

The Hawaii-based Longline Logbook Summary Report April-June 2005¹

Pacific Islands Fisheries Science Center
Fishery Monitoring and Economics Program

All Federal longline logbook data for trips completed in the second 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 second quarter of 2005 and continued into the third quarter are included, this report should still be considered preliminary.

Since April 2, 2004, the Hawaii-based longline fishery has operated under rules that have restrictions 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 dehooking devices, are also required for the tuna and swordfish fisheries.

During the second quarter of 2005, 120 vessels were active in the fishery, 14 more than in the same period last year (Fig. 1). 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 407 longline trips in the second quarter of 2005, 61 more than the previous year (Fig. 2), most of which were tuna-targeted (346 trips). However, because of the new rules, swordfish-targeted effort increased to 61 trips in the second quarter of 2005 (see FMEP website). The total number of hooks set in this quarter was a record 8.1 million, an increase of 400,000 hooks from the second quarter of last year (Fig. 3). Sixty-five percent of the hooks were set outside of the U.S. Exclusive Economic Zone (EEZ). Other effort was recorded in the main Hawaiian Islands (MHI) EEZ (24%), the Northwestern Hawaiian Islands (NWHI) EEZ (7%), and U.S. possessions (4%).

The catches of bigeye tuna and yellowfin tuna decreased whereas the albacore catch increased in the second quarter of 2005. Bigeye tuna catch was 21,122 fish in the second quarter of 2005 (Fig. 4), with 78% caught on the high seas. Bigeye tuna CPUE on tuna-targeted trips was 2.7 fish per 1000 hooks (Fig. 5). Albacore catch (5,756 fish) and CPUE (0.8) increased by more than three and a half and fourfold from the same period of last year, respectively (Figs. 6-7). Yellowfin tuna catch (2,847 fish) and CPUE (0.4) were slightly less than those in the second quarter of last year (Figs. 8-9).

Swordfish catch rose to 11,504 in the second quarter of 2005, the highest level since 2000 (Fig. 10). Swordfish-targeted swordfish CPUE was 14.4 while tuna-targeted swordfish CPUE was 0.2 in the second quarter of 2005 (Fig. 11). Striped marlin catch (5,421 fish) and CPUE (0.5) were above last year (Figs. 12-13). Blue marlin catch and CPUE were 1,640 and 0.2, respectively (Figs. 14-15).

A total of 13,274 sharks were caught in the second quarter of 2005, of which less than 1% (129) was kept. Blue shark comprised 81% of the total shark catch (16,520 fish) (Fig. 16). Blue shark CPUE on swordfish-targeted trips was 7.4 (Fig. 17).

¹ PIFSC Data Report DR-05-005
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Table 1.--Western Pacific longline logbook summary for 4/2005 through 6/2005
(Vessels landing or based in Hawaii)
(Date of haul; Area totals; All areas)

Trip information			

Number of vessels		120	
Number of trips		407	
Number of sets		4,462	
Number of hooks set		8,112,234	
Number of light sticks used		396,027	

Species catch information			

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

Billfish			
Blue Marlin	1,587	1,640	0.20
Spearfish	2,933	3,038	0.37
Striped Marlin	5,162	5,421	0.67
Swordfish	10,085	11,504	1.42
Other	50	55	0.01
Total	19,817	21,658	2.67
Sharks			
Blue	129	13,274	1.64
Mako	361	828	0.10
Thresher	93	1,531	0.19
Other	100	694	0.09
Total	683	16,327	2.01
Tuna			
Albacore	5,721	5,756	0.71
Bigeye	20,806	21,122	2.60
Bluefin	1	1	0.00
Skipjack	1,583	1,641	0.20
Yellowfin	2,790	2,847	0.35
Other	23	23	0.00
Total	30,924	31,390	3.87
Other PMUS			
Mahimahi	9,582	10,714	1.32
Moonfish	2,256	2,267	0.28
Oilfish	6,434	6,854	0.84
Pomfret	12,832	12,890	1.59
Wahoo	5,351	5,384	0.66
Total	36,455	38,109	4.70
Miscellaneous			

Non-PMUS	933	1,464	0.18

Date and time of summary:

08/12/05 (13:00:29)

Table 2.--Western Pacific longline logbook PSI summary for 4/2005 through 6/2005
 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	0	0	0	0
Dolphins	0	0	0	0
Total Whales/Dolphins	0	0	0	0
Turtles				
Green Turtles	0	0	0	0
Hawksbill Turtles	0	0	0	0
Leatherback Turtles	1	3	0	4
Loggerhead Turtles	0	0	0	0
Olive Ridley Turtles	0	0	0	0
Unidentified Turtles	0	0	0	0
Other Turtles	0	0	0	0
Total Turtles	1	3	0	4
Birds				
Albatross	13	2	7	22
Booby	0	0	0	0
Other Birds	0	0	0	0
Total Birds	13	2	7	22
Other Species	0	0	0	0

Date and time of summary:

08/12/05 (13:00:03)

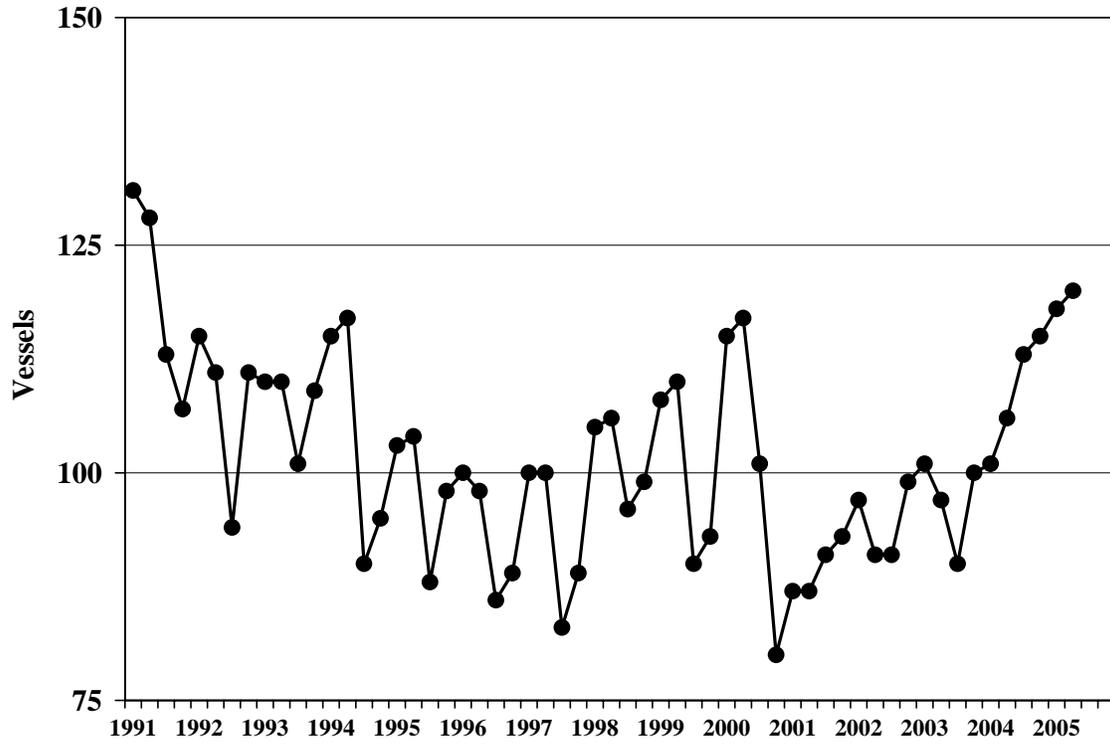


Figure 1.—Active Hawaii-based longline vessels, 1991-2005.

