

The Hawaii-based Longline Logbook Summary Report January–December 2014¹

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 2014. 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. A logbook is submitted at the end of each longline fishing trip. The report covers longline operations for fishing trips completed in 2014 and most, but not all, data from trips that began late in the fourth quarter of 2014 and continued into the first quarter of 2015. Therefore, the 2014 summary statistics reported here are preliminary.

During 2014, 140 vessels were active in the Hawaii-based fleet, five more vessels than 2013 (Table 1, Fig. 1); participation in the fishery has slowly increased from 2010. Longline fishing occurred year-around, with 1,431 trips contributing to fishing activity in 2014 (10 less than in 2013). For each trip, NMFS assigned a trip type designation (tuna-targeted trip or swordfish-targeted trip) based on information in the logbook, including the fisher's specification of target species and other factors. In 2014 there were 1,350 tuna-targeted trips (using deep-set gear to target tuna, down 33 trips from 2013) and 81 swordfish-targeted trips (using shallow-set gear to target swordfish, up 23 trips) (Table 1, Fig. 2).

The Hawaii-based longline fishery deployed 47.1 million hooks in 2014, down 0.9 million hooks from 2013 (Table 1, Fig. 3). The number of hooks has been on an increasing trend from 1994. A growing number of hooks are being set outside the U.S. Exclusive Economic Zone (EEZ) with this area comprising 75% of the total hooks set in 2014. The remainder were deployed in the main Hawaiian Islands EEZ (18%), Northwestern Hawaiian Islands EEZ (5%), 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) (2%).

In 2014, the Hawaii longline fleet (all trip types combined) caught a record 216,897 bigeye tuna (Table 1, Fig. 4), 12% more than in 2013. The trend of bigeye tuna catch has been upward since the first year of logbook monitoring in 1991. The albacore catch decreased to record low 9,009 fish in 2014; down 40% from 2013 and well below the record catch in 1997. The catch of yellowfin tuna also decreased by 11% in 2014 to 17,206 fish. Both albacore and yellowfin tuna catches decreased during the past four years.

The 2014 swordfish catch was 20,012 fish (Table 1, Fig. 5); 33% higher than the 2013 catch. The catch of striped marlin was 15,172 fish in 2014, a 17% increase compared to 2013. The catch of blue marlin in 2014 was 5,770 fish, up 44% from 2013. Although the swordfish catch increased in 2014, it has been on a downward trend since 2007. Overall catches of striped

¹ PIFSC Data Report DR-15-007
Issued 13 March 2015

marlin and blue marlin have varied substantially over the 24-year period of logbook collection; the 2014 catches were close to their respective long-term averages.

In 2014, the Hawaii longline fleet caught 85,067 sharks and kept less than 1% of them (Table 1, Fig. 6). Blue shark comprised 80% of the total shark catch (66,343 fish). The fleet also caught 4,142 mako sharks and a record 13,188 thresher sharks. Catches of mako and thresher sharks have trended upward, whereas those of blue shark have been relatively steady during the last twelve years (Fig. 6).

In 2014, the Hawaii longline catch of other key pelagic management unit species included 74,788 mahimahi and 31,174 oilfish, and record catches of pomfret (82,227 fish), moonfish (25,734 fish), and wahoo (23,074) (Table 1, Fig. 7).

The longline logbook statistics reported above refer to all fishing areas combined. Summary catch and effort for 2014 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 2014 are also presented for each distinct trip type: swordfish-targeted trips (Table 7) and tuna-targeted trips (Table 8).

This report is available in HTML and PDF formats on the PIFSC website at <http://www.pifsc.noaa.gov/fmb/reports.php>. The website also provides online charts and tables of non-confidential Hawaii longline logbook fish catch and fishing effort from 1991 to the present. Statistics in the online graphs and 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, 3/12/2015 1:53:13PM].

Report Coverage		Number of vessels active		140
Time Period	2014	Number of trips		1,431
Fishing Area	All Areas	Number of sets		19,115
Trip Types	All Trip Types	Number of hooks set		47,130,556

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	5,770	5,714	56	0.12
Striped marlin	15,172	15,068	104	0.32
Shortbill spearfish	16,009	15,858	151	0.34
Swordfish	20,012	18,403	1,609	0.42
Other billfishes	752	737	15	0.02
Total	57,715	55,780	1,935	1.22
Sharks				
Blue shark	66,343	1	66,342	1.41
Mako sharks	4,142	553	3,589	0.09
Thresher sharks	13,188	69	13,119	0.28
Oceanic whitetip shark	701	0	701	0.01
Silky shark	104	1	103	0.00
Other sharks	589	2	587	0.01
Total	85,067	626	84,441	1.80
Tunas				
Albacore	9,009	8,873	136	0.19
Bigeye tuna	216,897	214,418	2,479	4.60
Yellowfin tuna	17,206	16,995	211	0.37
Bluefin tuna	2	2	0	0.00
Skipjack tuna	24,204	23,886	318	0.51
Other tunas	37	32	5	0.00
Total	267,355	264,206	3,149	5.67
Other PMUS				
Mahimahi	74,788	73,537	1,251	1.59
Moonfish	25,734	25,447	287	0.55
Wahoo	23,074	23,011	63	0.49
Oilfish	31,174	29,719	1,455	0.66
Pomfret	82,227	81,690	537	1.74
Total	236,997	233,404	3,593	5.03
Total PMUS	647,134	554,016	93,118	13.73
Total Non-PMUS	3,645	772	2,873	0.08
Total All Species	650,779	554,788	95,991	13.81

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, 3/12/2015 1:53:13PM].

