

**The Hawaii-based Longline Logbook Summary Report
January-March 2005¹**

Pacific Islands Fisheries Science Center
Fishery Monitoring and Economics Program

All Federal longline logbook data for trips completed in the first quarter of 2005 by Hawaii-based longline vessels have been received and processed and are summarized in this report. Although most of the data from trips which began late in the first quarter of 2005 and continued into the second quarter are included, this report should be considered preliminary.

Since April 2, 2004 the Hawaii-based longline fishery has operated under new rules which eliminated the southern area closure and reopened the swordfish-directed component; however, the fishery remained restricted on effort, hook, and bait types. A separate limit on sea turtle interactions is in effect for the swordfish fishery and other mitigation measures, such as de-hooking devices, are also required for the tuna and swordfish fisheries.

During the first quarter of 2005, 117 vessels were active in the fishery, 16 more than in the same period last year (Figs. 1-2). The primary reasons for this increase were the closure of the California-based longline fishery and the establishment of the model swordfish fishery in Hawaii. Interactions between swordfish-targeted longline gear and sea turtles in California caused almost all of these vessels to migrate to Hawaii.

There were 415 longline trips in the first quarter of 2005, 53 more than in the previous year, most of which were tuna-targeted. However, because of the new rules, swordfish-targeted effort increased in the first quarter of 2005, resulting in 372 tuna-targeted and 43 swordfish-targeted trips (see FMEP Website). The total number of hooks set in this quarter was a record 8.5 million, an increase of 1.2 million from the first quarter of last year (Fig. 3). Forty-nine percent of the hooks were set in the main Hawaiian Islands (MHI) Exclusive Economic Zone (EEZ). Other effort was recorded outside the U.S. EEZ (45%), in the Northwestern Hawaiian Islands (NWHI) EEZ (4%), and in the EEZ around other U.S. possessions (1%).

The catch of major tuna species increased substantially in the first quarter of 2005. Bigeye tuna catch reached a record 39,036 fish (Fig. 4), with 48% caught on the high seas and 47% in the MHI EEZ. Bigeye tuna CPUE on tuna-targeted trips was 4.7 fish per 1000 hooks (Fig. 5). Albacore catch (4,731 fish) and CPUE (0.5) increased by 52% from the same period of last year (Figs. 6-7). Yellowfin tuna catch (13,390 fish) and CPUE (1.7) were about three times greater than in the first quarter of last year (Figs. 8-9).

Swordfish catch rose dramatically to 8,942 in the first quarter of 2005, the highest level since 2000 (Fig. 10). Swordfish-targeted swordfish CPUE was 18.9 while tuna-targeted swordfish CPUE was less than 0.1 (Fig. 11). Striped marlin catch (5,013 fish) and CPUE (0.6) were slightly below last year (Figs. 12-13). Blue marlin catch and CPUE were 1,021 and 0.1, respectively (Figs. 14-15).

A total of 19,182 sharks were caught in the first quarter of 2005, of which only 3% (797) were kept. Blue shark comprised 86% of the total (16,520 fish) (Fig. 16). Blue shark CPUE on swordfish-targeted trips was 15.5 (Fig. 17).

¹ PIFSC Data Report DR-05-001
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Table 1.--Western Pacific longline logbook summary for 1/2005 through 3/2005
(Vessels landing or based in Hawaii)
(Date of haul; Area totals;; All areas)

Trip information			

Number of vessels		117	
Number of trips		415	
Number of sets		4,463	
Number of hooks set		8,450,134	
Number of light sticks used		275,674	

Species catch information			

Species class			# caught
Species	# kept	# caught	per 1000 hooks
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Pelagic Management Unit Species (PMUS)			

Billfish			
Blue Marlin	1,005	1,021	0.12
Spearfish	6,750	6,923	0.82
Striped Marlin	4,960	5,013	0.59
Swordfish	8,198	8,942	1.06
Other	88	88	0.01
Total	21,001	21,987	2.60
Sharks			
Blue	78	16,520	1.95
Mako	366	1,183	0.14
Thresher	110	879	0.10
Other	16	600	0.07
Total	570	19,182	2.27
Tuna			
Albacore	4,442	4,731	0.56
Bigeye	37,203	39,036	4.62
Bluefin	0	0	0.00
Skipjack	7,227	8,660	1.02
Yellowfin	11,914	13,390	1.58
Other	16	17	0.00
Total	60,802	65,834	7.79
Other PMUS			
Mahimahi	25,397	25,957	3.07
Moonfish	1,454	1,471	0.17
Oilfish	6,970	7,167	0.85
Pomfret	11,684	11,739	1.39
Wahoo	5,025	5,072	0.60
Total	50,530	51,406	6.08
Miscellaneous			

Non-PMUS	485	725	0.09

Date and time of summary:

05/09/05 (10:11:38)

Table 2.--Western Pacific longline logbook PSI summary for 1/2005 through 3/2005
 (ALL Vessels landing or based in Hawaii)
 (Date of haul; All vessels;; All trips; All areas)

Reported Protected Species catch information				
Species	Alive/Uninjured	Injured	Dead	Total
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Seals/Sea Lions				
Monk Seals	0	0	0	0
Other Seals	0	0	0	0
Sea Lions	0	0	0	0
Total Seals/Sea Lions	0	0	0	0
Whales/Dolphins				
Humpback Whales	0	0	0	0
False Killer Whales	0	0	0	0
Other Whalse	2	1	0	3
Dolphins	0	1	0	1
Total Whales/Dolphins	2	2	0	4
Turtles				
Green Turtles	0	0	0	0
Hawksbill Turtles	0	0	0	0
Leatherback Turtles	0	2	0	2
Loggerhead Turtles	1	7	0	8
Olive Ridley Turtles	1	0	0	1
Unidentified Turtles	0	0	0	0
Other Turtles	0	0	0	0
Total Turtles	2	9	0	11
Birds				
Albatross	2	21	22	45
Booby	0	0	0	0
Other Birds	0	0	0	0
Total Birds	2	21	22	45
Other Species	0	0	0	0

Date and time of summary:

05/10/05 (10:52:05)

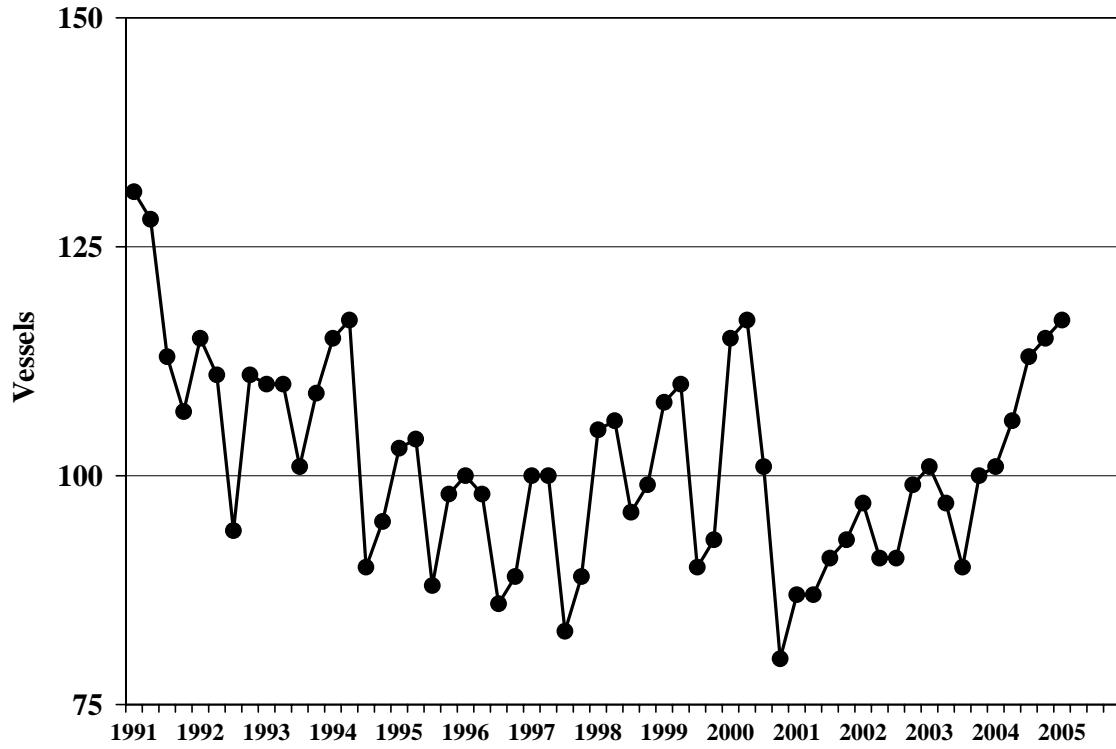


Figure 1.—Active Hawaii-based longline vessels, 1991-2005.

