sharks	535	11	524	0.01
Total	57,511	1,204	56,307	1.31
Tunas				
Albacore	29,567	29,491	76	0.67
Bigeye tuna	158,951	156,728	2,223	3.62
Yellowfin tuna	27,674	27,203	471	0.63
Bluefin tuna	25	25	0	0.00
Skipjack tuna	35,172	33,862	1,310	0.80
Other tunas	7	7	0	0.00
Total	251,396	247,316	4,080	5.72
Other PMUS				
Mahimahi	77,293	76,617	676	1.76
Moonfish	17,101	17,052	49	0.39
Wahoo	11,405	11,369	36	0.26
Oilfish	33,324	32,962	362	0.76
Pomfret	51,788	51,532	256	1.18
Total	190,911	189,532	1,379	4.34
Total PMUS	527,202	465,049	62,153	11.99
Total Non-PMUS	4,049	1,081	2,968	0.09
Total All Species	531,251	466,130	65,121	12.08

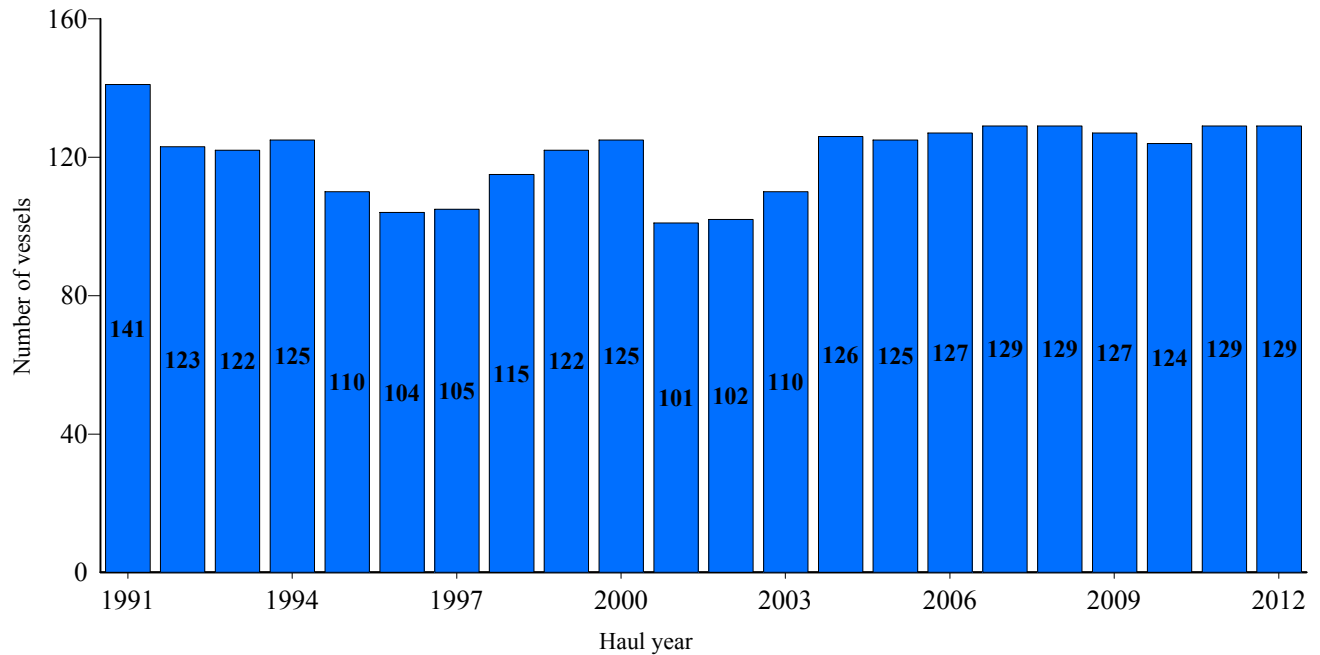


Figure 1. Number of active longline vessels based and landing in Hawaii, by year, 1991-2012. [PIFSC IMS, Longline Logbook Data, 2/14/2013 6:41:55AM]