Report Coverage		Number of vessels active		133
Time Period	2014	Number of trips		574
Fishing Area	Main Hawaiian Islands EEZ	Number of sets		3,410
Trip Types	All Trip Types	Number of hooks set		8,461,207

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	824	821	3	0.10
Striped marlin	3,708	3,691	17	0.44
Shortbill spearfish	3,260	3,243	17	0.39
Swordfish	1,054	995	59	0.12
Other billfishes	65	65	0	0.01
Total	8,911	8,815	96	1.05
Sharks				
Blue shark	14,740	1	14,739	1.74
Mako sharks	517	138	379	0.06
Thresher sharks	731	18	713	0.09
Oceanic whitetip shark	132	0	132	0.02
Silky shark	6	0	6	0.00
Other sharks	97	2	95	0.01
Total	16,223	159	16,064	1.92
Tunas				
Albacore	700	700	0	0.08
Bigeye tuna	31,724	31,270	454	3.75
Yellowfin tuna	3,535	3,477	58	0.42
Bluefin tuna	0	0	0	0.00
Skipjack tuna	4,297	4,232	65	0.51
Other tunas	1	1	0	0.00
Total	40,257	39,680	577	4.76
Other PMUS				
Mahimahi	7,671	7,568	103	0.91
Moonfish	1,523	1,510	13	0.18
Wahoo	3,148	3,128	20	0.37
Oilfish	6,720	6,505	215	0.79
Pomfret	8,842	8,719	123	1.05
Total	27,904	27,430	474	3.30
Total PMUS	93,295	76,084	17,211	11.03
Total Non-PMUS	976	403	573	0.12
Total All Species	94,271	76,487	17,784	11.14

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, 3/12/2015 1:53:13PM].

Report Coverage		Number of vessels active	
Time Period	2014		89
Fishing Area	Northwestern Hawaiian Islands EEZ	Number of trips	144
Trip Types	All Trip Types	Number of sets	1,044
		Number of hooks set	2,477,085

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	266	263	3	0.11
Striped marlin	1,447	1,440	7	0.58
Shortbill spearfish	1,024	1,020	4	0.41
Swordfish	1,495	1,361	134	0.60
Other billfishes	55	55	0	0.02
Total	4,287	4,139	148	1.73
Sharks				
Blue shark	5,128	0	5,128	2.07
Mako sharks	192	31	161	0.08
Thresher sharks	273	12	261	0.11
Oceanic whitetip shark	42	0	42	0.02
Silky shark	2	1	1	0.00
Other sharks	25	0	25	0.01
Total	5,662	44	5,618	2.29
Tunas				
Albacore	1,052	1,052	0	0.42
Bigeye tuna	11,727	11,597	130	4.73
Yellowfin tuna	1,723	1,676	47	0.70
Bluefin tuna	0	0	0	0.00
Skipjack tuna	3,370	3,348	22	1.36
Other tunas	1	1	0	0.00
Total	17,873	17,674	199	7.22
Other PMUS				
Mahimahi	2,164	2,134	30	0.87
Moonfish	650	649	1	0.26
Wahoo	959	957	2	0.39
Oilfish	1,794	1,689	105	0.72
Pomfret	2,069	2,063	6	0.84
Total	7,636	7,492	144	3.08
Total PMUS	35,458	29,349	6,109	14.31
Total Non-PMUS	29	14	15	0.01
Total All Species	35,487	29,363	6,124	14.33

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, 3/12/2015 1:53:13PM].

Report Coverage		Number of vessels active		42
Time Period	2014	Number of trips		61
Fishing Area	Pacific Remote Island Areas (PRIA) EEZ	Number of sets		322
Trip Types	All Trip Types	Number of hooks set		826,583

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	184	180	4	0.22
Striped marlin	231	230	1	0.28
Shortbill spearfish	245	245	0	0.30
Swordfish	111	106	5	0.13
Other billfishes	47	46	1	0.06
Total	818	807	11	0.99
Sharks				
Blue shark	858	0	858	1.04
Mako sharks	25	4	21	0.03
Thresher sharks	203	1	202	0.25
Oceanic whitetip shark	184	0	184	0.22
Silky shark	22	0	22	0.03
Other sharks	67	0	67	0.08
Total	1,359	5	1,354	1.64
Tunas				
Albacore	458	455	3	0.55
Bigeye tuna	4,166	4,108	58	5.04
Yellowfin tuna	626	611	15	0.76
Bluefin tuna	0	0	0	0.00
Skipjack tuna	928	913	15	1.12
Other tunas	0	0	0	0.00
Total	6,178	6,087	91	7.47
Other PMUS				
Mahimahi	498	498	0	0.60
Moonfish	47	47	0	0.06
Wahoo	762	762	0	0.92
Oilfish	509	506	3	0.62
Pomfret	1,868	1,863	5	2.26
Total	3,684	3,676	8	4.46
Total PMUS	12,039	10,575	1,464	14.56
Total Non-PMUS	35	6	29	0.04
Total All Species	12,074	10,581	1,493	14.61

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, 3/12/2015 1:53:13PM].