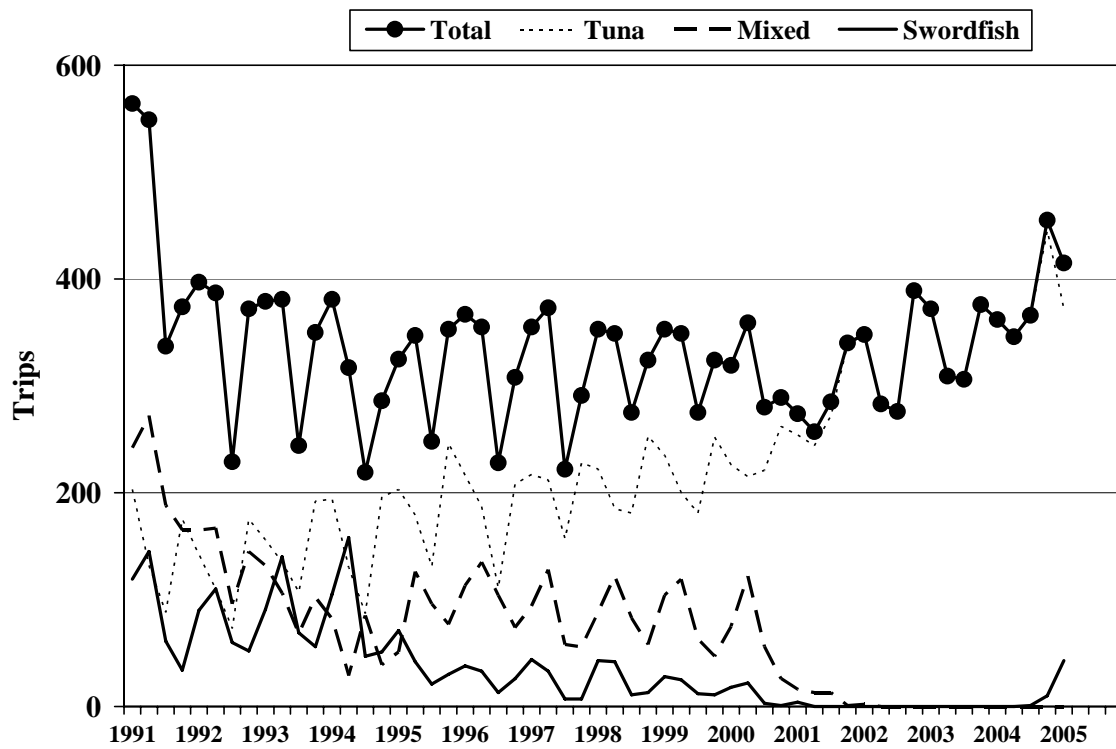


Figure 2.—Trips made by Hawaii-based longline vessels, 1991-2005.

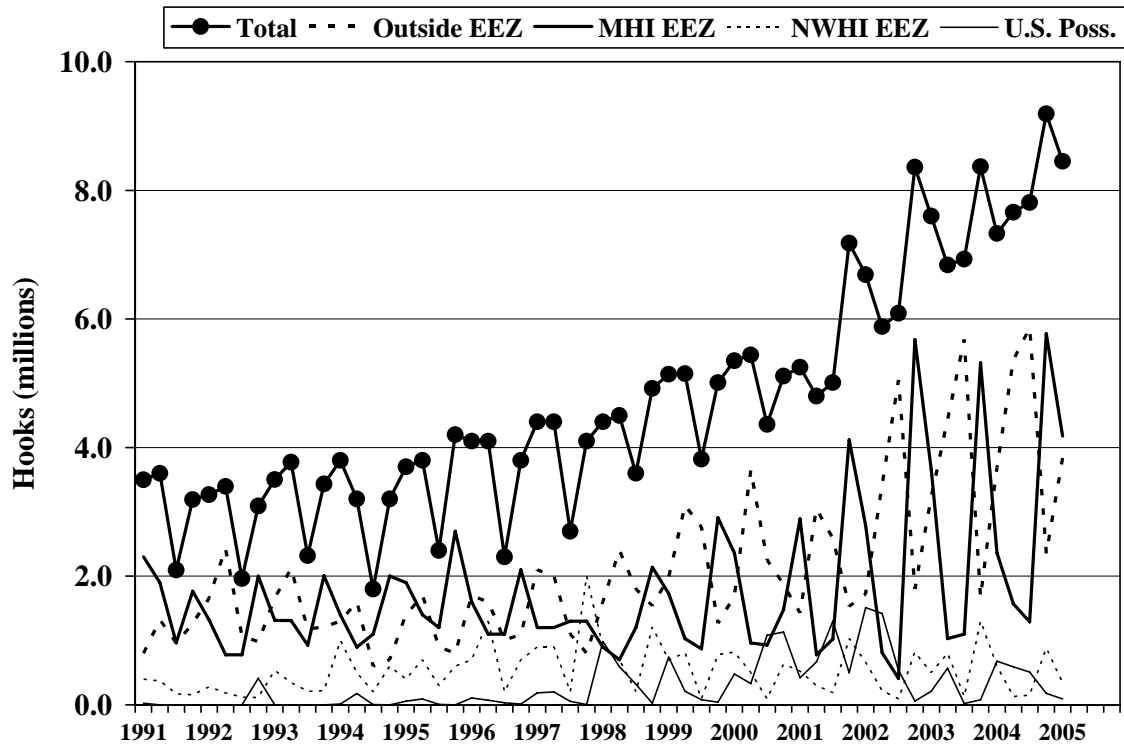


Figure 3.—Hooks set by the Hawaii-based longline fishery by quarter, 1991-2005.

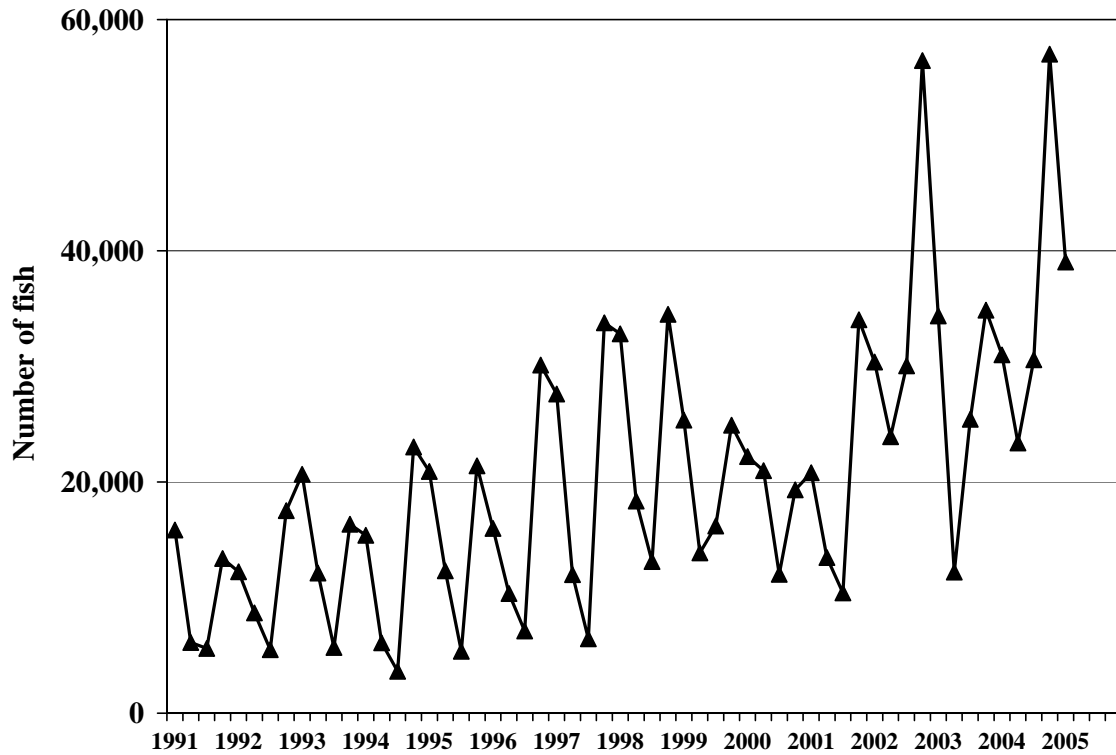


Figure 4.—Hawaii-based longline bigeye tuna catch by quarter, 1991-2005.