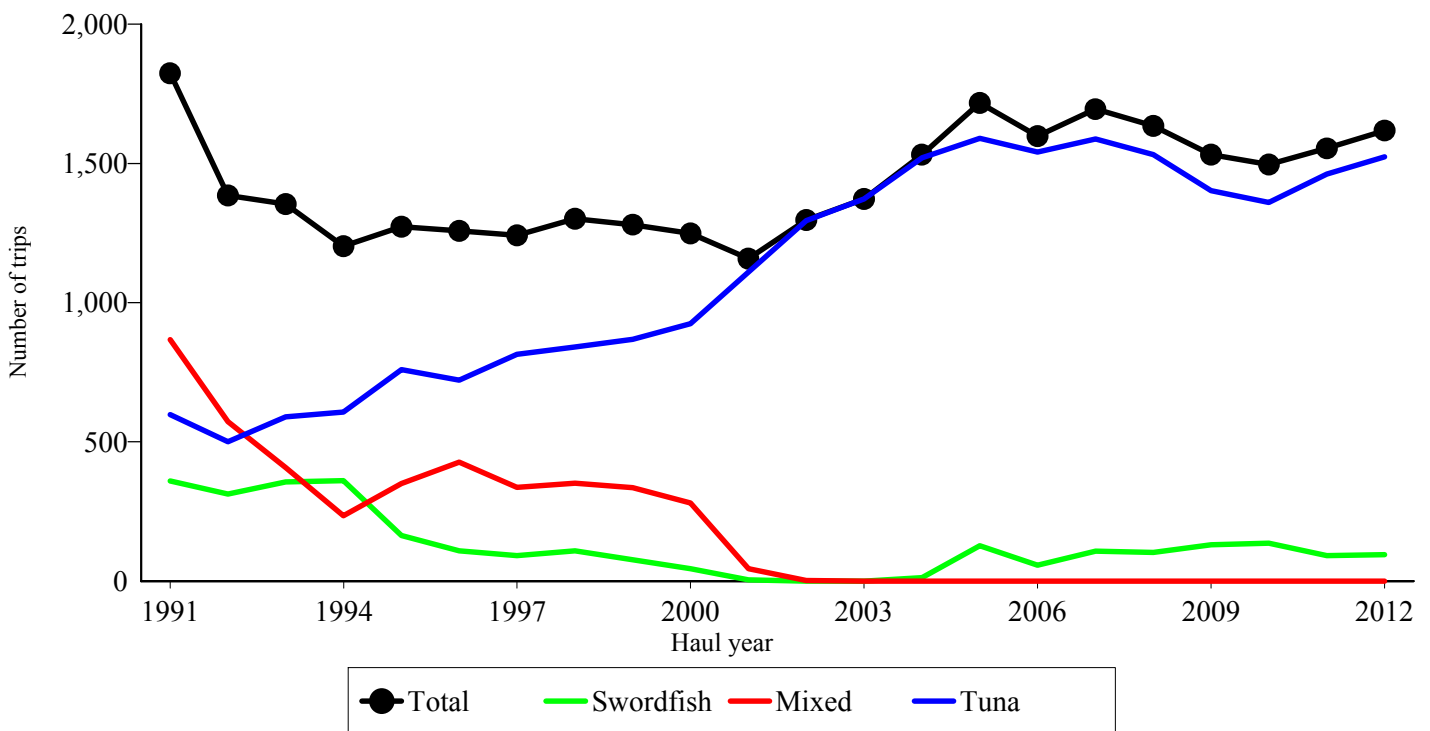


Figure 2. Number of fishing trips by longline vessels based and landing in Hawaii, by year and trip type, 1991-2012. [PIFSC IMS, Longline Logbook Data, 2/14/2013 6:41:55AM]