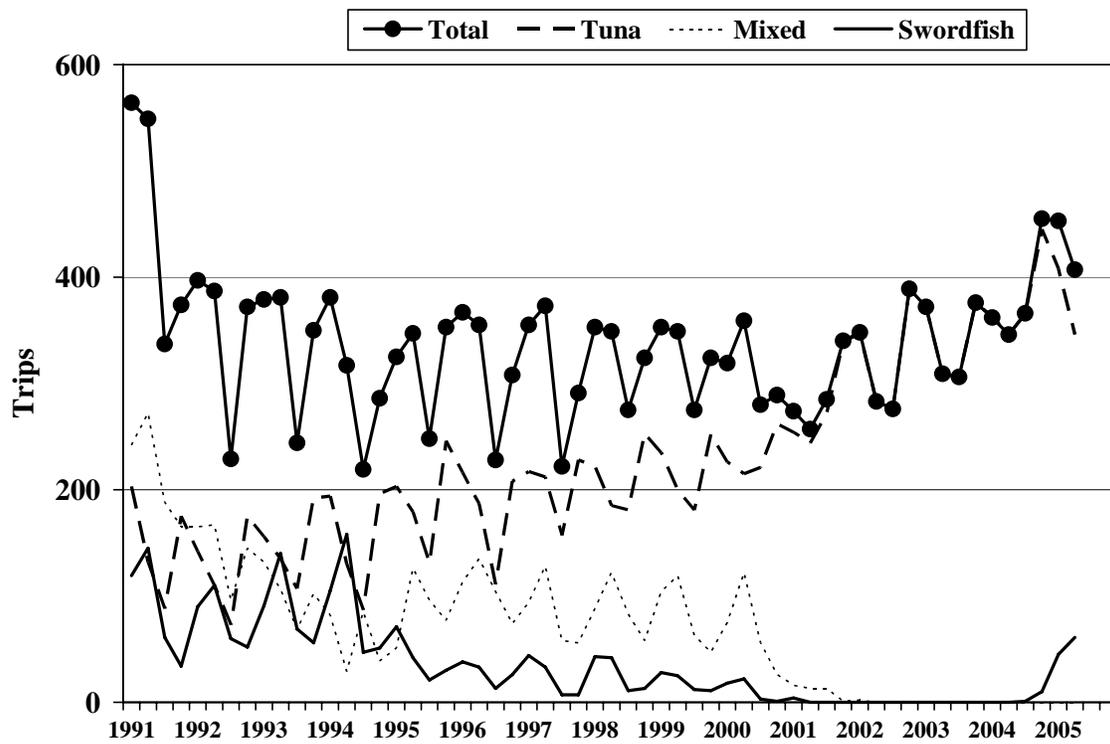


Figure 2.—Trips made by Hawaii-based longline vessels, 1991-2005.

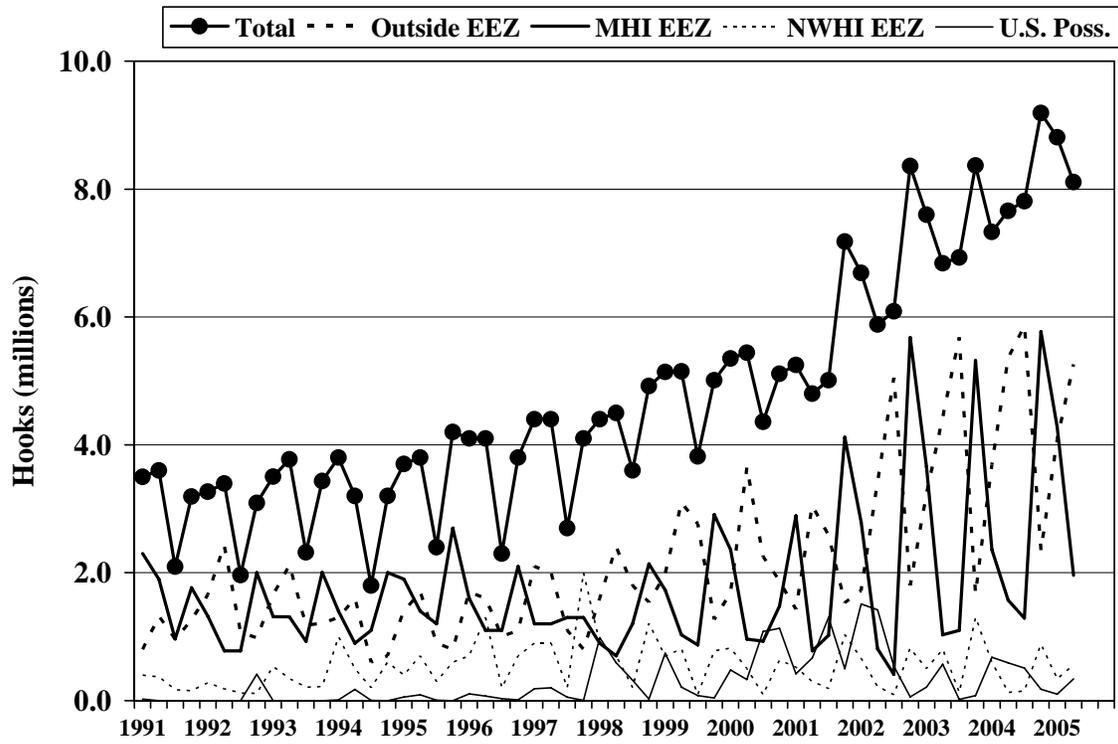


Figure 3.—Hooks set by the Hawaii-based longline fishery by quarter, 1991-2005.

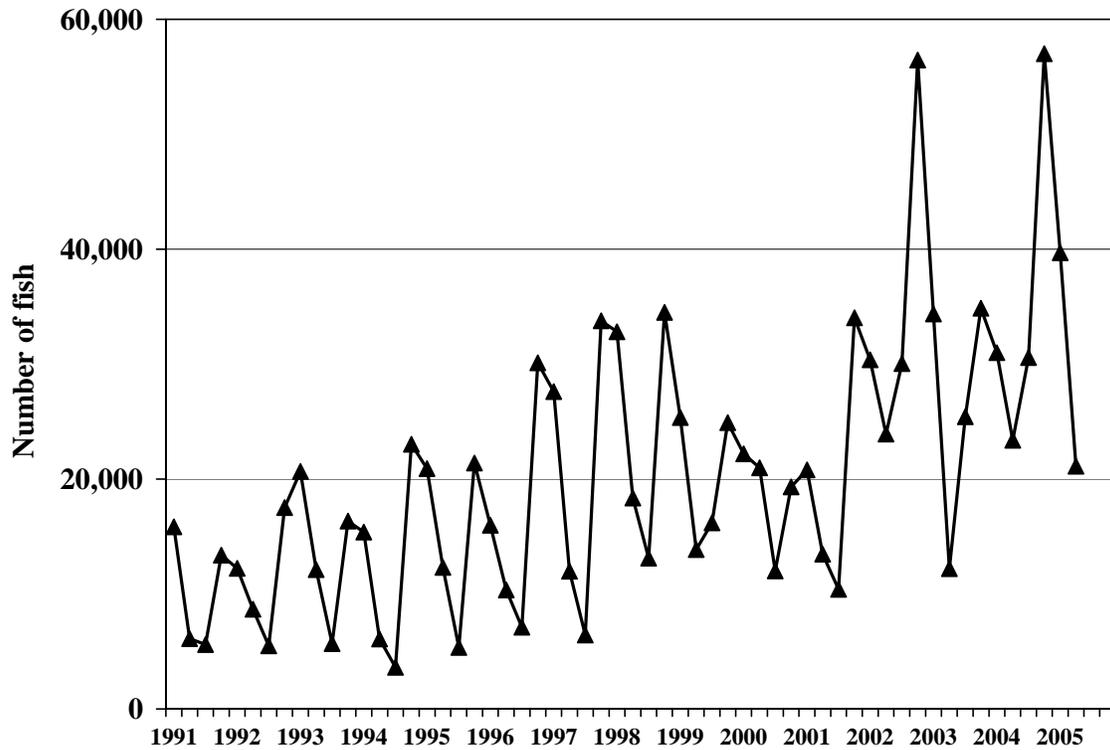


Figure 4.—Hawaii-based longline bigeye tuna catch by quarter, 1991-2005.