Report Coverage		Number of vessels active		136
Time Period	2014	Number of trips		692
Fishing Area	Hawaiian Islands EEZ + PRIA EEZ	Number of sets		4,776
Trip Types	All Trip Types	Number of hooks set		11,764,875

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	1,274	1,264	10	0.11
Striped marlin	5,386	5,361	25	0.46
Shortbill spearfish	4,529	4,508	21	0.38
Swordfish	2,660	2,462	198	0.23
Other billfishes	167	166	1	0.01
Total	14,016	13,761	255	1.19
Sharks				
Blue shark	20,726	1	20,725	1.76
Mako sharks	734	173	561	0.06
Thresher sharks	1,207	31	1,176	0.10
Oceanic whitetip shark	358	0	358	0.03
Silky shark	30	1	29	0.00
Other sharks	189	2	187	0.02
Total	23,244	208	23,036	1.98
Tunas				
Albacore	2,210	2,207	3	0.19
Bigeye tuna	47,617	46,975	642	4.05
Yellowfin tuna	5,884	5,764	120	0.50
Bluefin tuna	0	0	0	0.00
Skipjack tuna	8,595	8,493	102	0.73
Other tunas	2	2	0	0.00
Total	64,308	63,441	867	5.47
Other PMUS				
Mahimahi	10,333	10,200	133	0.88
Moonfish	2,220	2,206	14	0.19
Wahoo	4,869	4,847	22	0.41
Oilfish	9,023	8,700	323	0.77
Pomfret	12,779	12,645	134	1.09
Total	39,224	38,598	626	3.33
Total PMUS	140,792	116,008	24,784	11.97
Total Non-PMUS	1,040	423	617	0.09
Total All Species	141,832	116,431	25,401	12.06

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, 3/12/2015 1:53:13PM].

Report Coverage		Number of vessels active		140	
Time Period	2014	Number of trips		1,213	
Fishing Area	Outside U.S. EEZ	Number of sets		14,339	
Trip Types	All Trip Types	Number of hooks set		35,365,681	

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	4,496	4,450	46	0.13
Striped marlin	9,786	9,707	79	0.28
Shortbill spearfish	11,480	11,350	130	0.32
Swordfish	17,352	15,941	1,411	0.49
Other billfishes	585	571	14	0.02
Total	43,699	42,019	1,680	1.24
Sharks				
Blue shark	45,617	0	45,617	1.29
Mako sharks	3,408	380	3,028	0.10
Thresher sharks	11,981	38	11,943	0.34
Oceanic whitetip shark	343	0	343	0.01
Silky shark	74	0	74	0.00
Other sharks	400	0	400	0.01
Total	61,823	418	61,405	1.75
Tunas				
Albacore	6,799	6,666	133	0.19
Bigeye tuna	169,280	167,443	1,837	4.79
Yellowfin tuna	11,322	11,231	91	0.32
Bluefin tuna	2	2	0	0.00
Skipjack tuna	15,609	15,393	216	0.44
Other tunas	35	30	5	0.00
Total	203,047	200,765	2,282	5.74
Other PMUS				
Mahimahi	64,455	63,337	1,118	1.82
Moonfish	23,514	23,241	273	0.66
Wahoo	18,205	18,164	41	0.51
Oilfish	22,151	21,019	1,132	0.63
Pomfret	69,448	69,045	403	1.96
Total	197,773	194,806	2,967	5.59
Total PMUS	506,342	438,008	68,334	14.32
Total Non-PMUS	2,605	349	2,256	0.07
Total All Species	508,947	438,357	70,590	14.39

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, 3/12/2015 1:53:13PM].

Report Coverage		Number of vessels active		20
Time Period	2014	Number of trips		81
Fishing Area	All Areas	Number of sets		1,338
Trip Types	Swordfish Targeted Trips	Number of hooks set		1,483,809

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	75	69	6	0.05
Striped marlin	368	340	28	0.25
Shortbill spearfish	171	109	62	0.12
Swordfish	15,449	14,017	1,432	10.41
Other billfishes	23	18	5	0.02
Total	16,086	14,553	1,533	10.84
Sharks				
Blue shark	10,081	0	10,081	6.79
Mako sharks	1,469	98	1,371	0.99
Thresher sharks	64	2	62	0.04
Oceanic whitetip shark	18	0	18	0.01
Silky shark	0	0	0	0.00
Other sharks	33	0	33	0.02
Total	11,665	100	11,565	7.86
Tunas				
Albacore	664	550	114	0.45
Bigeye tuna	837	738	99	0.56
Yellowfin tuna	181	179	2	0.12
Bluefin tuna	2	2	0	0.00
Skipjack tuna	12	12	0	0.01
Other tunas	18	13	5	0.01
Total	1,714	1,494	220	1.16
Other PMUS				
Mahimahi	4,289	3,726	563	2.89
Moonfish	535	397	138	0.36
Wahoo	44	40	4	0.03
Oilfish	1,562	973	589	1.05
Pomfret	233	144	89	0.16
Total	6,663	5,280	1,383	4.49
Total PMUS	36,128	21,427	14,701	24.35
Total Non-PMUS	5	4	1	0.00
Total All Species	36,133	21,431	14,702	24.35

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, 3/12/2015 1:53:13PM].