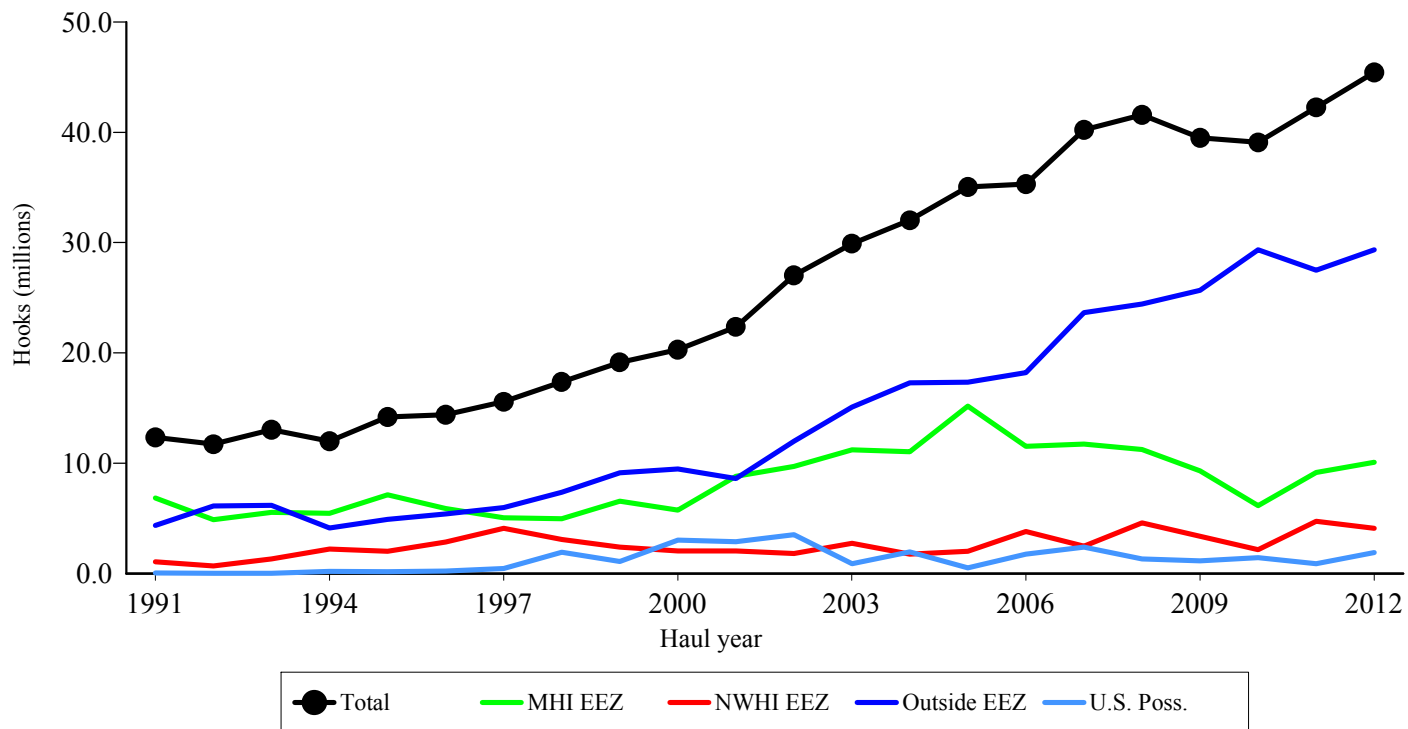


Figure 3. Number of hooks set by longline vessels based and landing in Hawaii, by year and fishing area, 1991-2012. [PIFSC IMS, Longline Logbook Data, 2/14/2013 6:41:55AM]