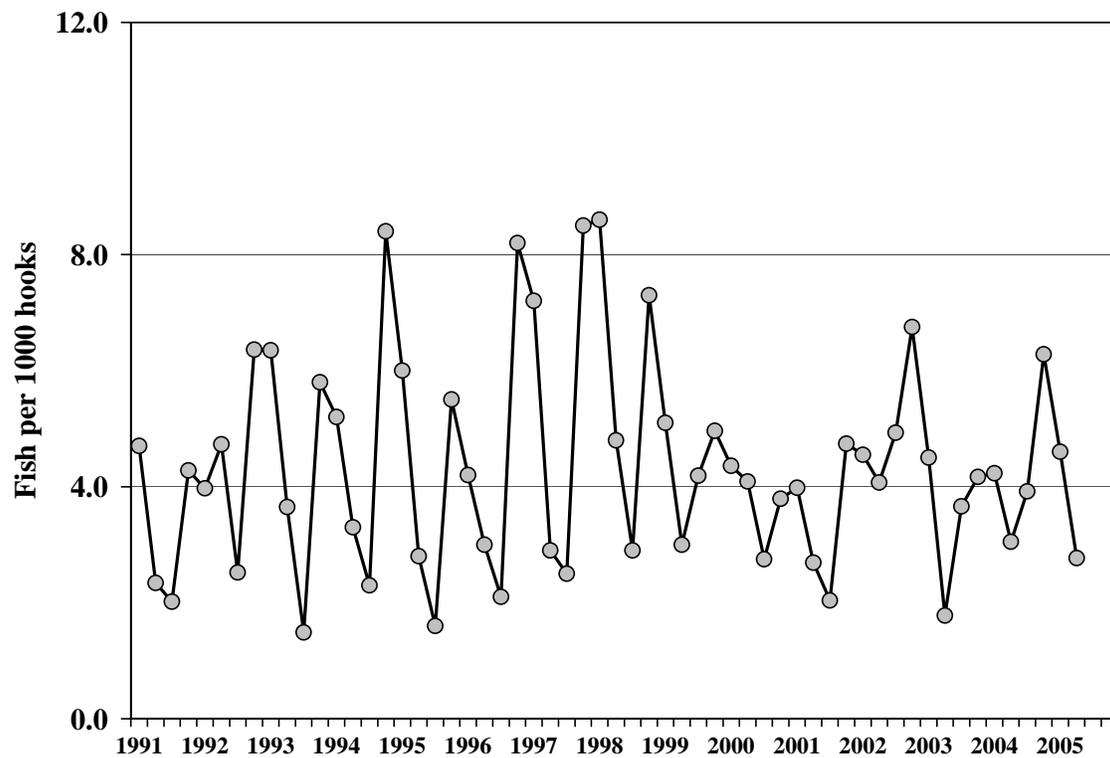


Figure 5.—Bigeye tuna CPUE for tuna-targeted trips by quarter, 1991-2005.

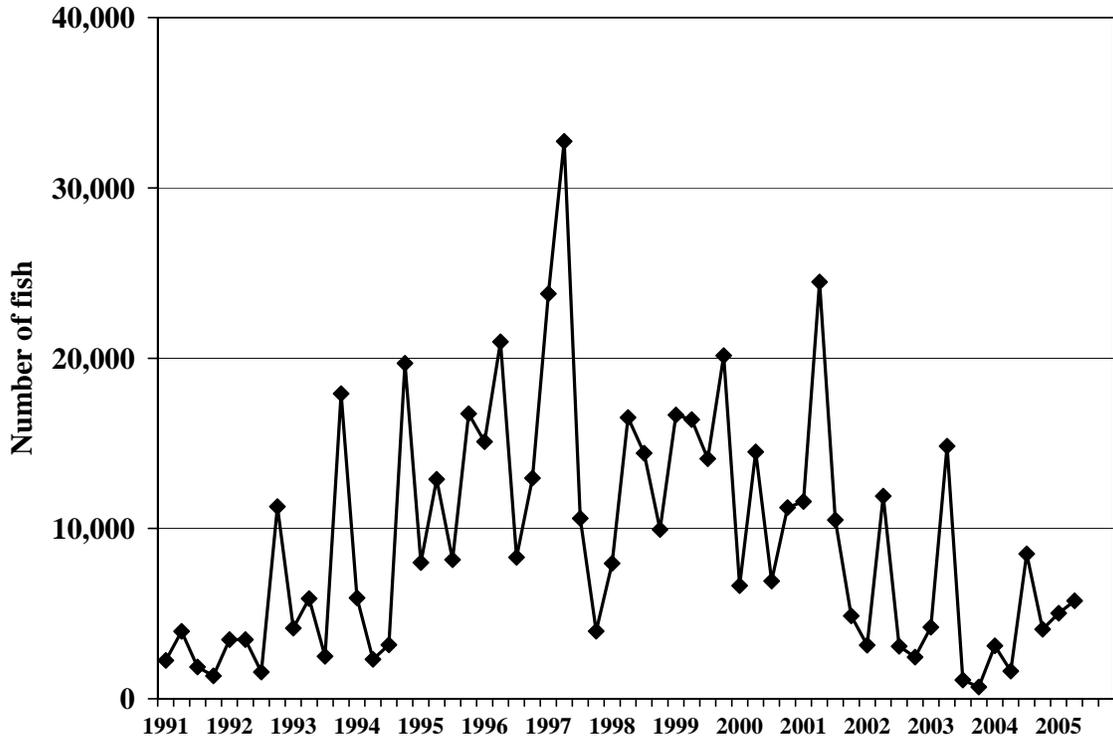


Figure 6.—Hawaii-based longline albacore catch by quarter, 1991-2005.