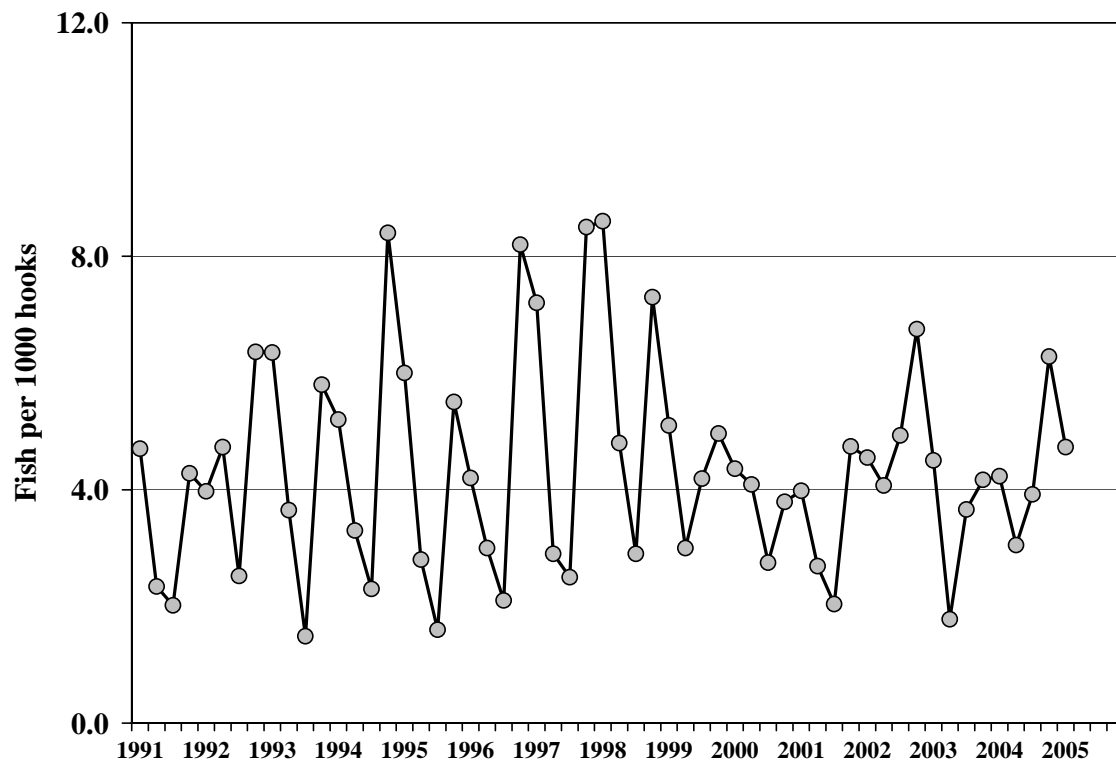


Figure 5.—Bigeye tuna CPUE for tuna-targeted trips by quarter, 1991-2005.

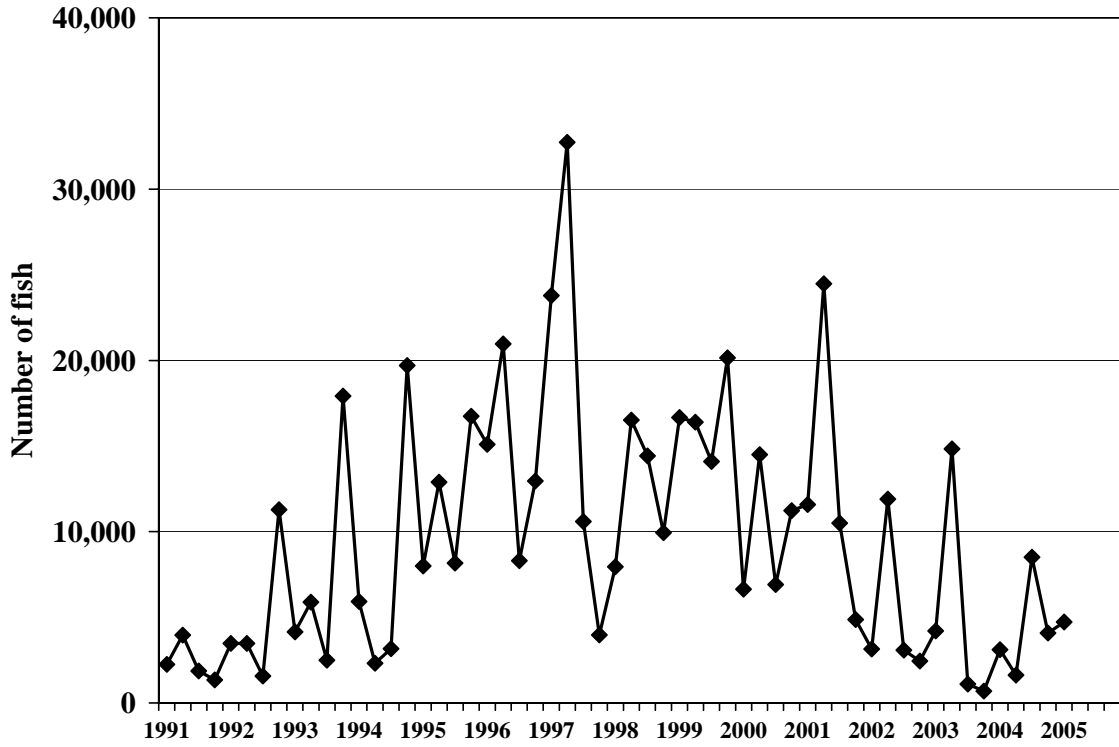


Figure 6.—Hawaii-based longline albacore catch by quarter, 1991-2005.

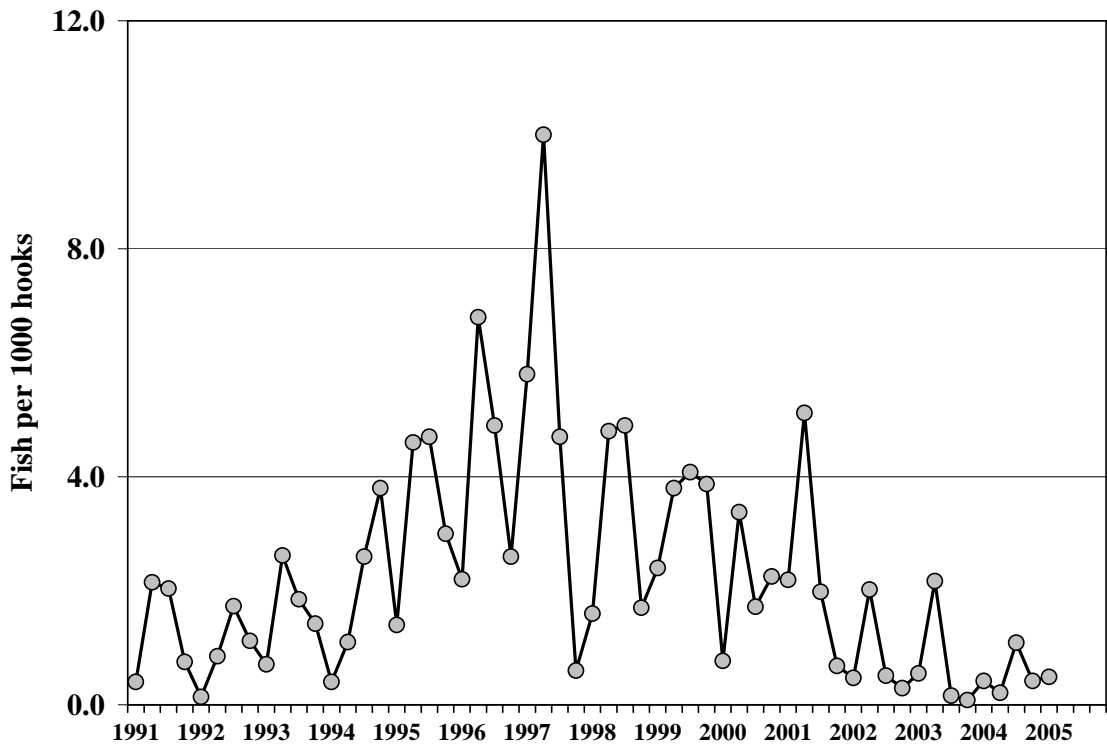


Figure 7.—Albacore CPUE for tuna-targeted trips by quarter, 1991-2005.

