

The Hawaii-based Longline Logbook Summary Report January–December 2008¹

Pacific Islands Fisheries Science Center
Fisheries Monitoring and Socioeconomics Division

This annual report summarizes data on fish catch and fishing effort by Hawaii-based longline vessels for calendar year 2008. 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 2008 and most, but not all, data from trips that began late in the fourth quarter of 2008 and continued into the first quarter of 2009. Therefore, the 2008 summary statistics reported here are preliminary.

During 2008, 129 vessels were active in the Hawaii-based fleet, the same number of vessels as in 2007 (Table 1, Fig. A1); participation in the fishery has been nearly constant over the past five years. Longline fishers made 1,470 longline trips in 2008 (45 less than in 2007), including 1,380 using deep-set gear to target tuna (down 46 trips) and 90 using shallow-set gear to target swordfish (up 11 trips) (Table 1, Fig. A2). A record 41.6 million hooks were deployed in 2008, 1.4 million more than in 2007 (Table 1, Fig. A3); the number of hooks set has increased steadily since 1994. A growing proportion of hooks are being set outside the U.S. Exclusive Economic Zone (EEZ) — 59% of total hooks set in 2008. The remainder were deployed in the main Hawaiian Islands EEZ (27%), Northwestern Hawaiian Islands EEZ (11%), and in the EEZ of the Pacific Remote Islands Area (PRIA, consisting of U.S. possessions Wake Island, Jarvis Island, Howland Island, Baker Island, Kingman Reef, Palmyra Atoll, and Johnston Atoll) (3%).

In 2008, the Hawaii longline fleet caught 152,323 bigeye tuna (Table 1, Fig. A4). Bigeye tuna catches have been on an increasing trend since the first year of logbook monitoring in 1991. In contrast, the trend in albacore catches has been downward since 1997, reaching a low in 2007; however, the albacore catch in 2008 was 16,637 fish, an increase of 53% from 2007 and the highest catch since 2004. The catch of yellowfin tuna in 2008 was 34,526 fish, an increase of 31% compared to 2007. Yellowfin tuna catches have remained relatively steady since 2003.

The 2008 swordfish catch was 23,919 fish (Table 1, Fig. A5). This was 1.4% lower than the swordfish catch in 2007 despite an increase in the number of hooks deployed in shallow sets targeting swordfish in 2008. The catch of striped marlin was 14,409 fish in 2008, an increase of 76% compared to 2007; it has continued to vary within a relatively constant range during the 18-year period of logbook records. Similarly, the catch of blue marlin in 2008 (4,225 fish) was higher than in 2007 by 28%.

In 2008, the Hawaii longline fleet caught 62,367 sharks and kept 4% of them (Table 1, Fig. A6). Blue shark comprised 85% of the total shark catch (52,912 fish). In 2008, the fleet caught 3,694 mako sharks and 4,438 thresher sharks. Catches of mako shark have steadily

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increased, whereas those of blue shark and thresher sharks have been relatively steady during the last several years (Fig. A6).

In 2008, the Hawaii longline catch of other key pelagic species included 67,239 mahimahi, 43,068 pomfret, 30,066 oilfish, 15,122 moonfish, and 14,239 wahoo (Table 1, Fig. A7). Catches of all these species are higher than levels in the 1990s, but those of wahoo and pomfret have declined slightly over the last several years.

The longline logbook statistics reported above refer to all fishing areas combined. Summary catch and effort for 2008 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 2008 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 PDF format on the PIFSC Web site at <http://www.pifsc.noaa.gov/fmsd/reports.php>. The Web 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, 2/23/2009 11:13:07AM].

Report Coverage					Number of vessels active 129	
Time Period	2008				Number of trips 1,470	
Fishing Area	All Areas				Number of sets 19,468	
Trip Types	All Trip Types				Number of hooks set 41,564,853	
Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks		
Billfishes						
Blue marlin	4,225	4,176	49	0.10		
Striped marlin	14,409	14,266	143	0.35		
Shortbill spearfish	15,465	15,308	157	0.37		
Swordfish	23,919	21,808	2,111	0.58		
Other billfishes	466	459	7	0.01		
Total	58,484	56,017	2,467	1.41		
Sharks						
Blue shark	52,912	182	52,730	1.27		
Mako sharks	3,694	1,553	2,141	0.09		
Thresher sharks	4,438	466	3,972	0.11		
Oceanic whitetip shark	837	53	784	0.02		
Silky shark	61	1	60	0.00		
Other sharks	425	31	394	0.01		
Total	62,367	2,286	60,081	1.50		
Tunas						
Albacore	16,637	15,467	1,170	0.40		
Bigeye tuna	152,323	149,563	2,760	3.66		
Yellowfin tuna	34,526	32,761	1,765	0.83		
Bluefin tuna	4	4	0	0.00		
Skipjack tuna	16,489	15,043	1,446	0.40		
Other tunas	32	27	5	0.00		
Total	220,011	212,865	7,146	5.29		
Other PMUS						
Mahimahi	67,239	66,059	1,180	1.62		
Moonfish	15,122	15,047	75	0.36		
Wahoo	14,239	14,179	60	0.34		
Oilfish	30,066	29,451	615	0.72		
Pomfret	43,068	42,880	188	1.04		
Total	169,734	167,616	2,118	4.08		
Total PMUS	510,596	438,784	71,812	12.28		
Total Non-PMUS	4,421	1,778	2,643	0.11		
Total All Species	515,017	440,562	4,421	12.39		