Report Coverage		Number of vessels active	
Time Period	2014		139
Fishing Area	All Areas	Number of trips	1,350
Trip Types	Tuna Targeted Trips	Number of sets	17,777
		Number of hooks set	45,646,747

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	5,695	5,645	50	0.12
Striped marlin	14,804	14,728	76	0.32
Shortbill spearfish	15,838	15,749	89	0.35
Swordfish	4,563	4,386	177	0.10
Other billfishes	729	719	10	0.02
Total	41,629	41,227	402	0.91
Sharks				
Blue shark	56,262	1	56,261	1.23
Mako sharks	2,673	455	2,218	0.06
Thresher sharks	13,124	67	13,057	0.29
Oceanic whitetip shark	683	0	683	0.01
Silky shark	104	1	103	0.00
Other sharks	556	2	554	0.01
Total	73,402	526	72,876	1.61
Tunas				
Albacore	8,345	8,323	22	0.18
Bigeye tuna	216,060	213,680	2,380	4.73
Yellowfin tuna	17,025	16,816	209	0.37
Bluefin tuna	0	0	0	0.00
Skipjack tuna	24,192	23,874	318	0.53
Other tunas	19	19	0	0.00
Total	265,641	262,712	2,929	5.82
Other PMUS				
Mahimahi	70,499	69,811	688	1.54
Moonfish	25,199	25,050	149	0.55
Wahoo	23,030	22,971	59	0.50
Oilfish	29,612	28,746	866	0.65
Pomfret	81,994	81,546	448	1.80
Total	230,334	228,124	2,210	5.05
Total PMUS	611,006	532,589	78,417	13.39
Total Non-PMUS	3,640	768	2,872	0.08
Total All Species	614,646	533,357	81,289	13.47

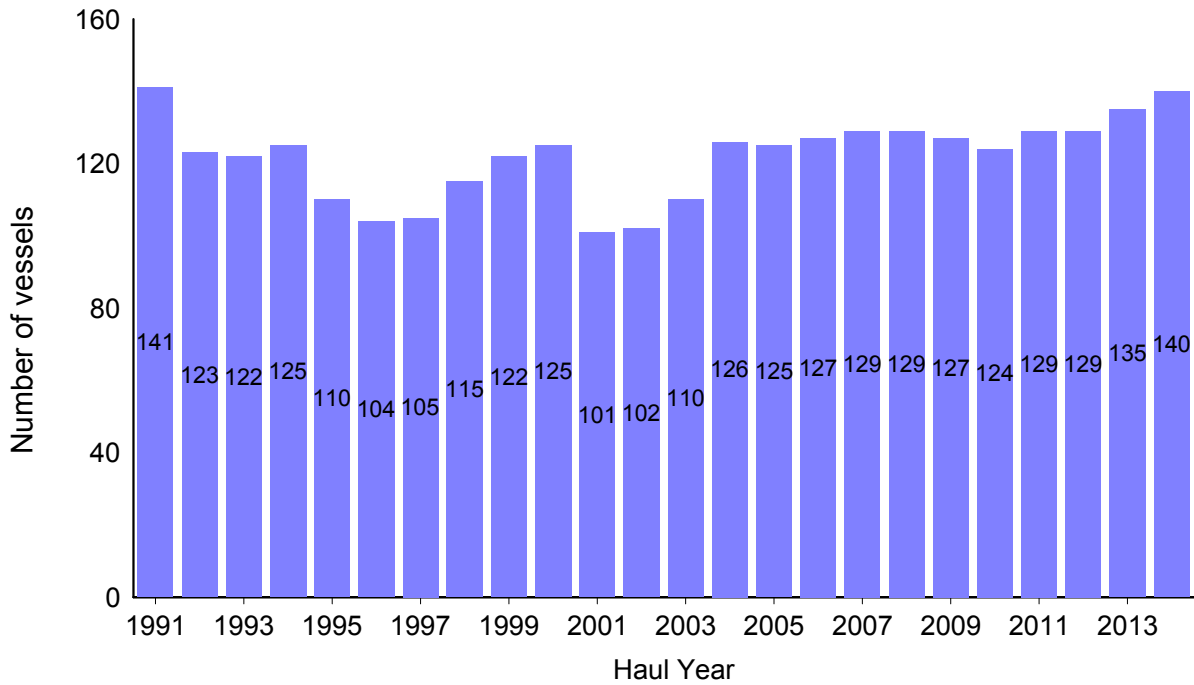


Figure 1. Number of active longline vessels based in Hawaii, 1991-2014. [PIFSC IMS, Longline Logbook Data, 3/12/2015 1:54:19PM].