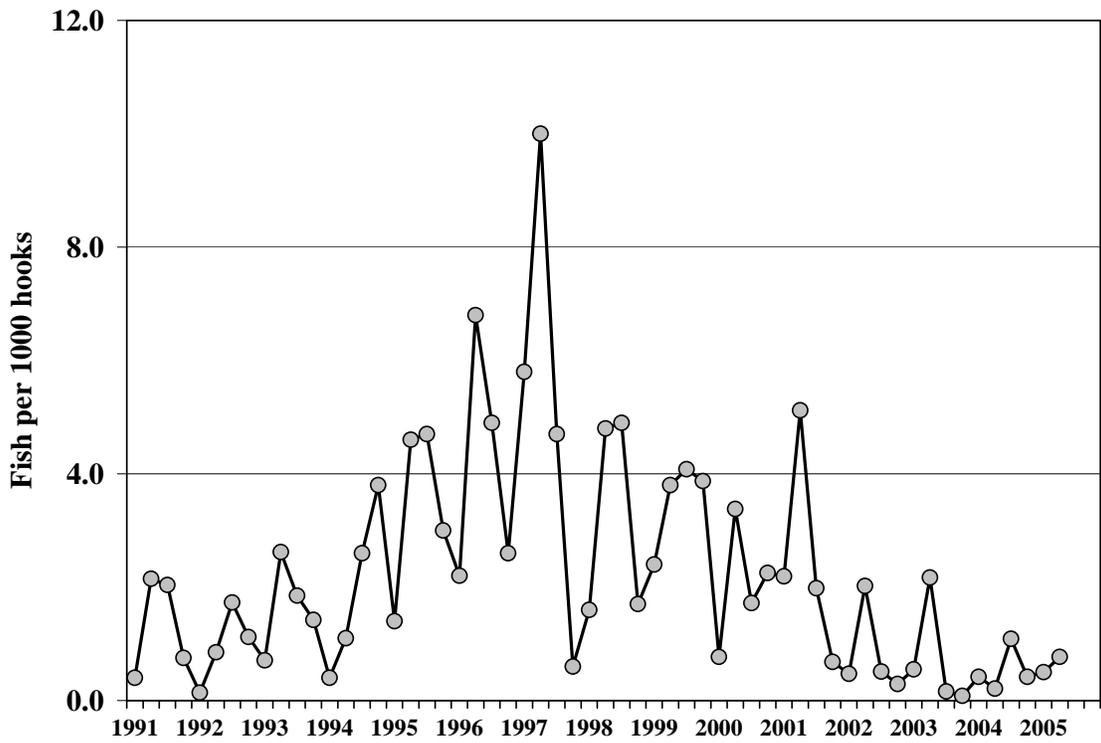


Figure 7.—Albacore CPUE for tuna-targeted trips by quarter, 1991-2005.

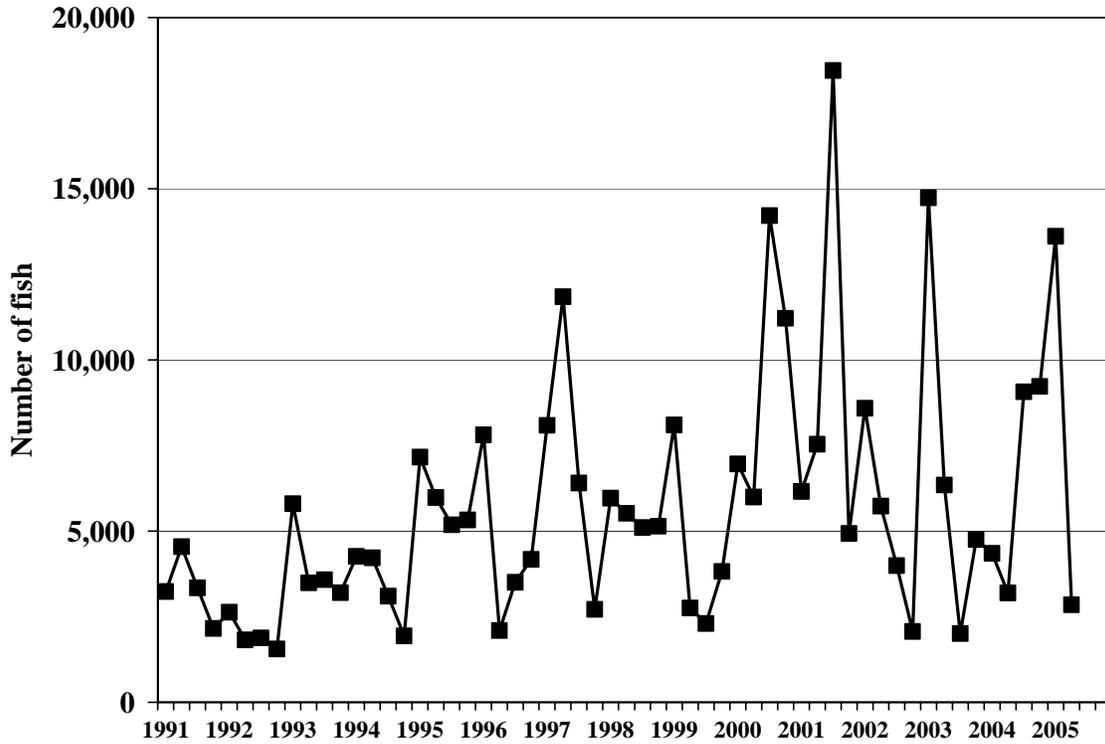


Figure 8.—Hawaii-based longline yellowfin tuna catch by quarter, 1991-2005.

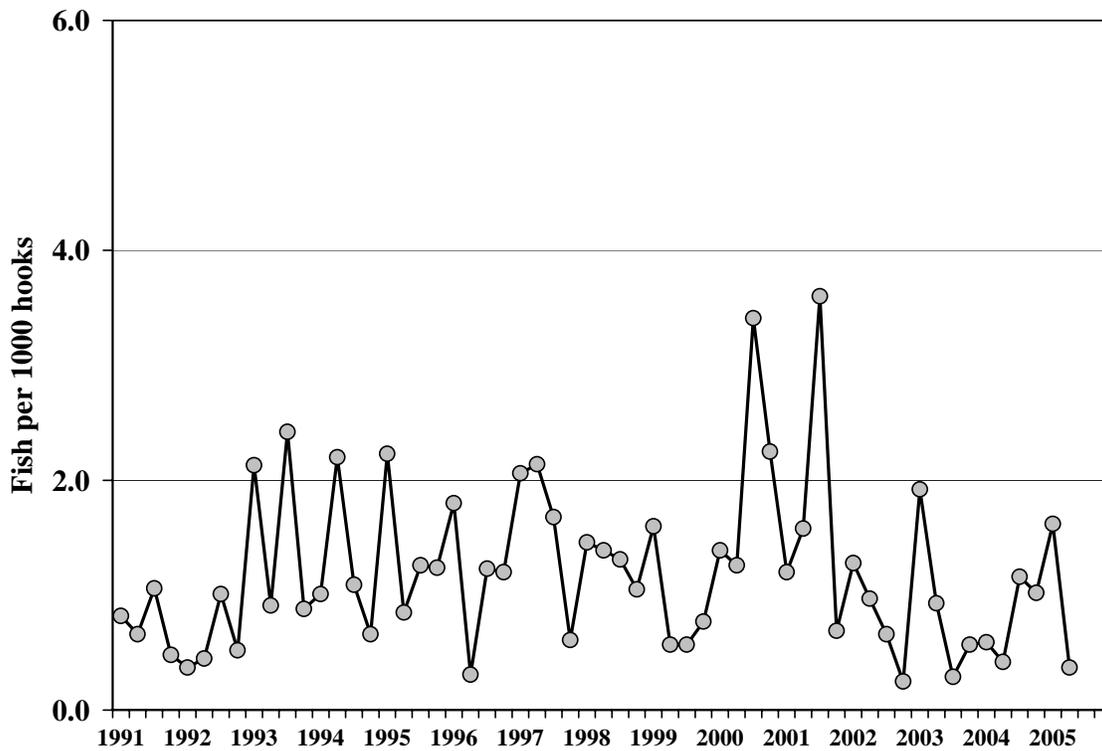


Figure 9.—Yellowfin tuna CPUE for tuna-targeted trips by quarter, 1991-2005.