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, 2/23/2009 11:13:07AM].

Report Coverage					Number of vessels active		126
Time Period	2008				Number of trips		772
Fishing Area	Main Hawaiian Islands EEZ				Number of sets		5,188
Trip Types	All Trip Types				Number of hooks set		11,249,293

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	991	985	6	0.09
Striped marlin	3,397	3,376	21	0.30
Shortbill spearfish	4,788	4,759	29	0.43
Swordfish	1,210	1,062	148	0.11
Other billfishes	129	127	2	0.01
Total	10,515	10,309	206	0.93
Sharks				
Blue shark	11,256	39	11,217	1.00
Mako sharks	688	446	242	0.06
Thresher sharks	1,002	215	787	0.09
Oceanic whitetip shark	140	20	120	0.01
Silky shark	2	0	2	0.00
Other sharks	95	11	84	0.01
Total	13,183	731	12,452	1.17
Tunas				
Albacore	1,303	1,297	6	0.12
Bigeye tuna	34,807	33,948	859	3.09
Yellowfin tuna	13,090	12,218	872	1.16
Bluefin tuna	1	1	0	0.00
Skipjack tuna	5,785	5,360	425	0.51
Other tunas	0	0	0	0.00
Total	54,986	52,824	2,162	4.89
Other PMUS				
Mahimahi	14,791	14,613	178	1.31
Moonfish	2,456	2,450	6	0.22
Wahoo	2,562	2,548	14	0.23
Oilfish	7,632	7,578	54	0.68
Pomfret	9,858	9,817	41	0.88
Total	37,299	37,006	293	3.32
Total PMUS	115,983	100,870	15,113	10.31
Total Non-PMUS	2,148	1,156	992	0.19
Total All Species	118,131	102,026	2,148	10.50

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, 2/23/2009 11:13:07AM].

Report Coverage					Number of vessels active		116
Time Period	2008				Number of trips		290
Fishing Area	Northwestern Hawaiian Islands EEZ				Number of sets		2,137
Trip Types	All Trip Types				Number of hooks set		4,581,724

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	913	894	19	0.20
Striped marlin	3,939	3,898	41	0.86
Shortbill spearfish	2,521	2,472	49	0.55
Swordfish	2,700	2,281	419	0.59
Other billfishes	101	99	2	0.02
Total	10,174	9,644	530	2.22
Sharks				
Blue shark	7,977	41	7,936	1.74
Mako sharks	363	174	189	0.08
Thresher sharks	605	66	539	0.13
Oceanic whitetip shark	105	13	92	0.02
Silky shark	2	0	2	0.00
Other sharks	79	7	72	0.02
Total	9,131	301	8,830	1.99
Tunas				
Albacore	1,271	1,265	6	0.28
Bigeye tuna	18,378	18,053	325	4.01
Yellowfin tuna	8,062	7,686	376	1.76
Bluefin tuna	0	0	0	0.00
Skipjack tuna	1,923	1,835	88	0.42
Other tunas	1	1	0	0.00
Total	29,635	28,840	795	6.47
Other PMUS				
Mahimahi	7,041	6,940	101	1.54
Moonfish	1,384	1,381	3	0.30
Wahoo	1,590	1,580	10	0.35
Oilfish	4,791	4,750	41	1.05
Pomfret	3,770	3,757	13	0.82
Total	18,576	18,408	168	4.05
Total PMUS	67,516	57,193	10,323	14.74
Total Non-PMUS	166	136	30	0.04
Total All Species	67,682	57,329	166	14.77

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, 2/23/2009 11:13:07AM].