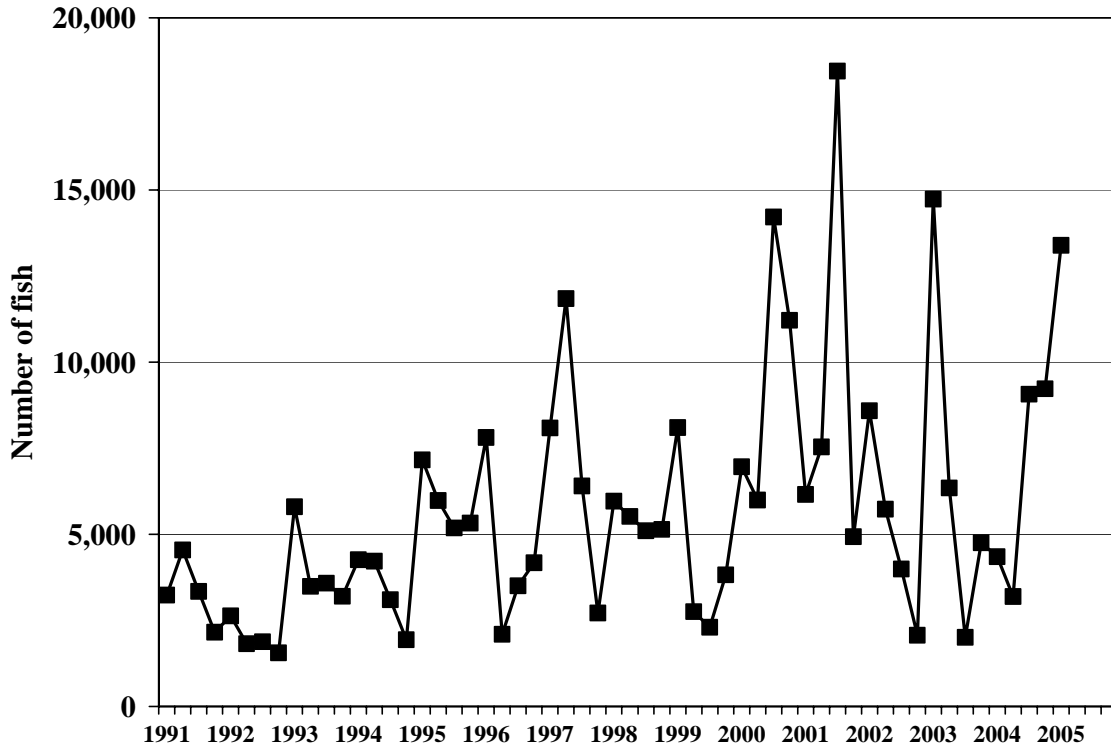


Figure 8.—Hawaii-based longline yellowfin tuna catch by quarter, 1991-2005.

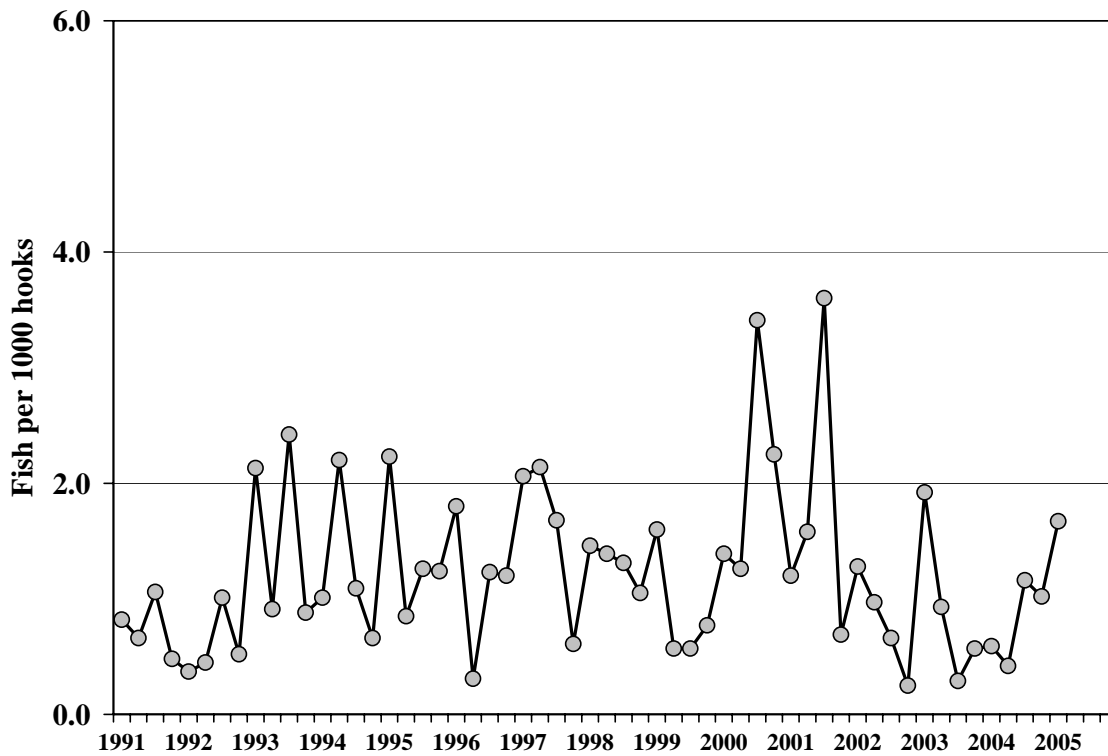


Figure 9.—Yellowfin tuna CPUE for tuna-targeted trips by quarter, 1991-2005.

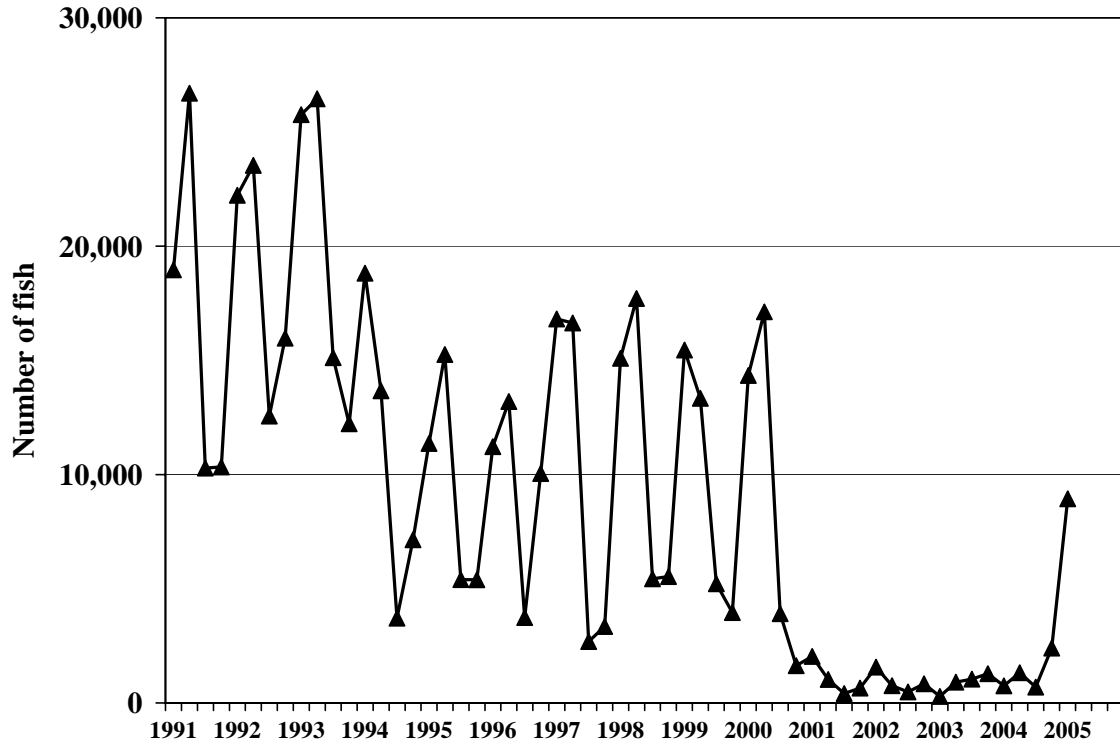


Figure 10.—Hawaii-based longline swordfish catch by quarter, 1991-2005.

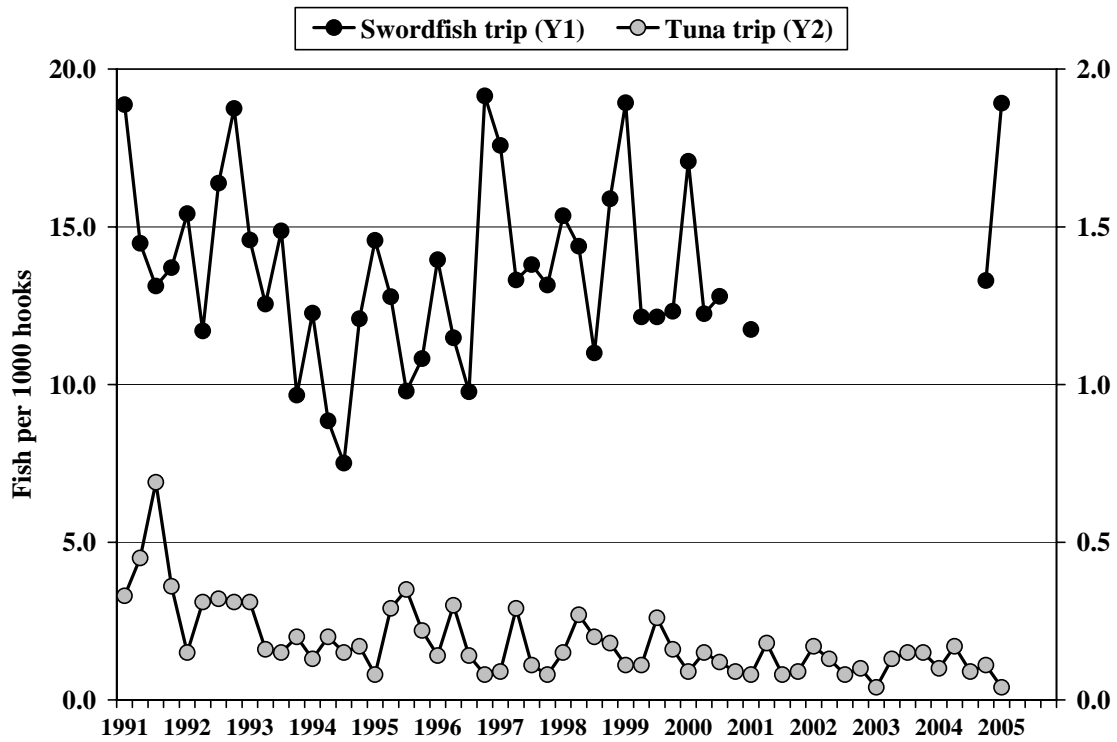


Figure 11.—Swordfish CPUE by quarter, 1991-2005.