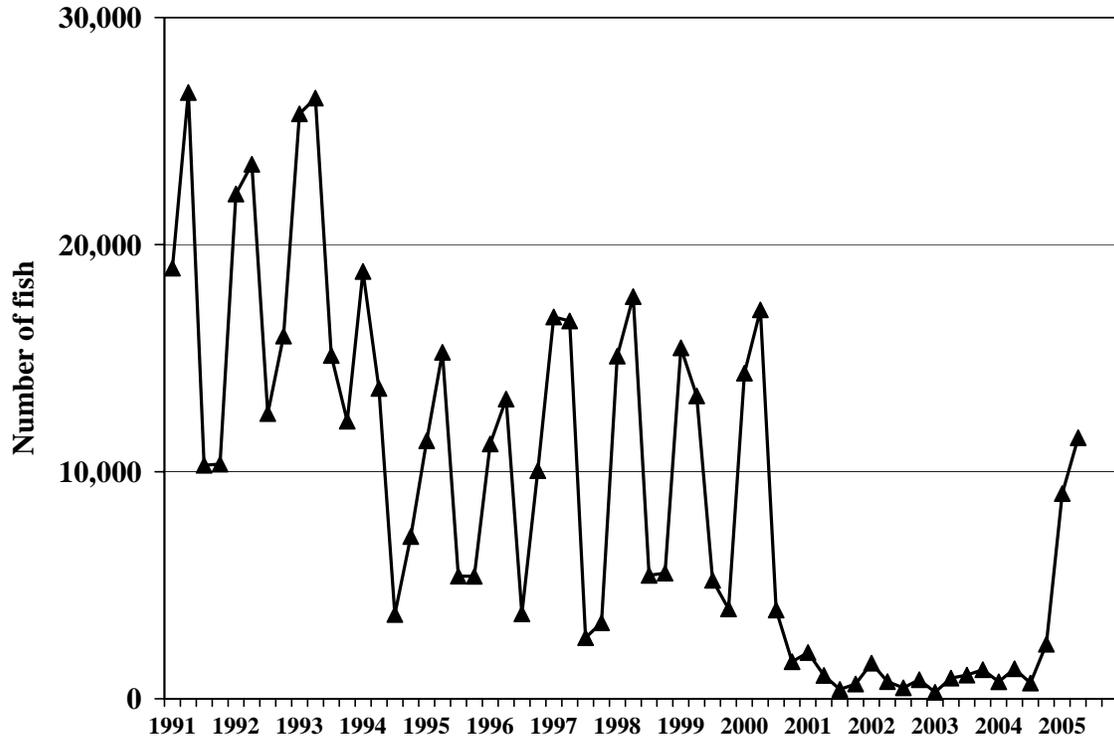


Figure 10.—Hawaii-based longline swordfish catch by quarter, 1991-2005.

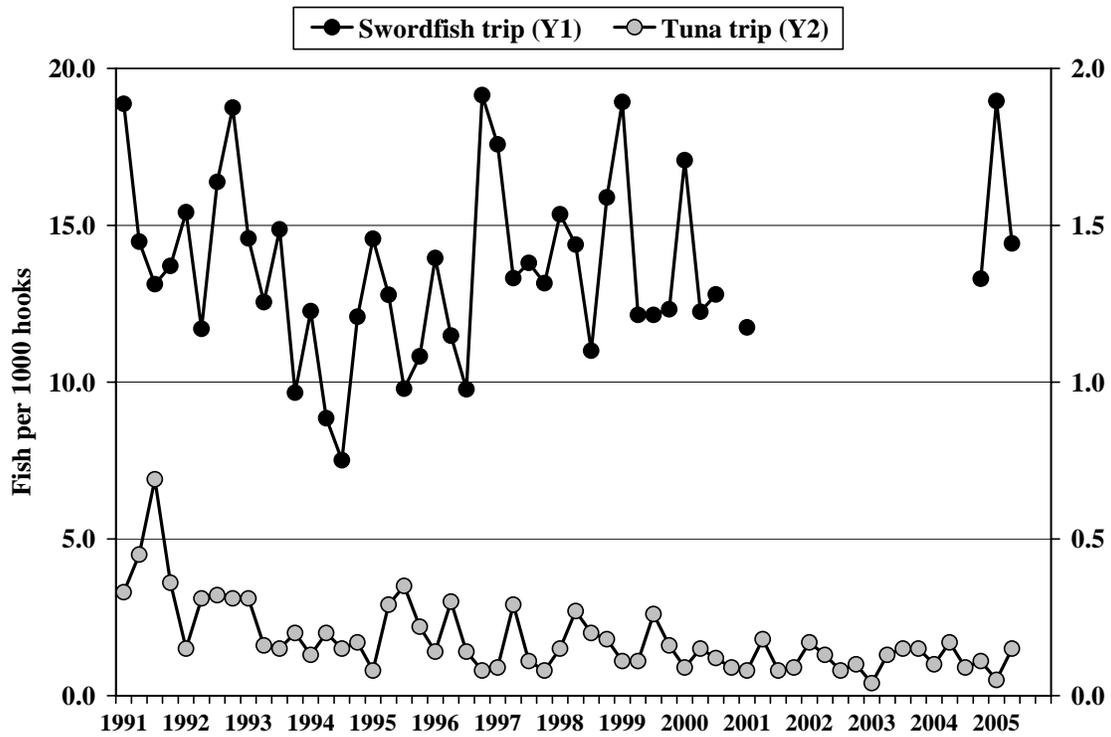


Figure 11.—Swordfish CPUE by quarter, 1991-2005.

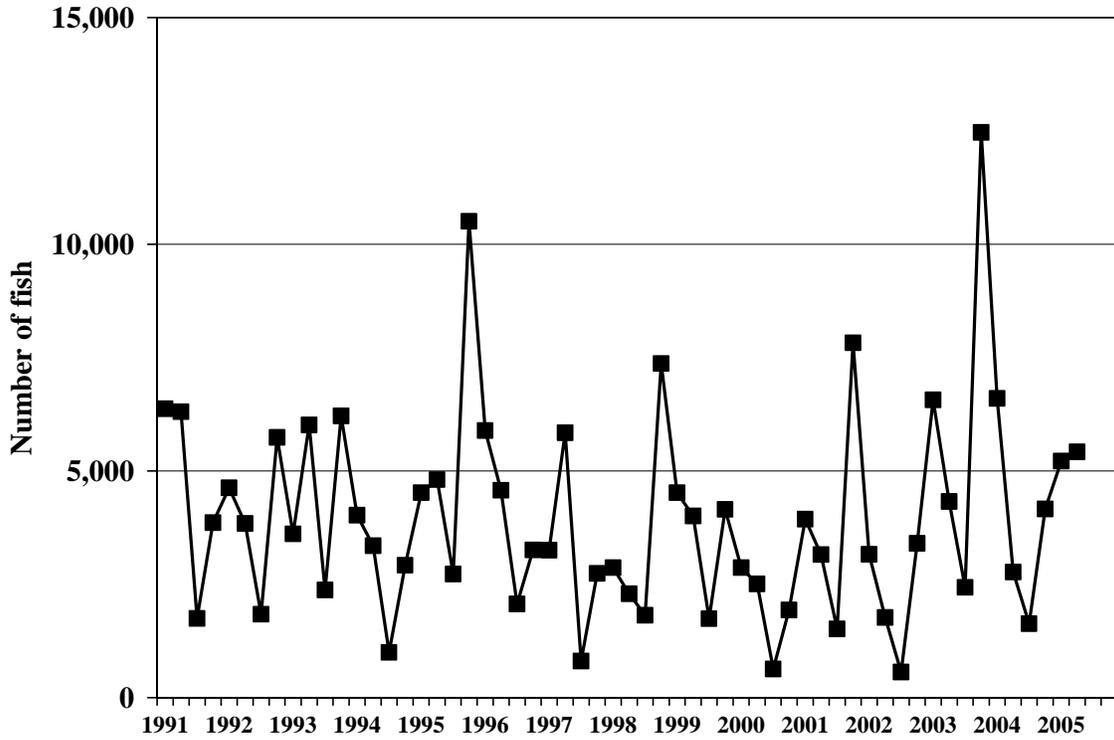


Figure 12.—Hawaii-based longline striped marlin catch by quarter, 1991-2005.