Report Coverage				Number of vessels active 56	
Time Period	2008			Number of trips 82	
Fishing Area	Pacific Remote Island Areas (PRIA) EEZ			Number of sets 576	
Trip Types	All Trip Types			Number of hooks set 1,318,835	

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	310	308	2	0.24
Striped marlin	292	289	3	0.22
Shortbill spearfish	576	574	2	0.44
Swordfish	120	116	4	0.09
Other billfishes	27	27	0	0.02
Total	1,325	1,314	11	1.00
Sharks				
Blue shark	1,621	10	1,611	1.23
Mako sharks	60	30	30	0.05
Thresher sharks	484	12	472	0.37
Oceanic whitetip shark	437	3	434	0.33
Silky shark	49	0	49	0.04
Other sharks	14	0	14	0.01
Total	2,665	55	2,610	2.02
Tunas				
Albacore	2,421	2,418	3	1.84
Bigeye tuna	5,977	5,851	126	4.53
Yellowfin tuna	2,245	2,115	130	1.70
Bluefin tuna	0	0	0	0.00
Skipjack tuna	1,203	1,127	76	0.91
Other tunas	2	2	0	0.00
Total	11,848	11,513	335	8.98
Other PMUS				
Mahimahi	1,530	1,518	12	1.16
Moonfish	126	126	0	0.10
Wahoo	1,118	1,114	4	0.85
Oilfish	625	623	2	0.47
Pomfret	944	940	4	0.72
Total	4,343	4,321	22	3.29
Total PMUS	20,181	17,203	2,978	15.30
Total Non-PMUS	23	17	6	0.02
Total All Species	20,204	17,220	23	15.32

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, 2/23/2009 11:13:07AM].

Report Coverage					Number of vessels active 126	
Time Period	2008				Number of trips 956	
Fishing Area	Hawaiian Islands EEZ + PRIA EEZ				Number of sets 7,901	
Trip Types	All Trip Types				Number of hooks set 17,149,852	

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	2,214	2,187	27	0.13
Striped marlin	7,628	7,563	65	0.44
Shortbill spearfish	7,885	7,805	80	0.46
Swordfish	4,030	3,459	571	0.23
Other billfishes	257	253	4	0.01
Total	22,014	21,267	747	1.28
Sharks				
Blue shark	20,854	90	20,764	1.22
Mako sharks	1,111	650	461	0.06
Thresher sharks	2,091	293	1,798	0.12
Oceanic whitetip shark	682	36	646	0.04
Silky shark	53	0	53	0.00
Other sharks	188	18	170	0.01
Total	24,979	1,087	23,892	1.46
Tunas				
Albacore	4,995	4,980	15	0.29
Bigeye tuna	59,162	57,852	1,310	3.45
Yellowfin tuna	23,397	22,019	1,378	1.36
Bluefin tuna	1	1	0	0.00
Skipjack tuna	8,911	8,322	589	0.52
Other tunas	3	3	0	0.00
Total	96,469	93,177	3,292	5.63
Other PMUS				
Mahimahi	23,362	23,071	291	1.36
Moonfish	3,966	3,957	9	0.23
Wahoo	5,270	5,242	28	0.31
Oilfish	13,048	12,951	97	0.76
Pomfret	14,572	14,514	58	0.85
Total	60,218	59,735	483	3.51
Total PMUS	203,680	175,266	28,414	11.88
Total Non-PMUS	2,337	1,309	1,028	0.14
Total All Species	206,017	176,575	2,337	12.01

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, 2/23/2009 11:13:07AM].

Report Coverage					Number of vessels active		127
Time Period	2008				Number of trips		1,122
Fishing Area	Outside U.S. EEZ				Number of sets		11,567
Trip Types	All Trip Types				Number of hooks set		24,415,001

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	2,011	1,989	22	0.08
Striped marlin	6,781	6,703	78	0.28
Shortbill spearfish	7,580	7,503	77	0.31
Swordfish	19,889	18,349	1,540	0.81
Other billfishes	209	206	3	0.01
Total	36,470	34,750	1,720	1.49
Sharks				
Blue shark	32,058	92	31,966	1.31
Mako sharks	2,583	903	1,680	0.11
Thresher sharks	2,347	173	2,174	0.10
Oceanic whitetip shark	155	17	138	0.01
Silky shark	8	1	7	0.00
Other sharks	237	13	224	0.01
Total	37,388	1,199	36,189	1.53
Tunas				
Albacore	11,642	10,487	1,155	0.48
Bigeye tuna	93,161	91,711	1,450	3.82
Yellowfin tuna	11,129	10,742	387	0.46
Bluefin tuna	3	3	0	0.00
Skipjack tuna	7,578	6,721	857	0.31
Other tunas	29	24	5	0.00
Total	123,542	119,688	3,854	5.06
Other PMUS				
Mahimahi	43,877	42,988	889	1.80
Moonfish	11,156	11,090	66	0.46
Wahoo	8,969	8,937	32	0.37
Oilfish	17,018	16,500	518	0.70
Pomfret	28,496	28,366	130	1.17
Total	109,516	107,881	1,635	4.49
Total PMUS	306,916	263,518	43,398	12.57
Total Non-PMUS	2,084	469	1,615	0.09
Total All Species	309,000	263,987	2,084	12.66

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, 2/23/2009 11:13:07AM].