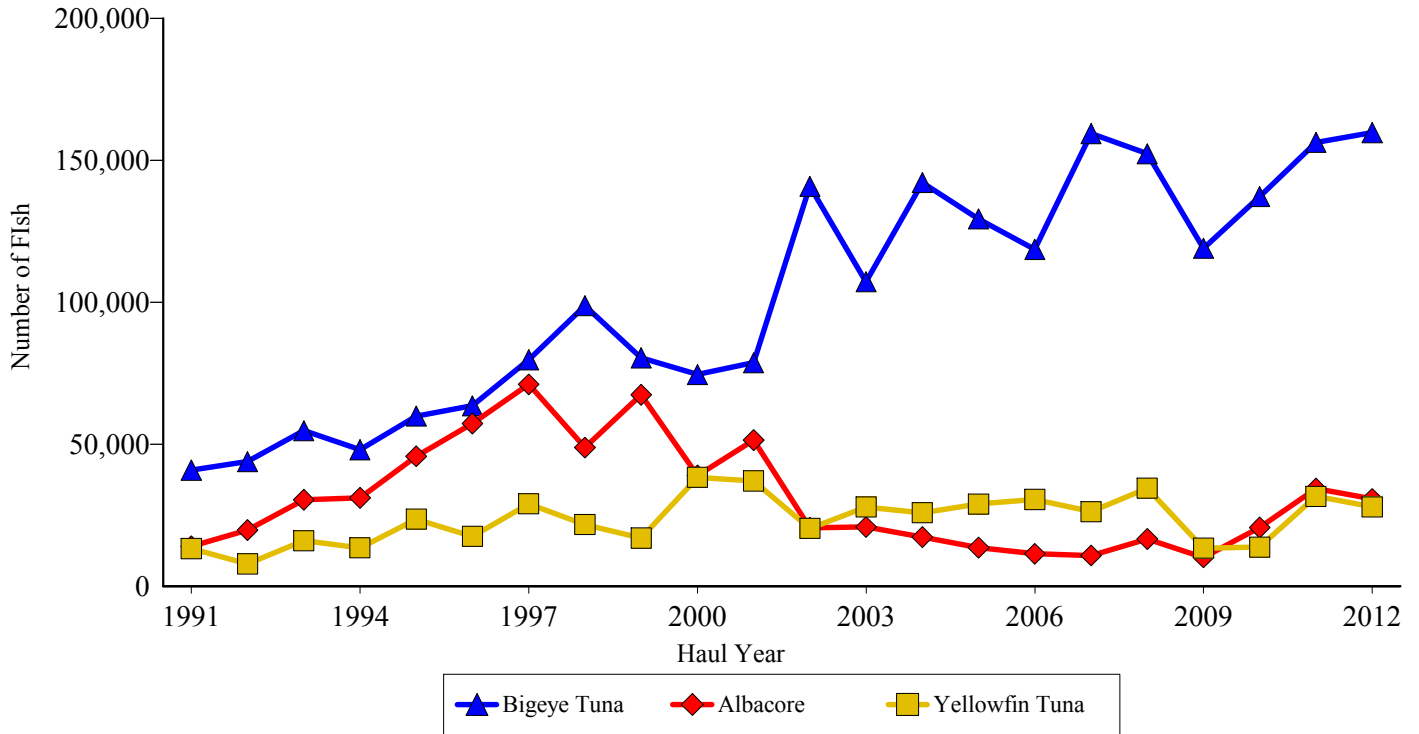


Figure 4. Annual catch of albacore, bigeye tuna, and yellowfin tuna by longline vessels based and landing in Hawaii, .1991-2012 2/14/2013 6:41:55AM]