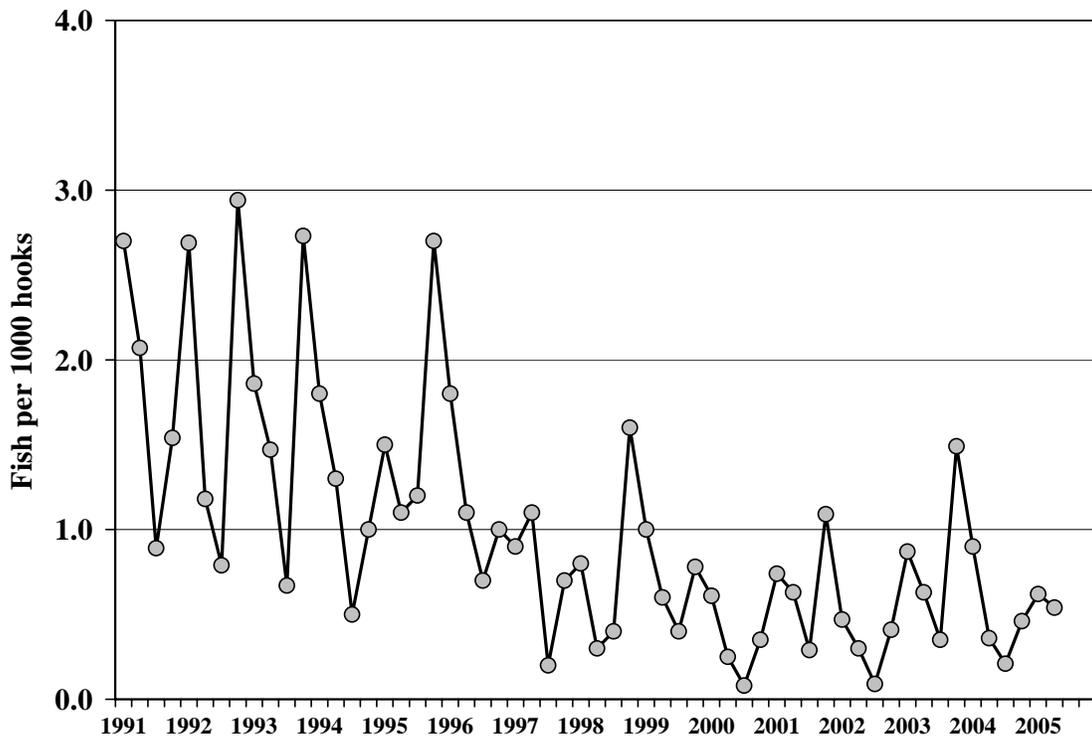


Figure 13.—Striped marlin CPUE for tuna-targeted trips by quarter, 1991-2005.

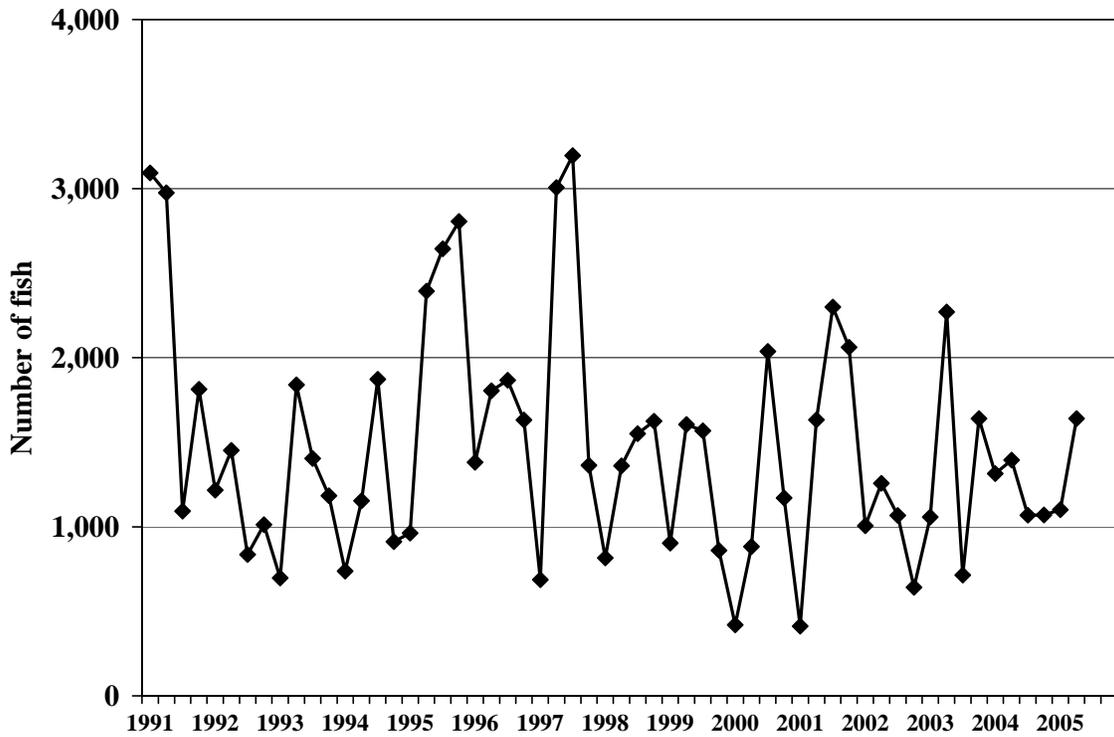


Figure 14.—Hawaii-based longline blue marlin catch by quarter, 1991-2005.