Report Coverage					Number of vessels active		27
Time Period	2008				Number of trips		90
Fishing Area	All Areas				Number of sets		1,587
Trip Types	Swordfish Targeted Trips				Number of hooks set		1,486,240

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	351	338	13	0.24
Striped marlin	937	891	46	0.63
Shortbill spearfish	169	151	18	0.11
Swordfish	20,271	18,513	1,758	13.64
Other billfishes	26	25	1	0.02
Total	21,754	19,918	1,836	14.64
Sharks				
Blue shark	12,411	18	12,393	8.35
Mako sharks	948	118	830	0.64
Thresher sharks	173	16	157	0.12
Oceanic whitetip shark	36	6	30	0.02
Silky shark	2	0	2	0.00
Other sharks	21	0	21	0.01
Total	13,591	158	13,433	9.14
Tunas				
Albacore	2,924	1,791	1,133	1.97
Bigeye tuna	1,489	1,379	110	1.00
Yellowfin tuna	504	478	26	0.34
Bluefin tuna	2	2	0	0.00
Skipjack tuna	109	91	18	0.07
Other tunas	5	0	5	0.00
Total	5,033	3,741	1,292	3.39
Other PMUS				
Mahimahi	4,792	4,495	297	3.22
Moonfish	105	72	33	0.07
Wahoo	134	133	1	0.09
Oilfish	2,525	2,053	472	1.70
Pomfret	77	65	12	0.05
Total	7,633	6,818	815	5.14
Total PMUS	48,011	30,635	17,376	32.30
Total Non-PMUS	44	10	34	0.03
Total All Species	48,055	30,645	44	32.33

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, 2/23/2009 11:13:07AM].

Report Coverage					Number of vessels active	127
Time Period	2008				Number of trips	1,380
Fishing Area	All Areas				Number of sets	17,881
Trip Types	Tuna Targeted Trips				Number of hooks set	40,078,613

Pelagic Management Unit Species (PMUS)	Number Caught	Number Kept	Number Released	CPUE - Number Caught per 1000 hooks
Billfishes				
Blue marlin	3,874	3,838	36	0.10
Striped marlin	13,472	13,375	97	0.34
Shortbill spearfish	15,296	15,157	139	0.38
Swordfish	3,648	3,295	353	0.09
Other billfishes	440	434	6	0.01
Total	36,730	36,099	631	0.92
Sharks				
Blue shark	40,501	164	40,337	1.01
Mako sharks	2,746	1,435	1,311	0.07
Thresher sharks	4,265	450	3,815	0.11
Oceanic whitetip shark	801	47	754	0.02
Silky shark	59	1	58	0.00
Other sharks	404	31	373	0.01
Total	48,776	2,128	46,648	1.22
Tunas				
Albacore	13,713	13,676	37	0.34
Bigeye tuna	150,834	148,184	2,650	3.76
Yellowfin tuna	34,022	32,283	1,739	0.85
Bluefin tuna	2	2	0	0.00
Skipjack tuna	16,380	14,952	1,428	0.41
Other tunas	27	27	0	0.00
Total	214,978	209,124	5,854	5.36
Other PMUS				
Mahimahi	62,447	61,564	883	1.56
Moonfish	15,017	14,975	42	0.37
Wahoo	14,105	14,046	59	0.35
Oilfish	27,541	27,398	143	0.69
Pomfret	42,991	42,815	176	1.07
Total	162,101	160,798	1,303	4.04
Total PMUS	462,585	408,149	54,436	11.54
Total Non-PMUS	4,377	1,768	2,609	0.11
Total All Species	466,962	409,917	4,377	11.65