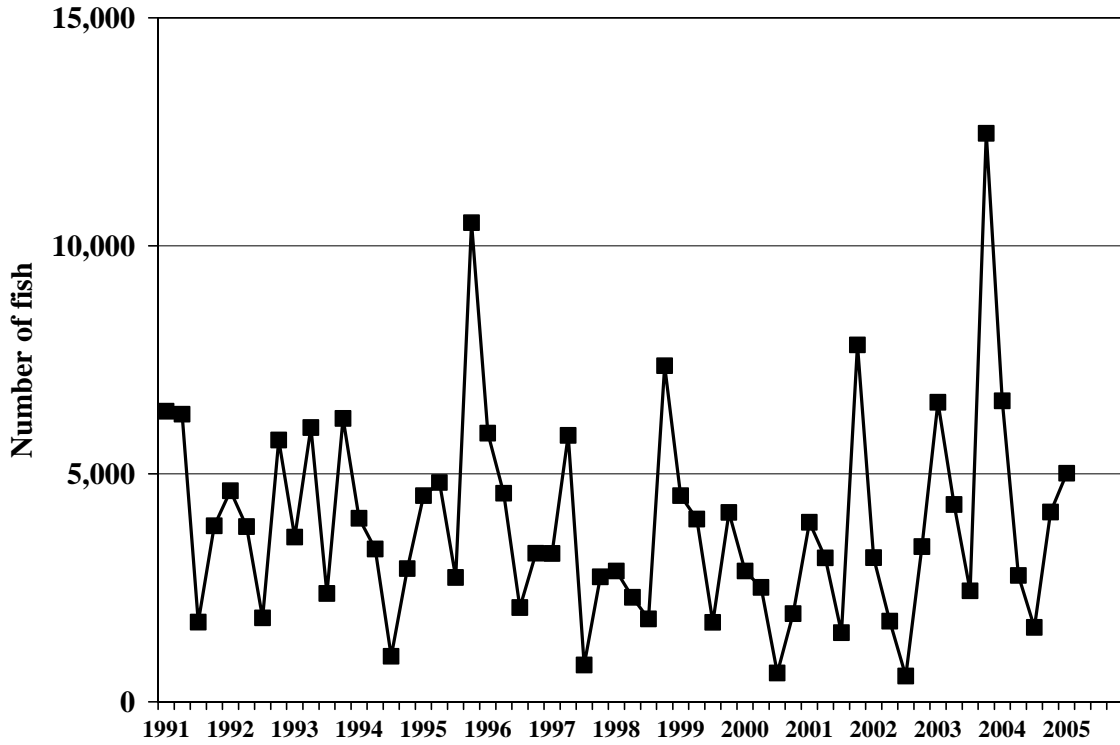


Figure 12.—Hawaii-based longline striped marlin catch by quarter, 1991-2005.

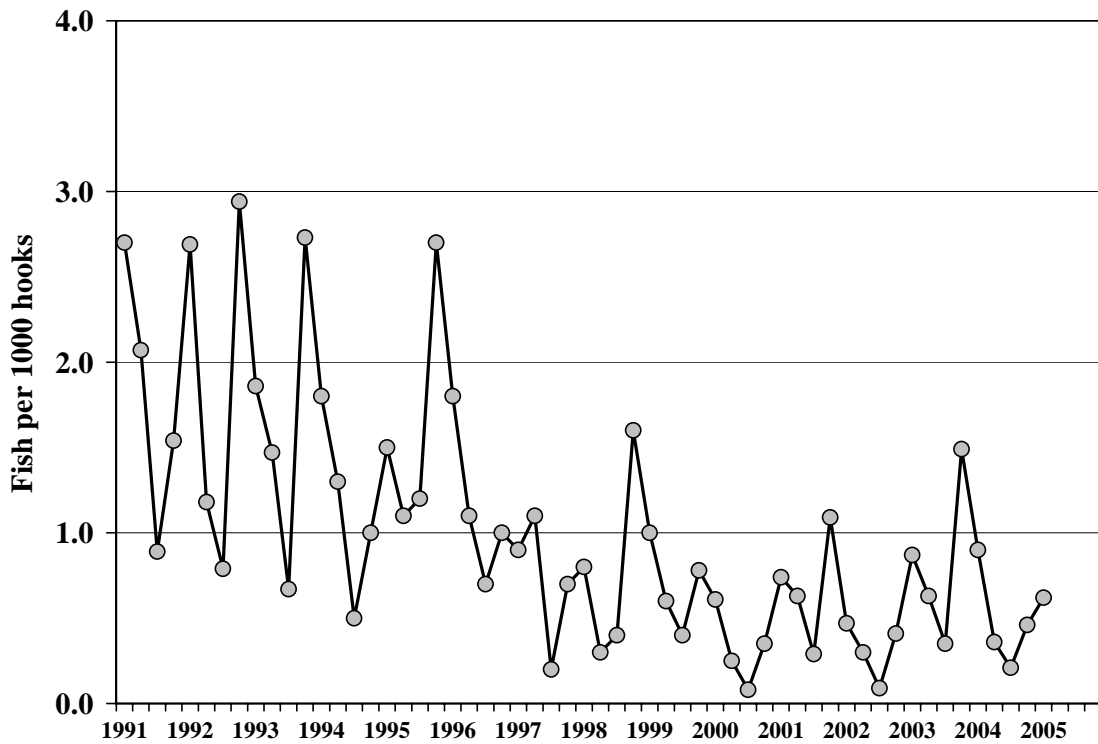


Figure 13.—Striped marlin CPUE for tuna-targeted trips by quarter, 1991-2005.

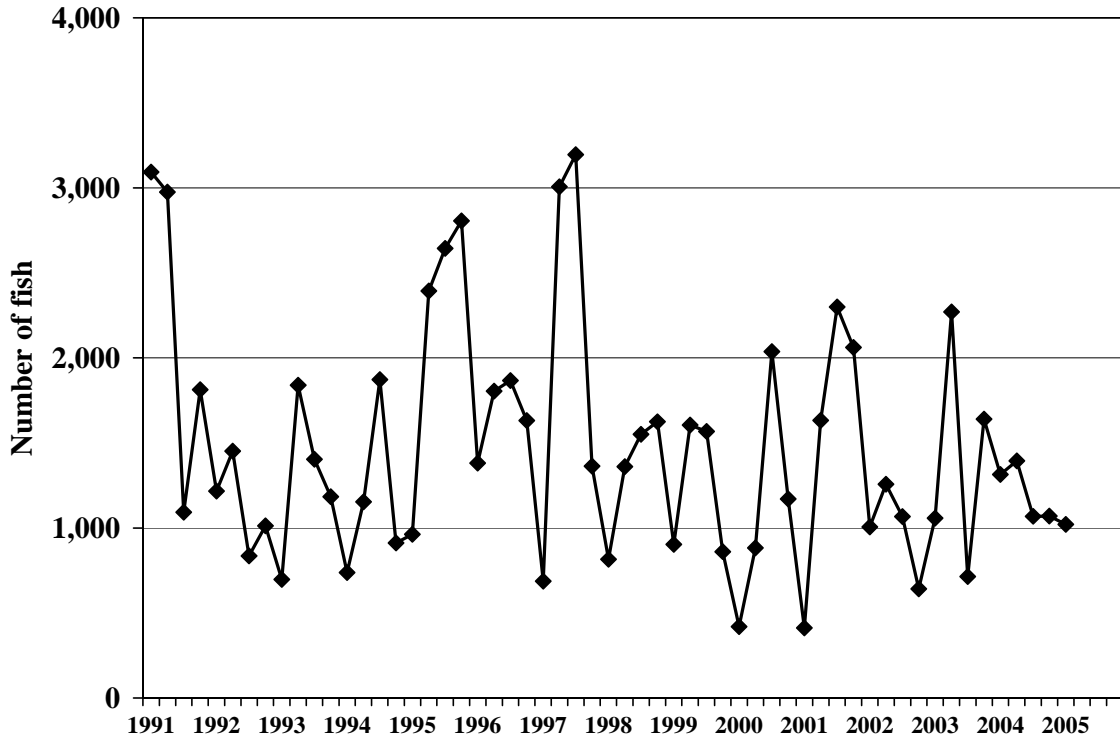


Figure 14.—Hawaii-based longline blue marlin catch by quarter, 1991-2005.