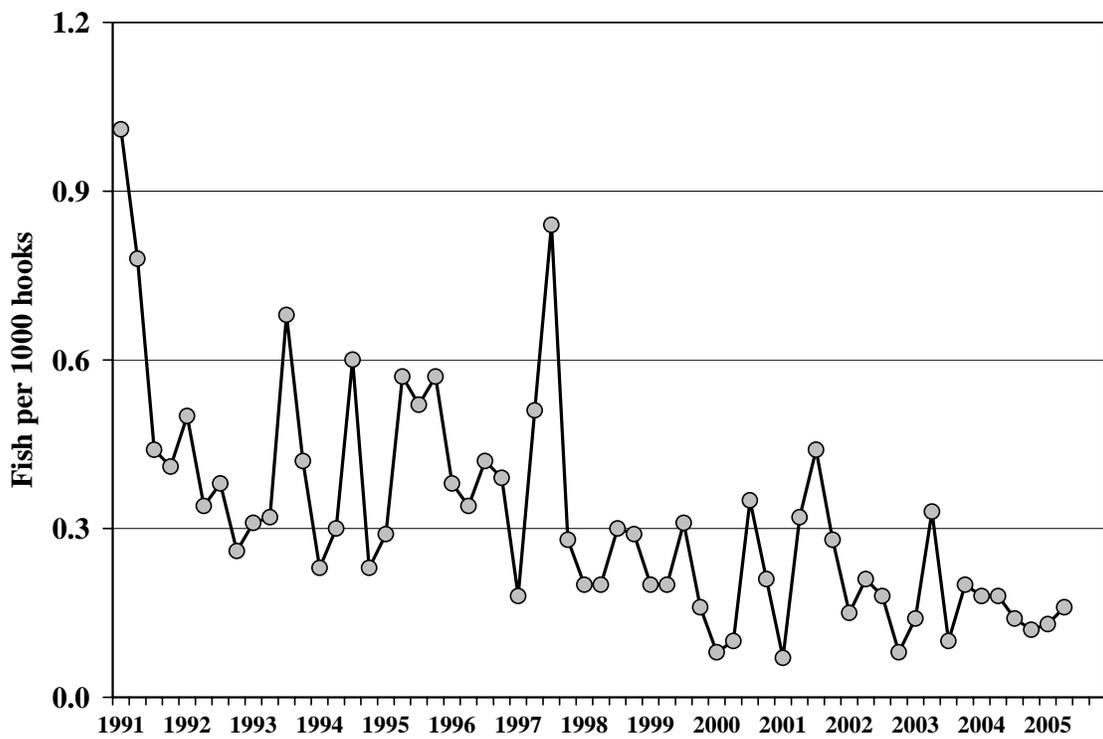


Figure 15.—Blue marlin CPUE for tuna-targeted trips by quarter, 1991-2005.

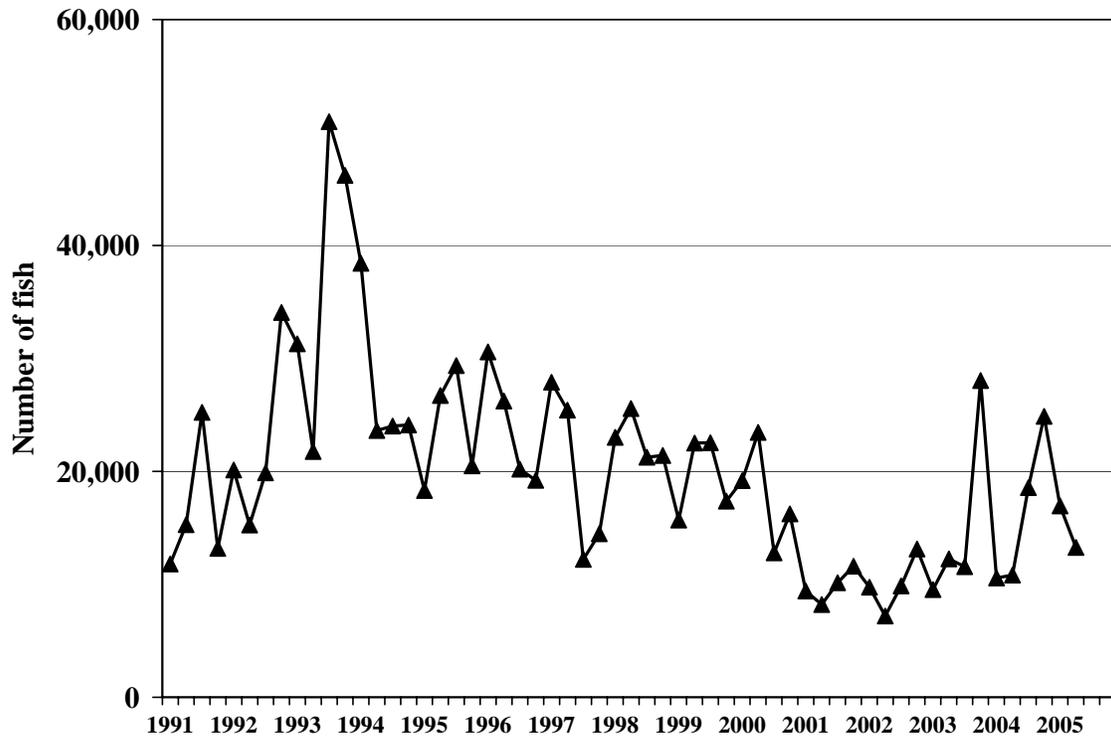


Figure 16.—Hawaii-based longline blue shark catch by quarter, 1991-2005.

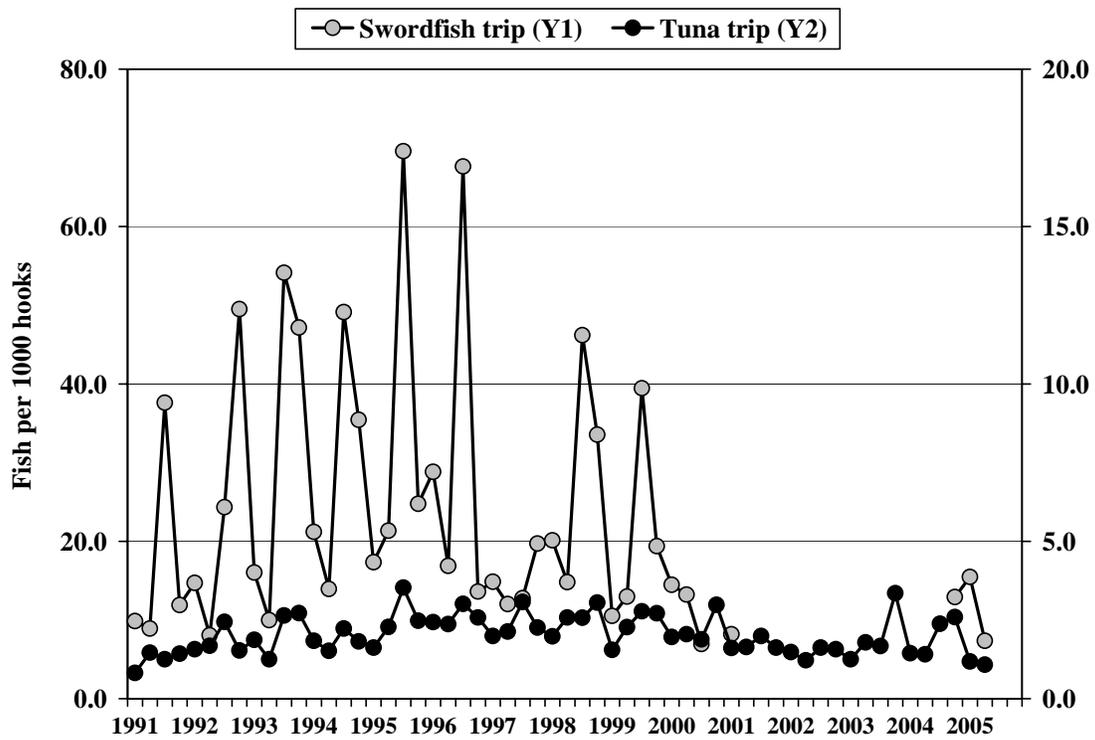


Figure 17.—Blue shark CPUE by quarter, 1991-2005.