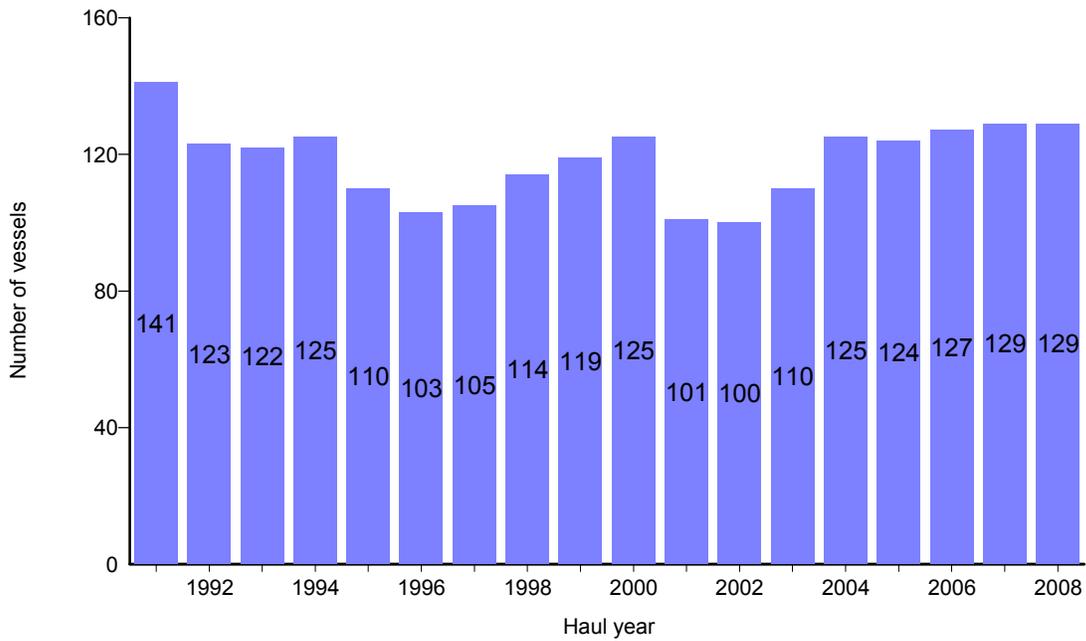


Figure A1. Number of active longline vessels based and landing in Hawaii, by year, 1991-2008. [PIFSC IMS, Longline Logbook Data, 2/20/2009 10:48:26AM]

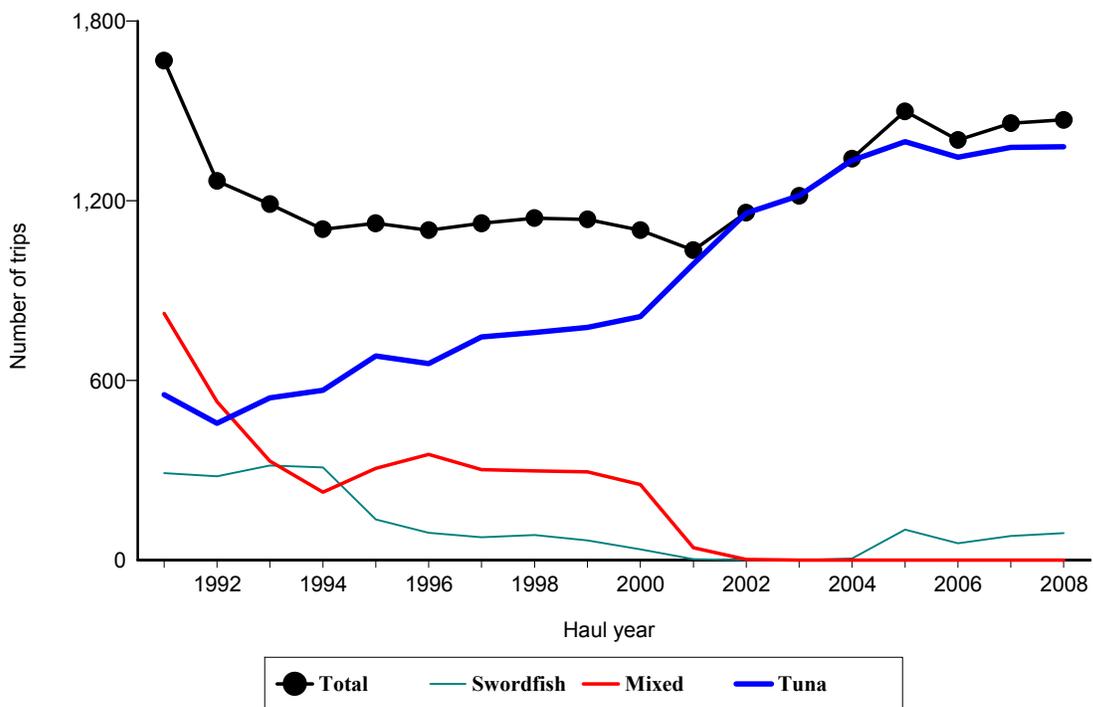


Figure A2. Number of fishing trips by longline vessels based and landing in Hawaii, by year and trip type, 1991-2008. [PIFSC IMS, Longline Logbook Data, 2/20/2009 10:48:26AM]