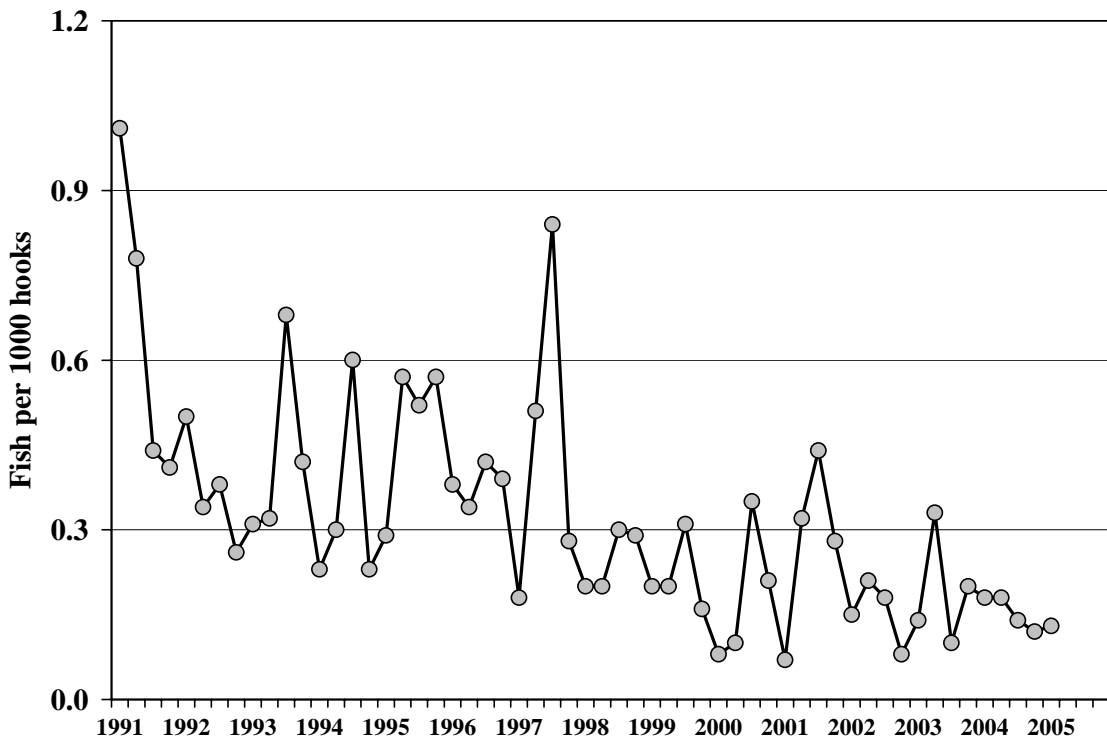


Figure 15.—Blue marlin CPUE for tuna-targeted trips by quarter, 1991-2005.

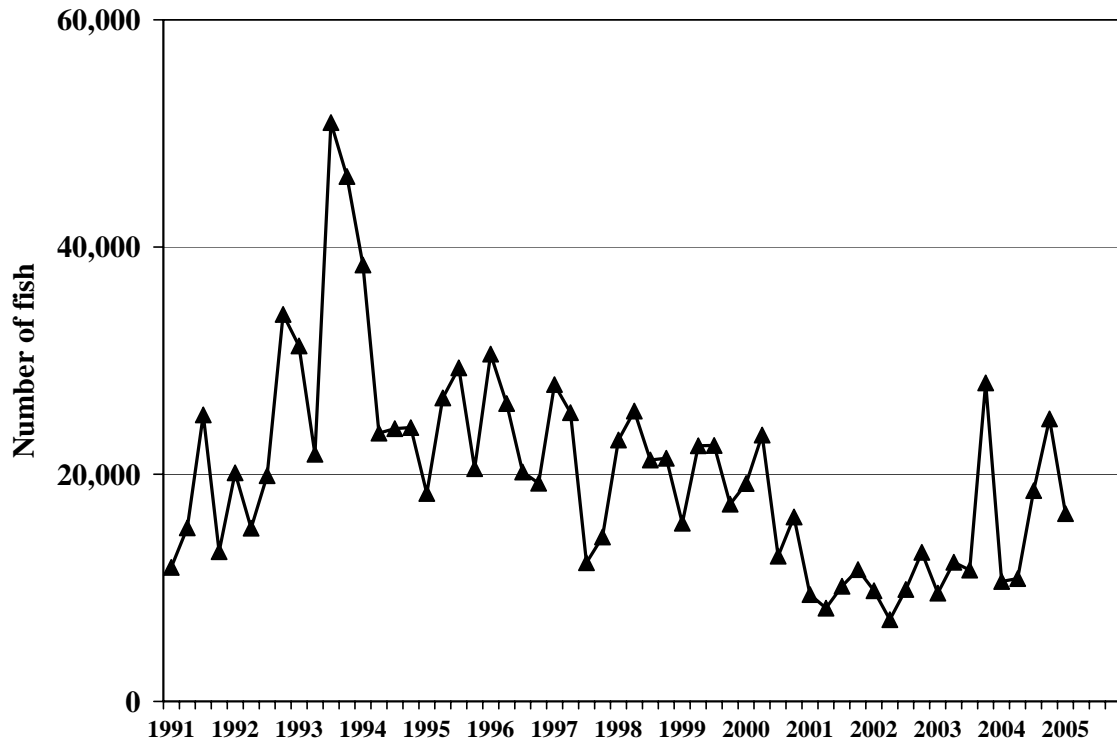


Figure 16.—Hawaii-based longline blue shark catch by quarter, 1991-2005.

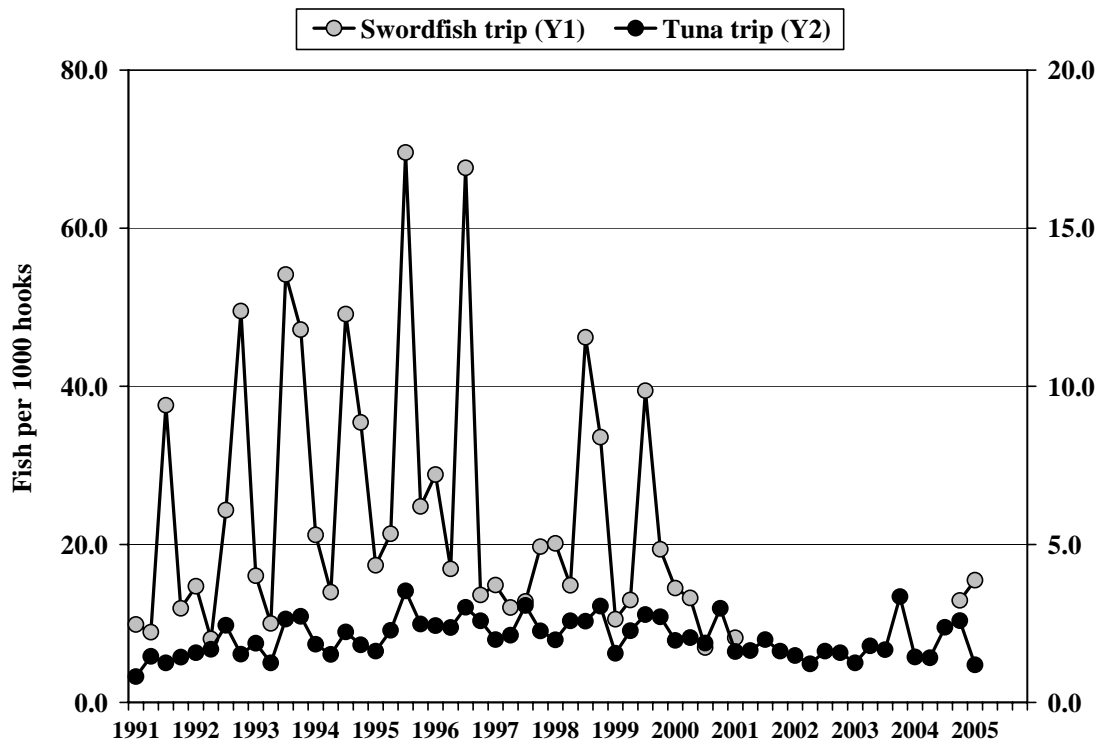


Figure 17.—Blue shark CPUE by quarter, 1991-2005.