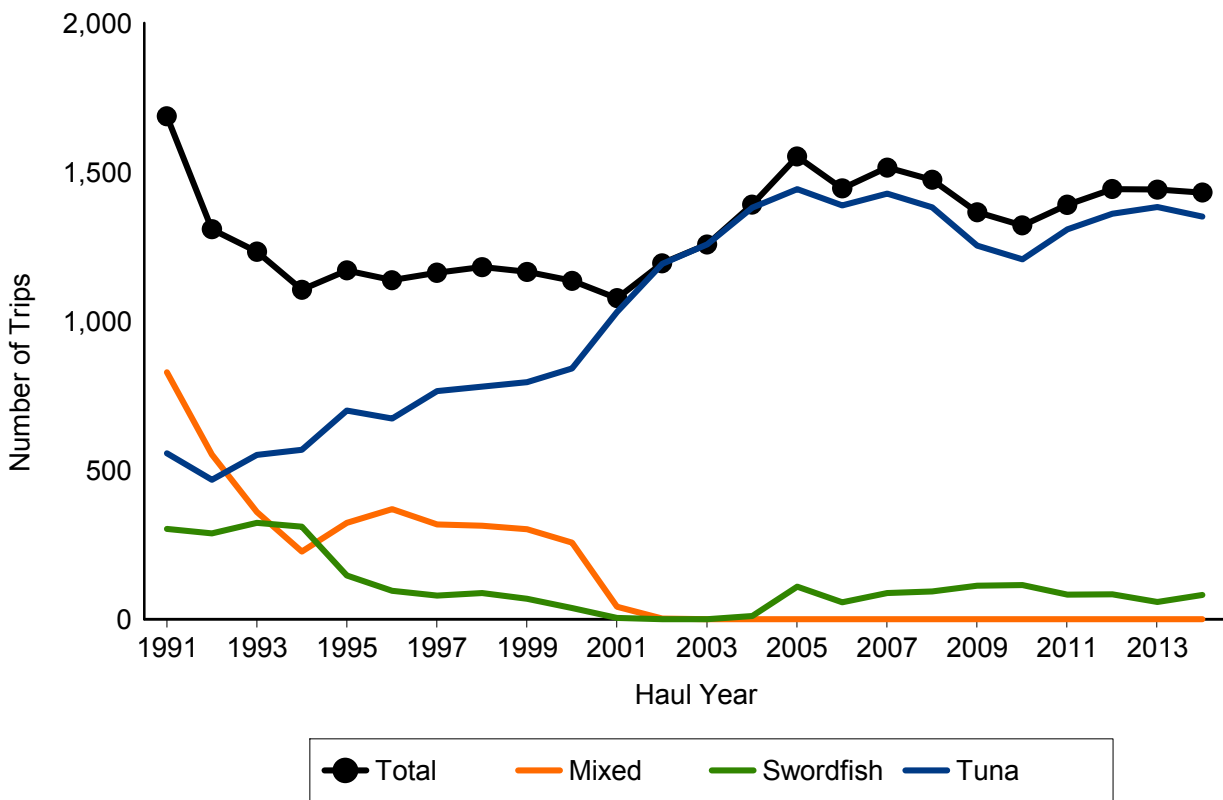


Figure 2. Number of fishing trips by longline vessels based in Hawaii, by trip type, 1991-2014. [PIFSC IMS, Longline Logbook Data, 3/12/2015 1:54:19PM].