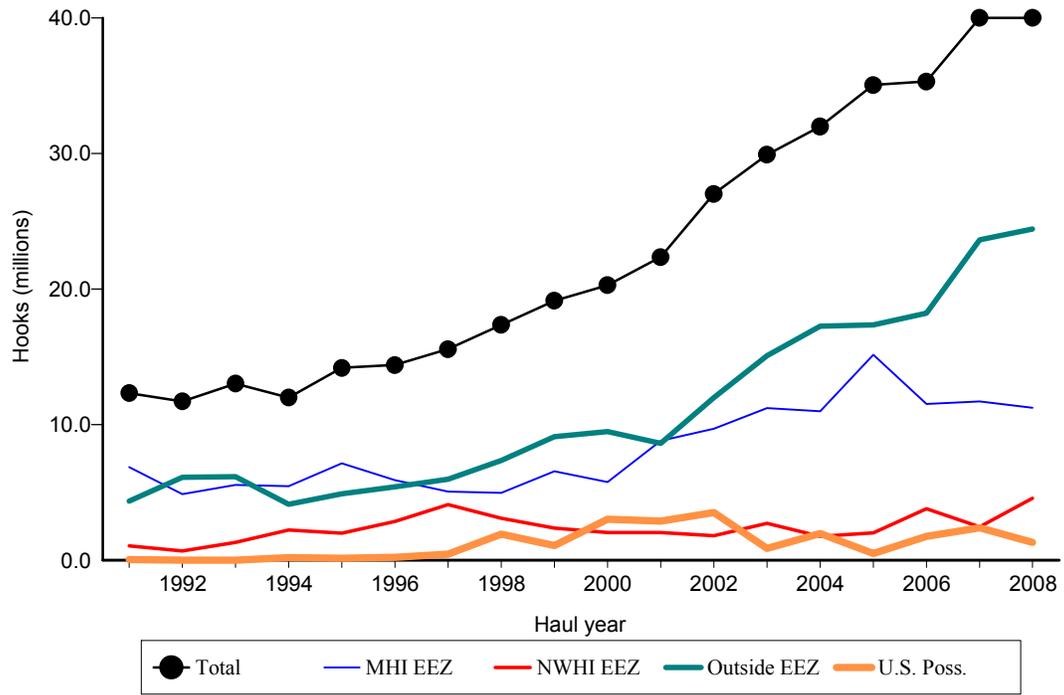


Figure A3. Number of hooks set by longline vessels based and landing in Hawaii, by year and fishing area, 1991-2008. [PIFSC IMS, Longline Logbook Data, 2/20/2009 10:48:26AM]