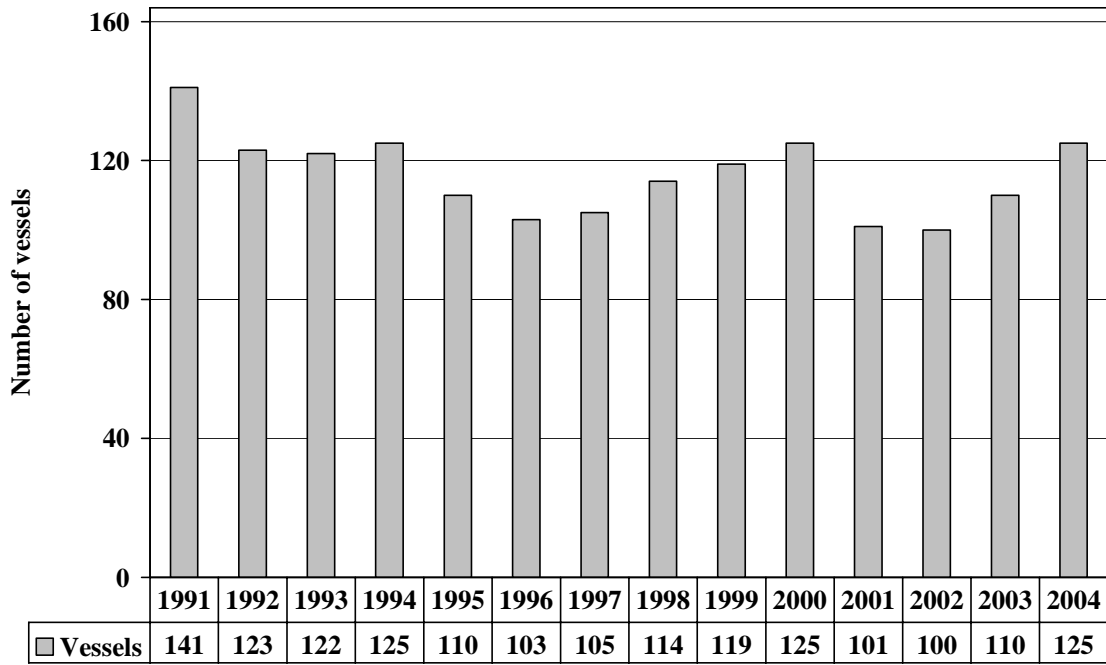


Figure A1.--Number of active Hawaii-based longline vessels, 1991-2004.

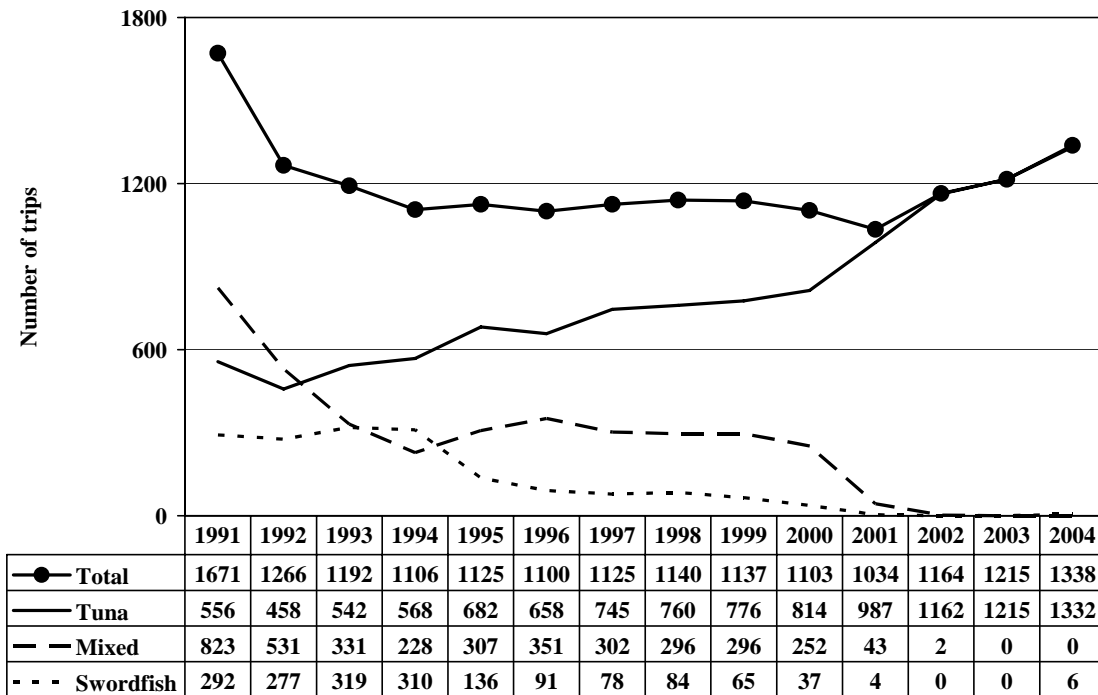


Figure A2.--Number of trips by the Hawaii-based longline fishery, 1991-2004.

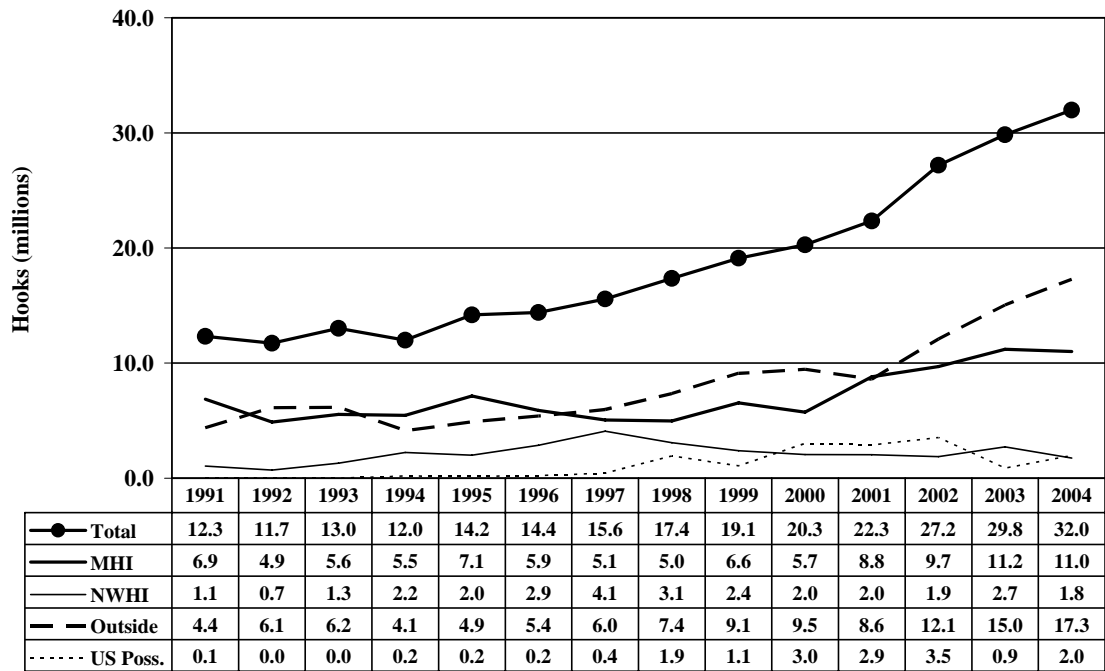


Figure A3.--Number of hooks set by area, 1991-2004.

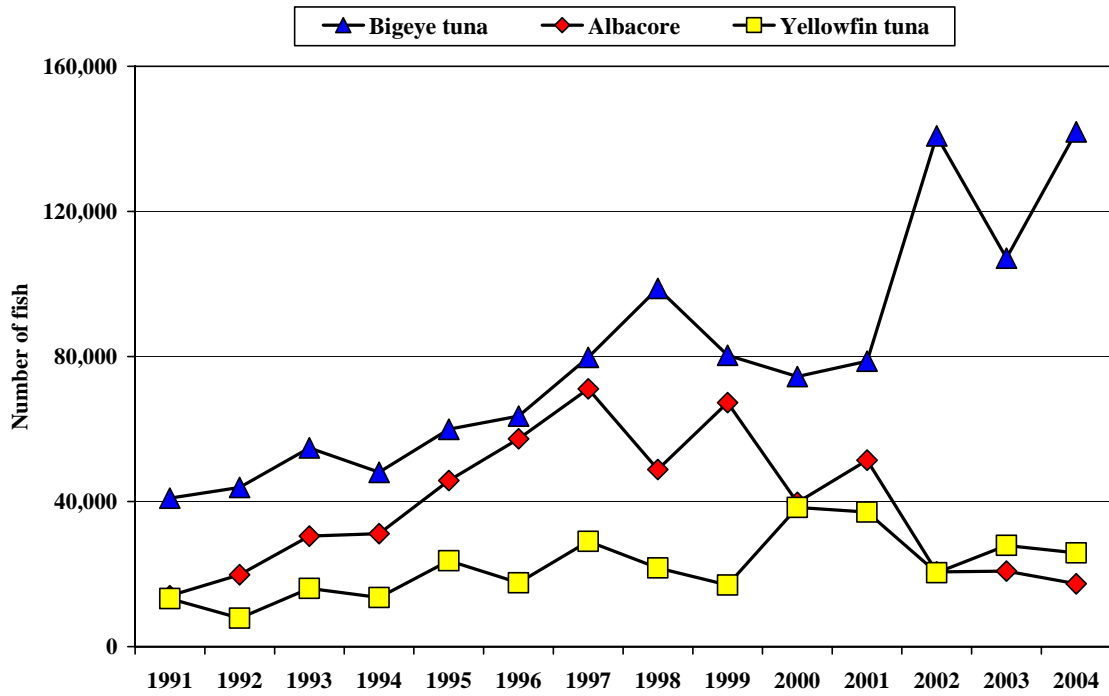


Figure A4.--Tuna catches by the Hawaii-based longline fishery, 1991-2004.