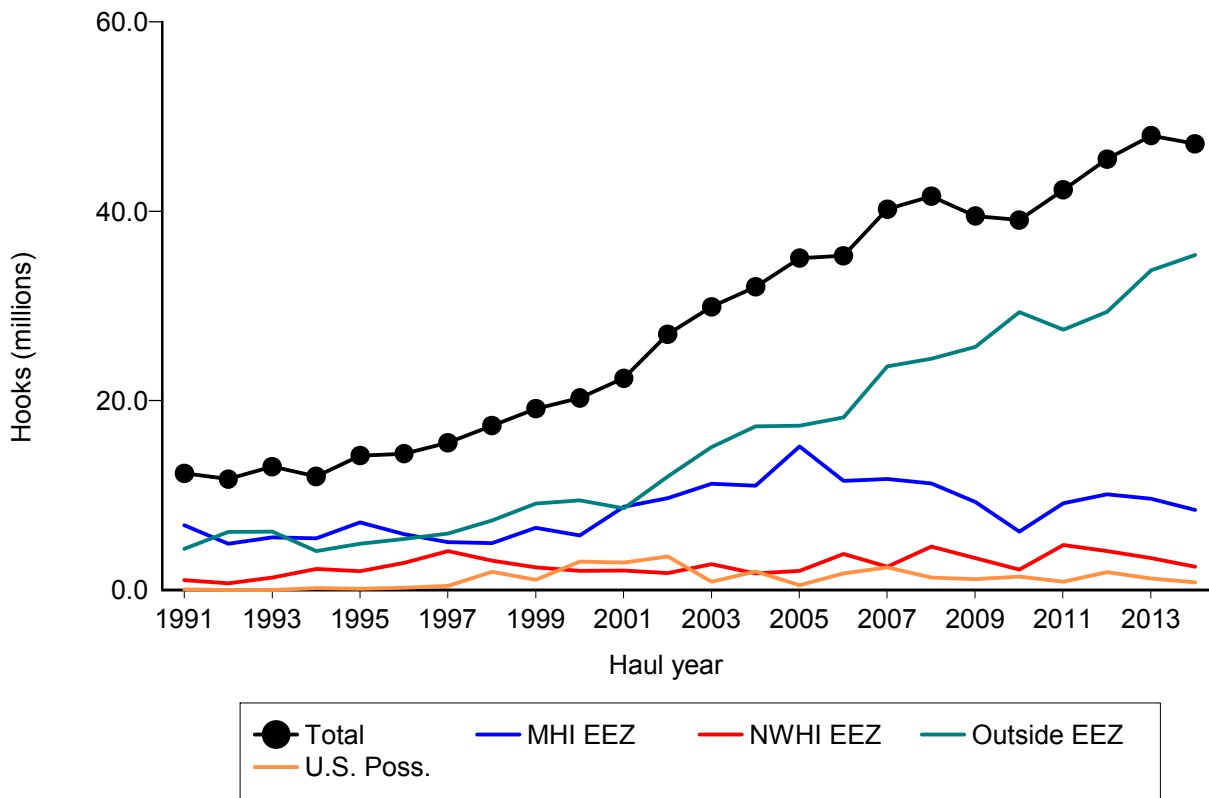


Figure 3. Number of hooks set by longline vessels based in Hawaii, by fishing area, 1991-2014. [PIFSC IMS, Longline Logbook Data, 3/12/2015 1:57:52PM]

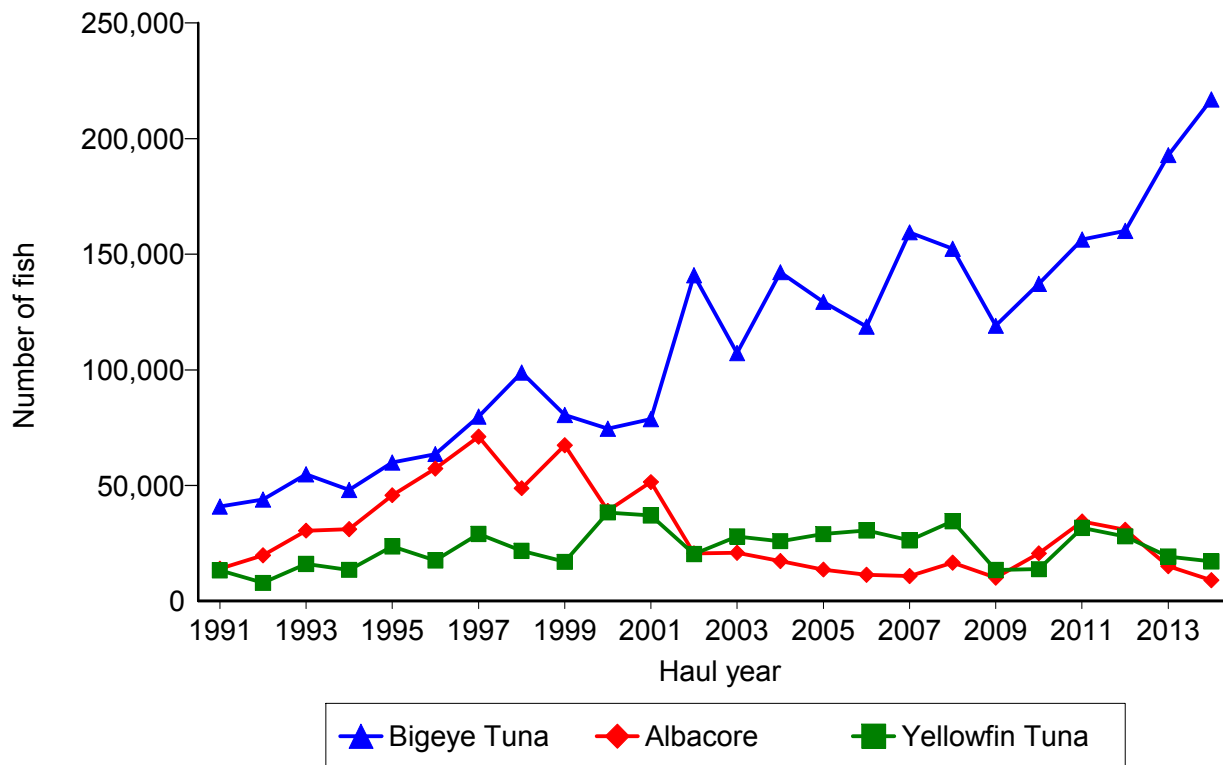


Figure 4. Annual catch of albacore, bigeye tuna, and yellowfin tuna by longline vessels based in Hawaii, 1991-2014 [3/12/2015 1:58:21PM]