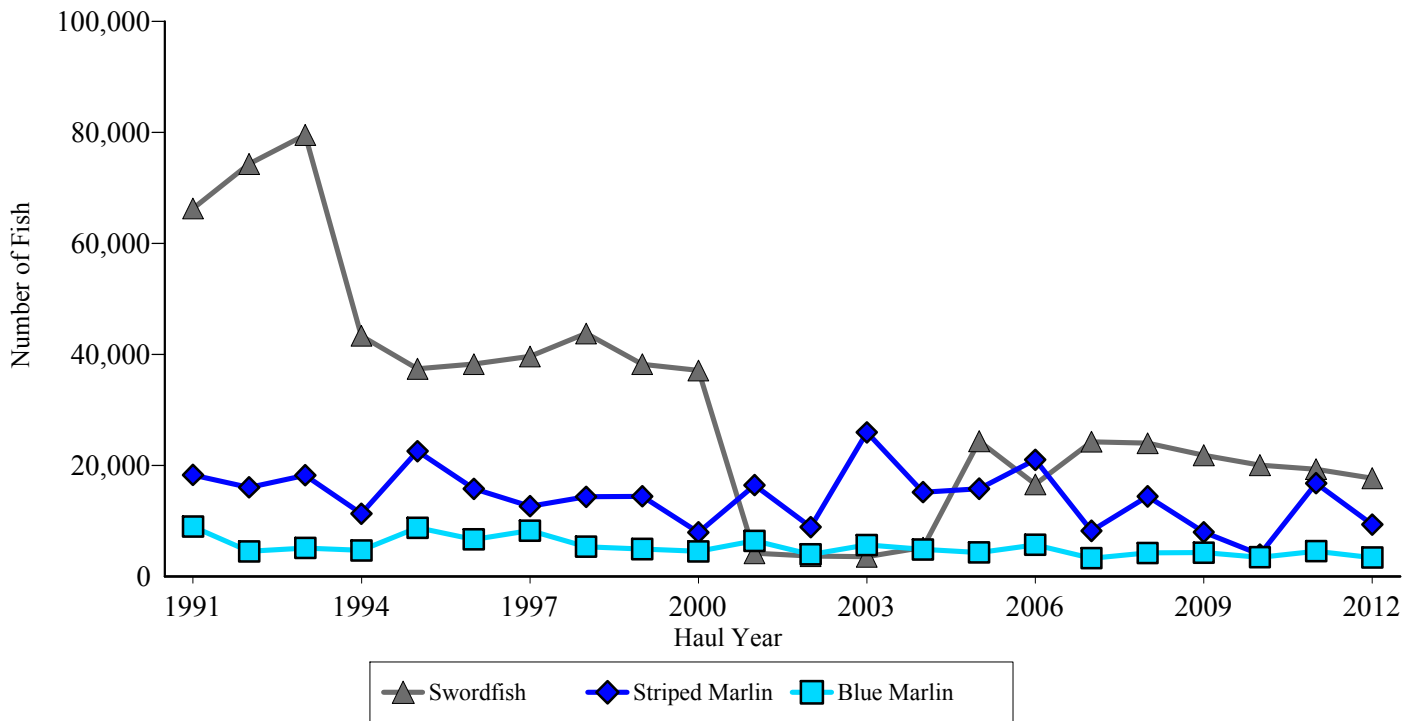


Figure 5. Annual catch of blue marlin, striped marlin, and swordfish by longline vessels based and landing in Hawaii, 1991-2012. [PIFSC IMS, Longline Logbook Data, 2/14/2013 6:41:55AM]