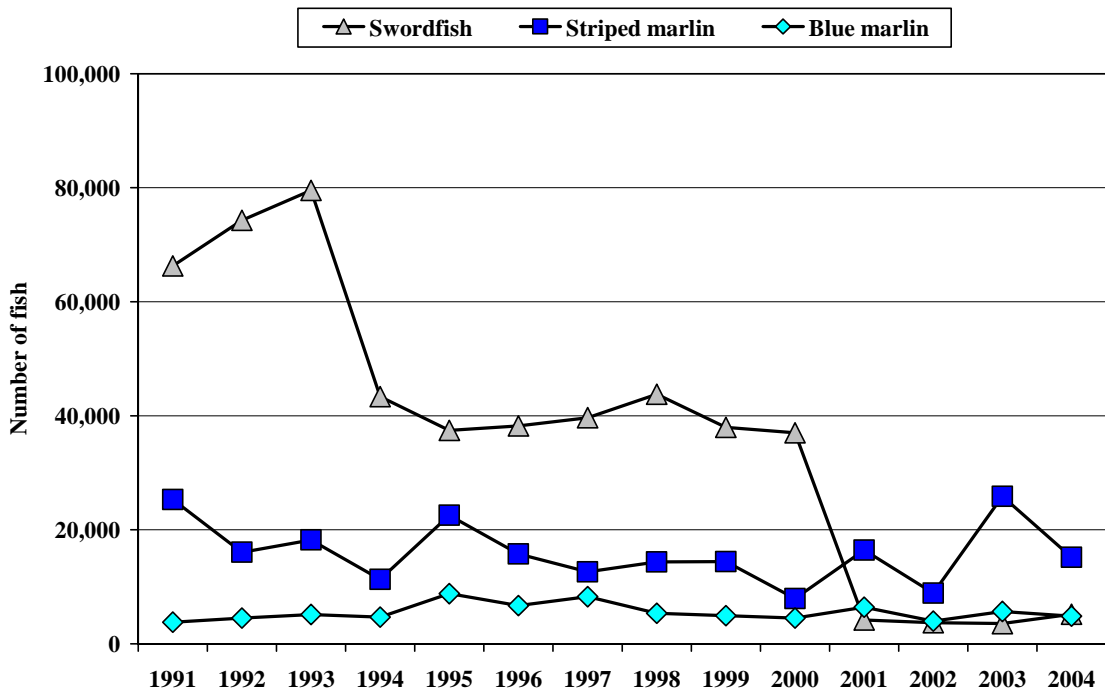


Figure A5.--Billfish catches by the Hawaii-based longline fishery, 1991-2004.

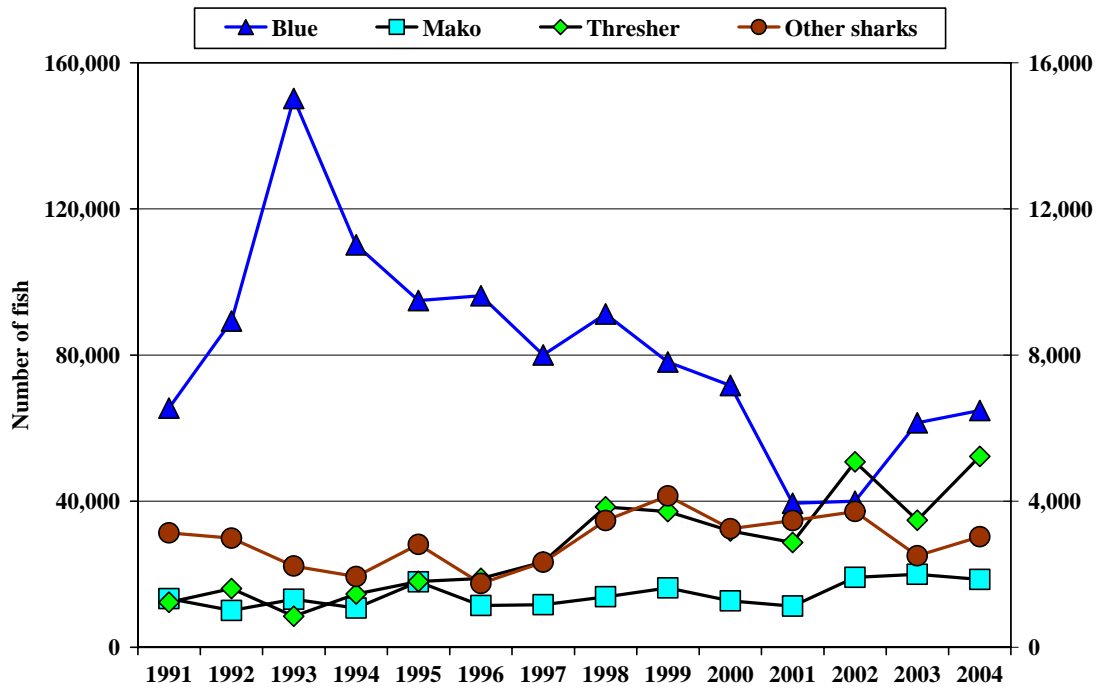


Figure A6.--Shark catches by the Hawaii-based longline fishery, 1991-2004.

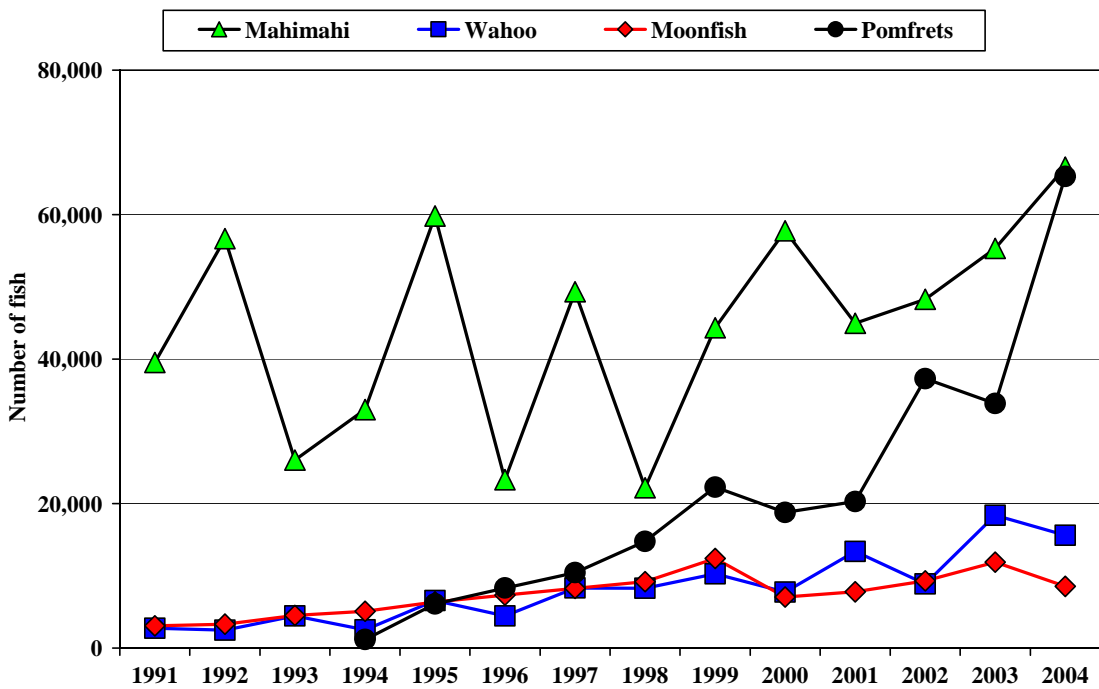


Figure A7.--Catch of miscellaneous pelagic species, 1991-2004.