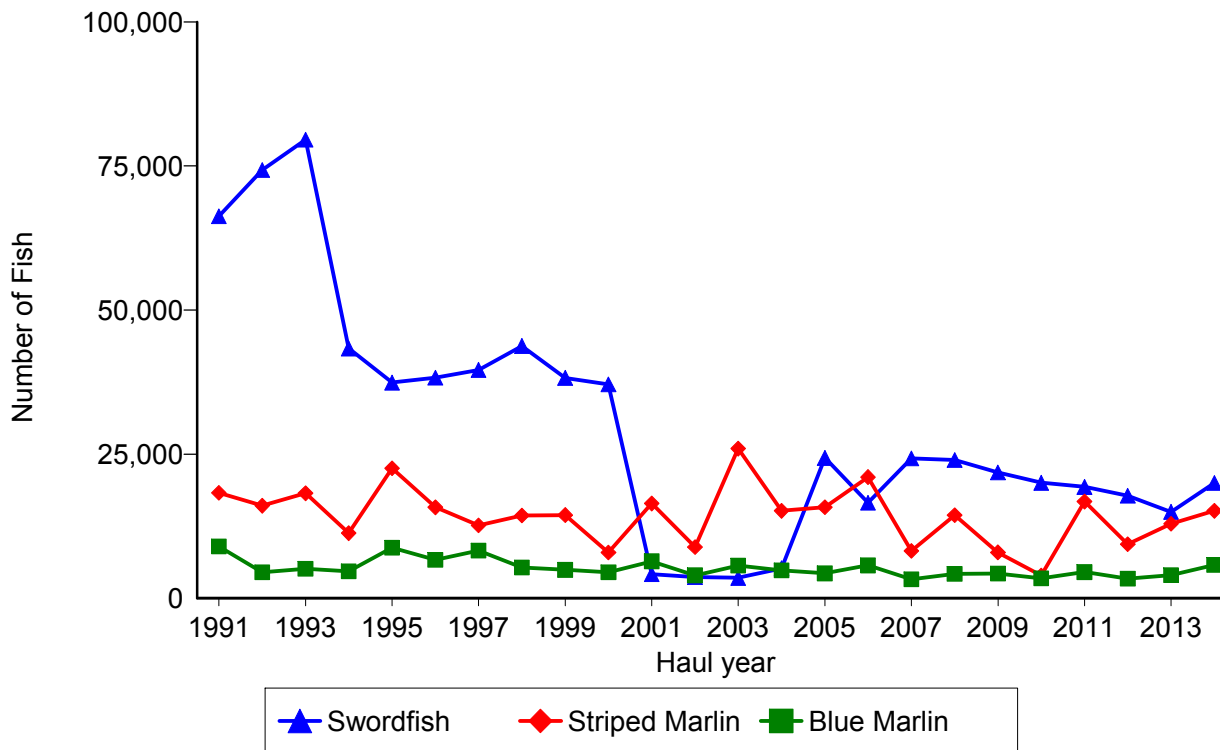


Figure 5. Annual catch of blue marlin, striped marlin, and swordfish by longline vessels based in Hawaii, 1991-2014. [PIFSC IMS, Longline Logbook Data, 3/12/2015 1:58:21PM]