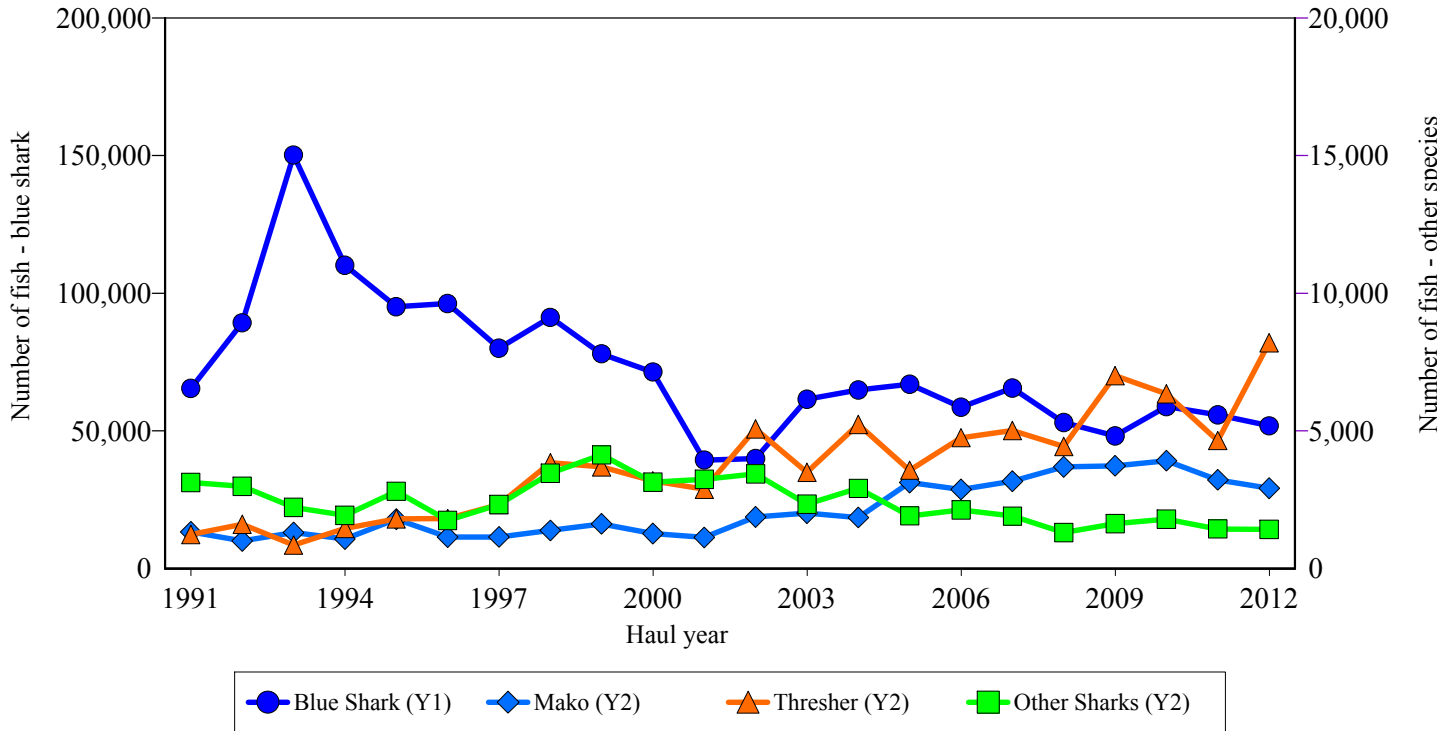


Figure 6. Annual catch of blue shark, mako shark, thresher shark, and other sharks by longline vessels based and landing in Hawaii, 1991-2012. [PIFSC IMS, Longline Logbook Data, 2/14/2013 6:41:55AM]

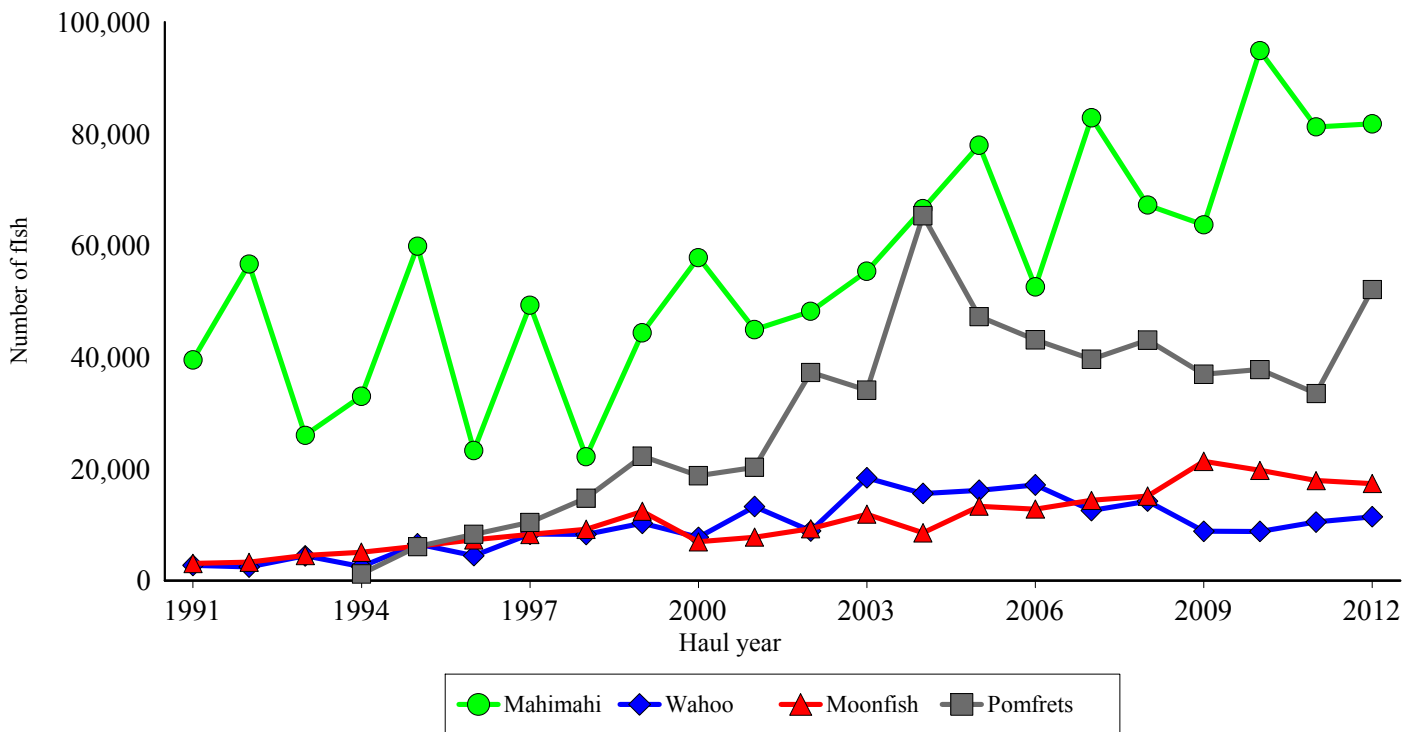


Figure 7. Annual catch of mahimahi, moonfish, pomfret, and wahoo by longline vessels based and landing in Hawaii, 1991-2012. [PIFSC IMS, Longline Logbook Data, 2/14/2013 6:41:55AM]