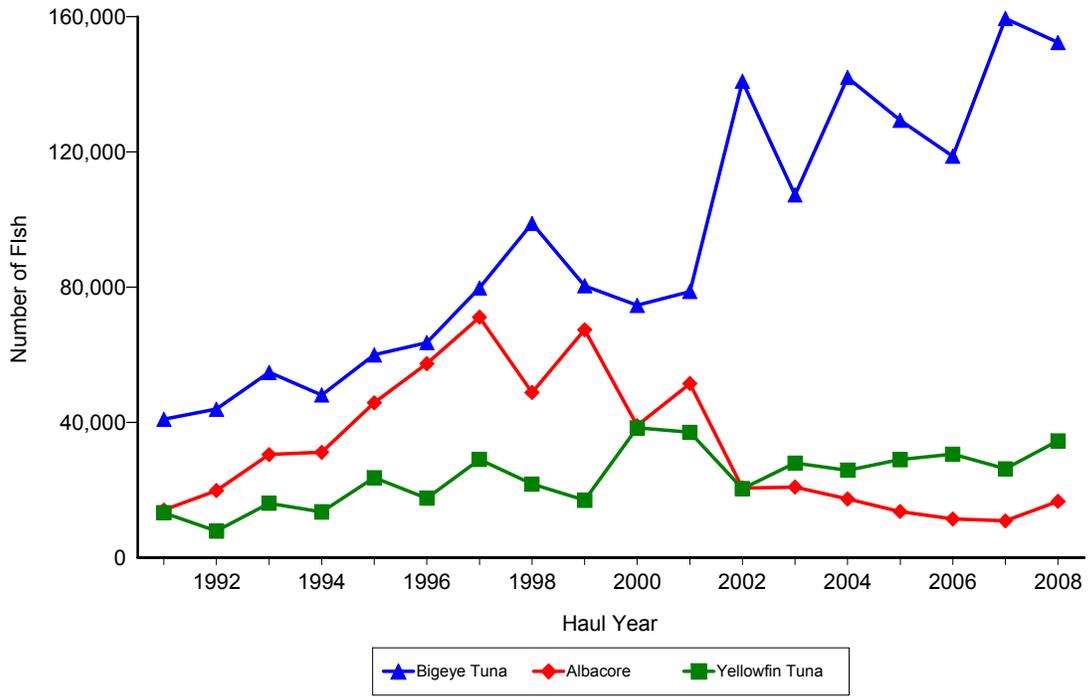


Figure A4. Annual catch of albacore, bigeye tuna, and yellowfin tuna by longline vessels based and landing in Hawaii, 1991-2008. [2/20/2009 10:48:26AM]

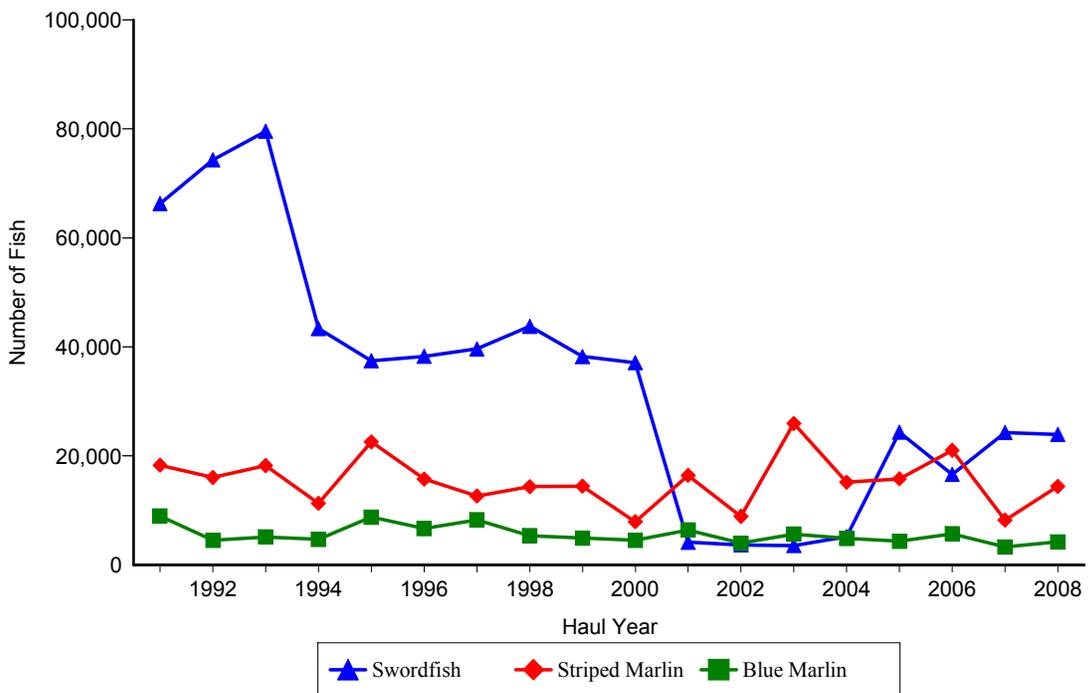


Figure A5. Annual catch of blue marlin, striped marlin, and swordfish by longline vessels based and landing in Hawaii, 1991-2008. [PIFSC IMS, Longline Logbook Data, 2/20/2009 10:48:26AM]