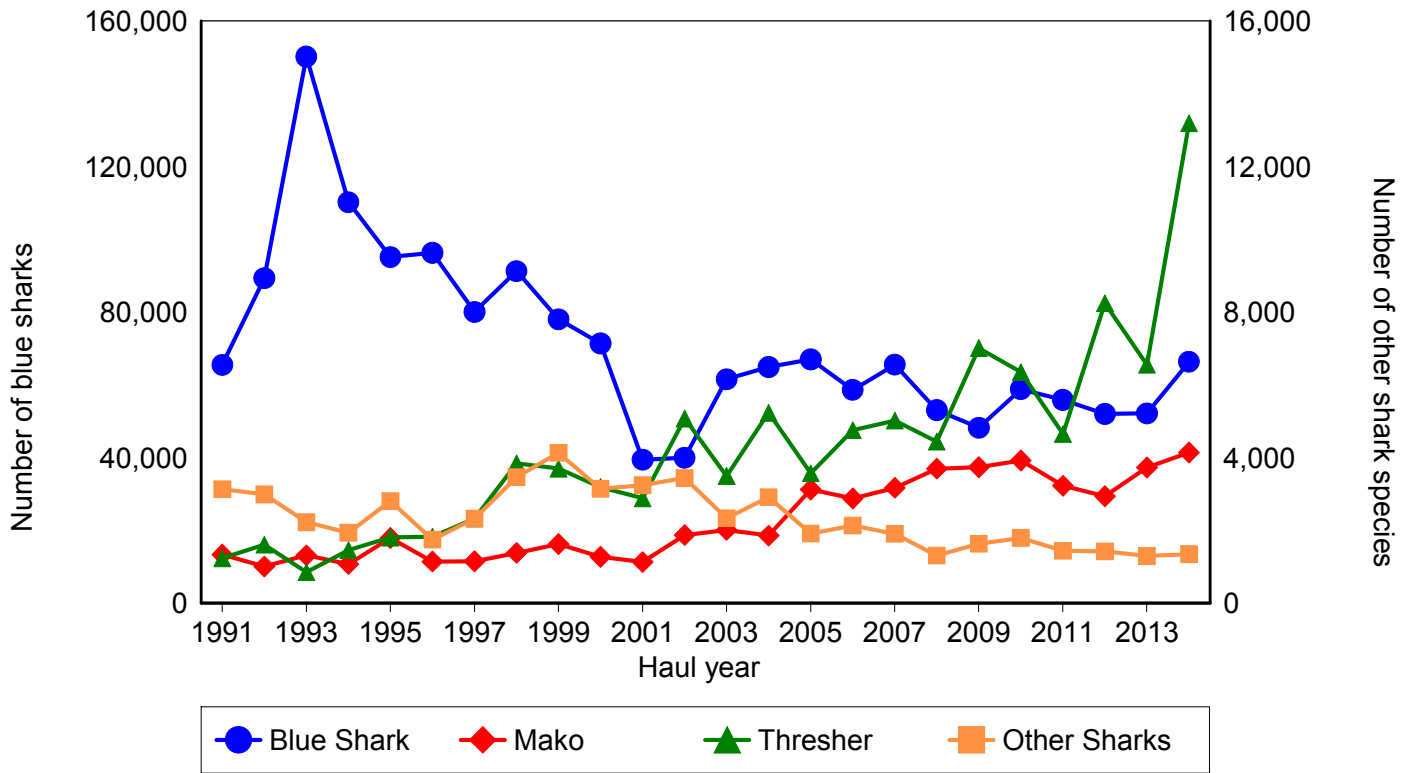


Figure 6. Annual catch of blue shark, mako shark, thresher shark, and other sharks by longline vessels based in Hawaii, 1991-2014. [PIFSC IMS, Longline Logbook Data, 3/12/2015 1:58:21PM]

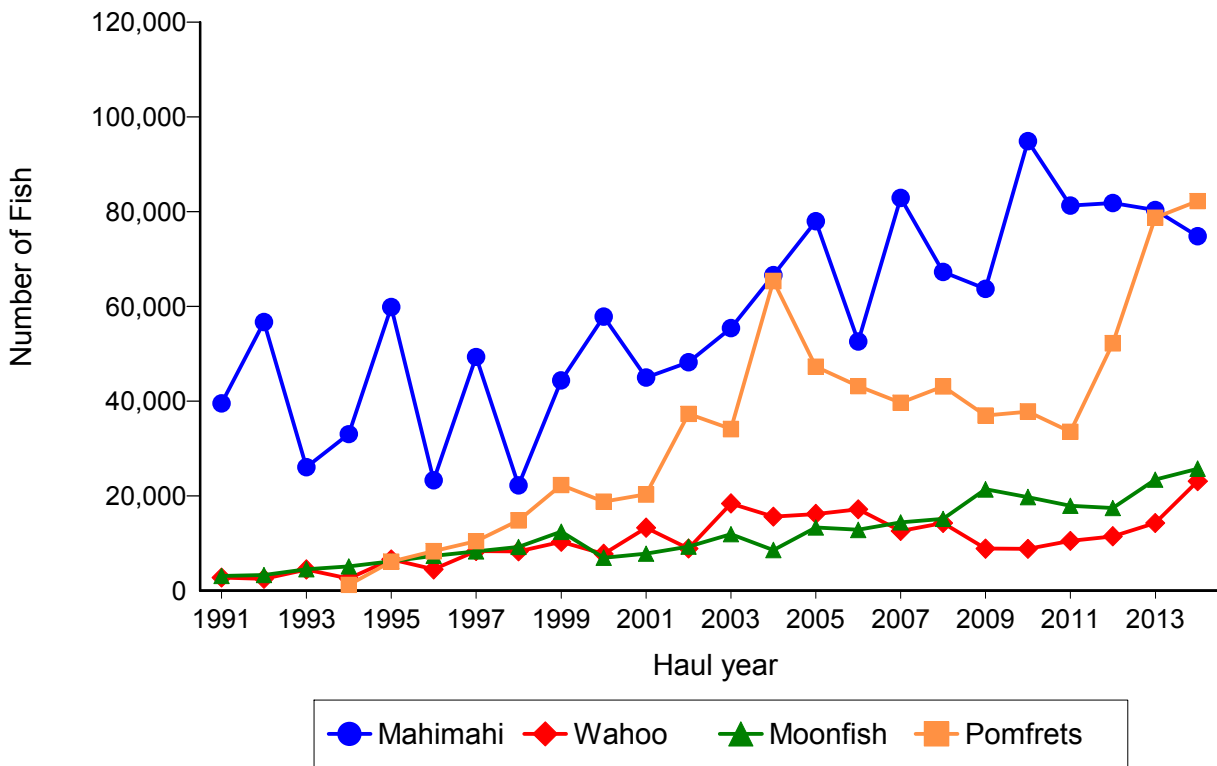


Figure 7. Annual catch of mahimahi, moonfish, pomfret, and wahoo by longline vessels based in Hawaii, 1991-2014. [PIFSC IMS, Longline Logbook Data, 3/12/2015 1:58:21PM]