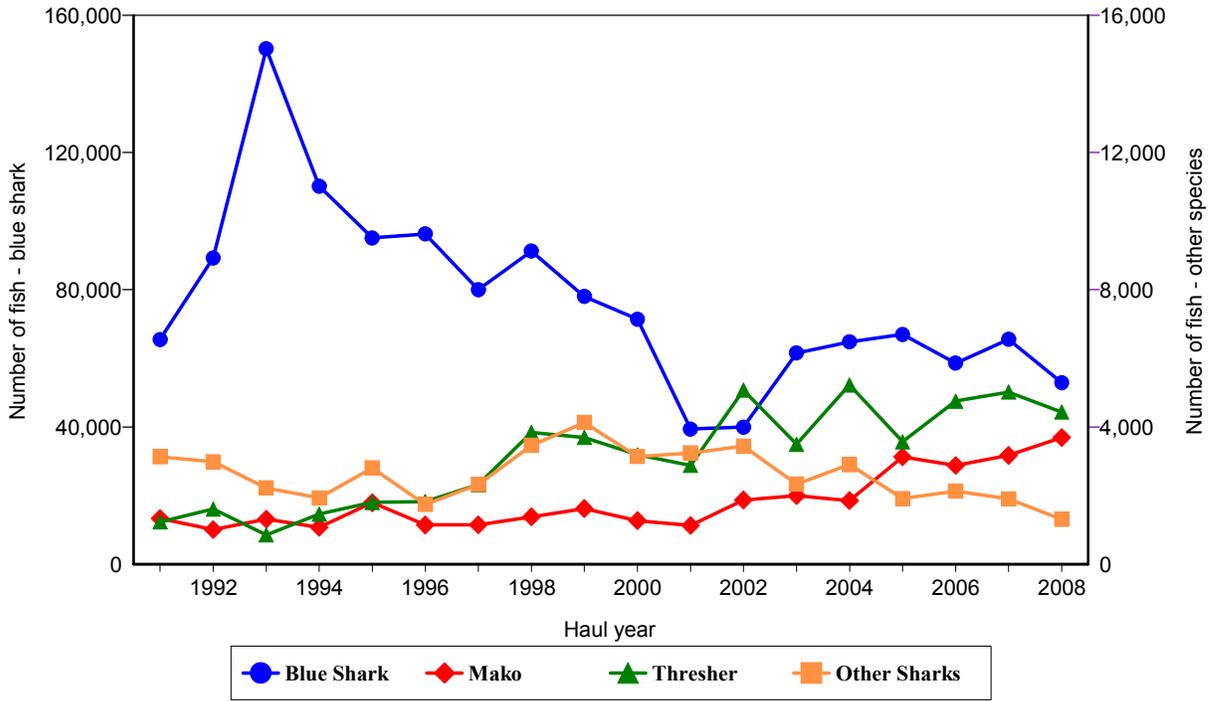


Figure A6. Annual catch of blue shark, mako shark, thresher shark, and other sharks by longline vessels based and landing in Hawaii, 1991-2008. [PIFSC IMS, Longline Logbook Data, 2/20/2009 10:48:26AM]

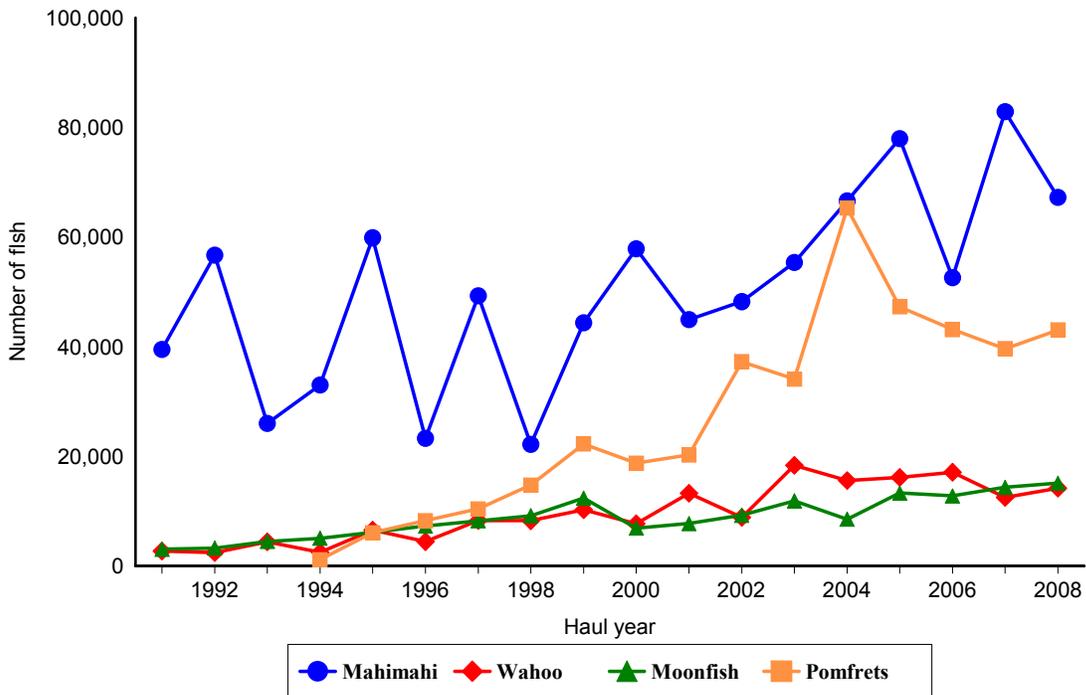


Figure A7. Annual catch of mahimahi, moonfish, pomfret, and wahoo by longline vessels based and landing in Hawaii, 1991-2008. [PIFSC IMS, Longline Logbook Data, 2/20/2009 10:48:26AM]