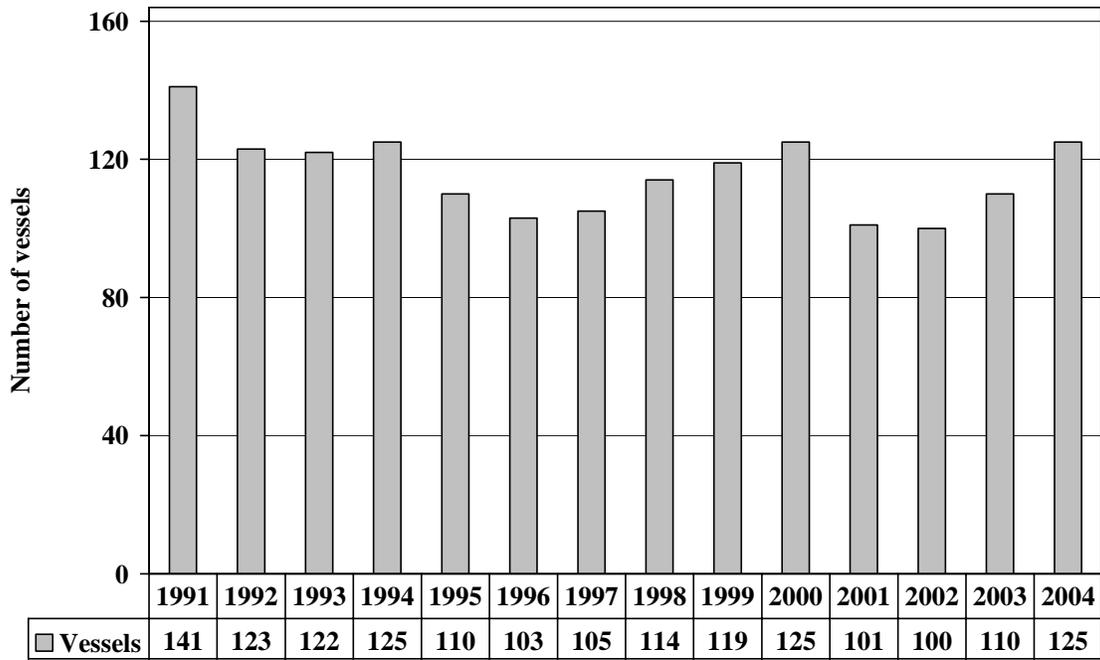


Figure A1.--Number of active Hawaii-based longline vessels, 1991-2004.

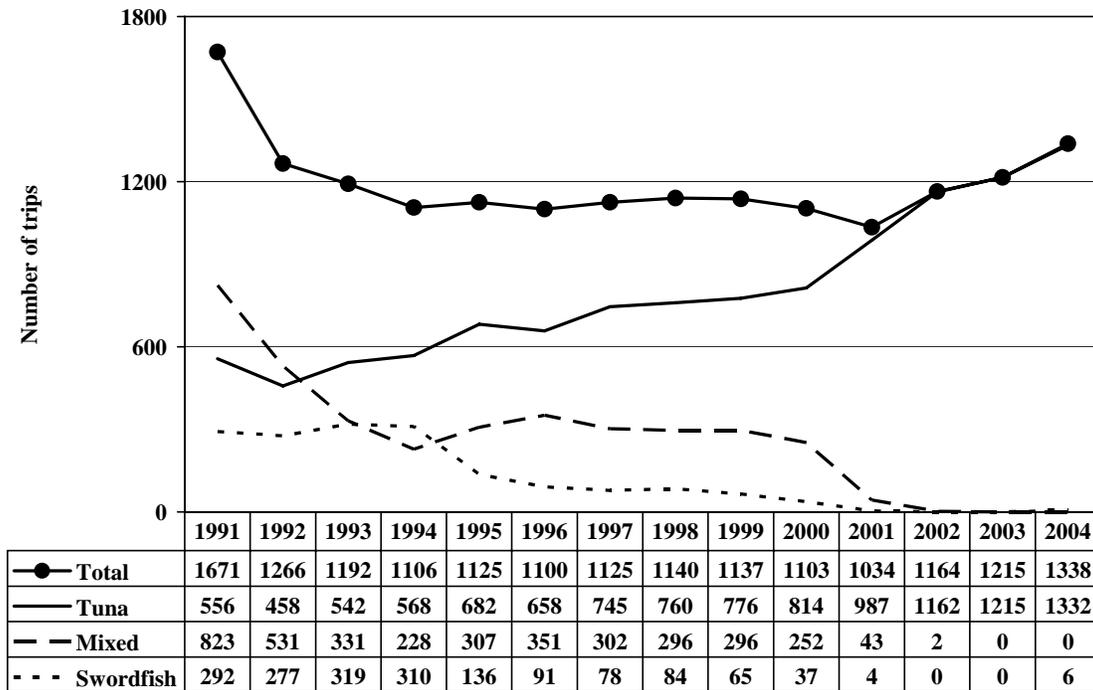


Figure A2.--Number of trips by the Hawaii-based longline fishery, 1991-2004.

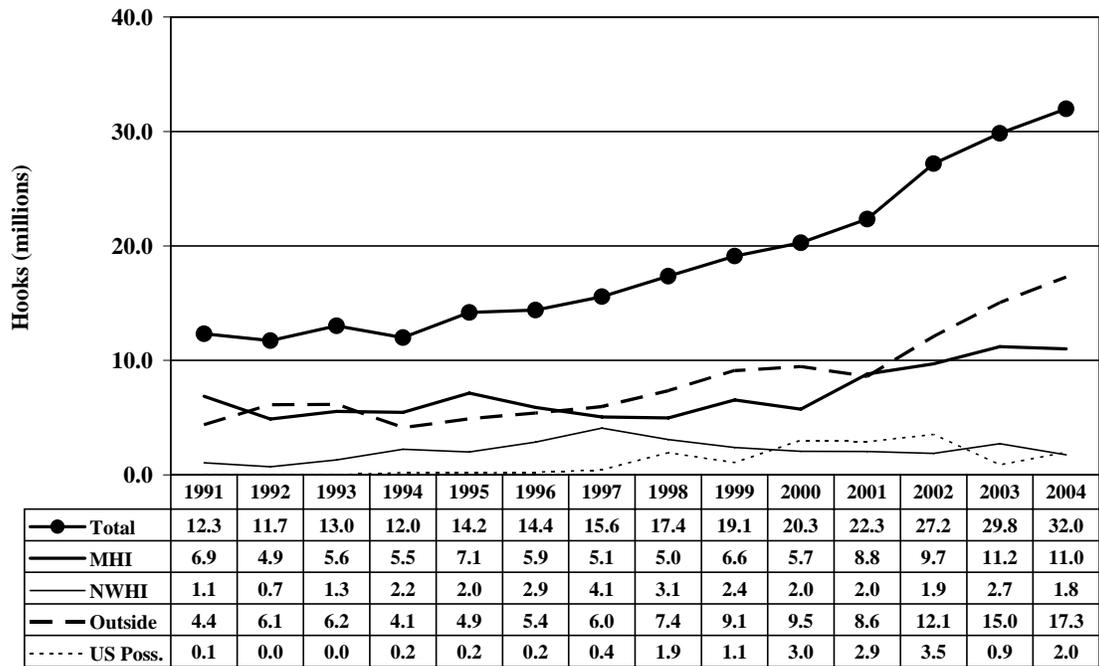


Figure A3.--Number of hooks set by area, 1991-2004.

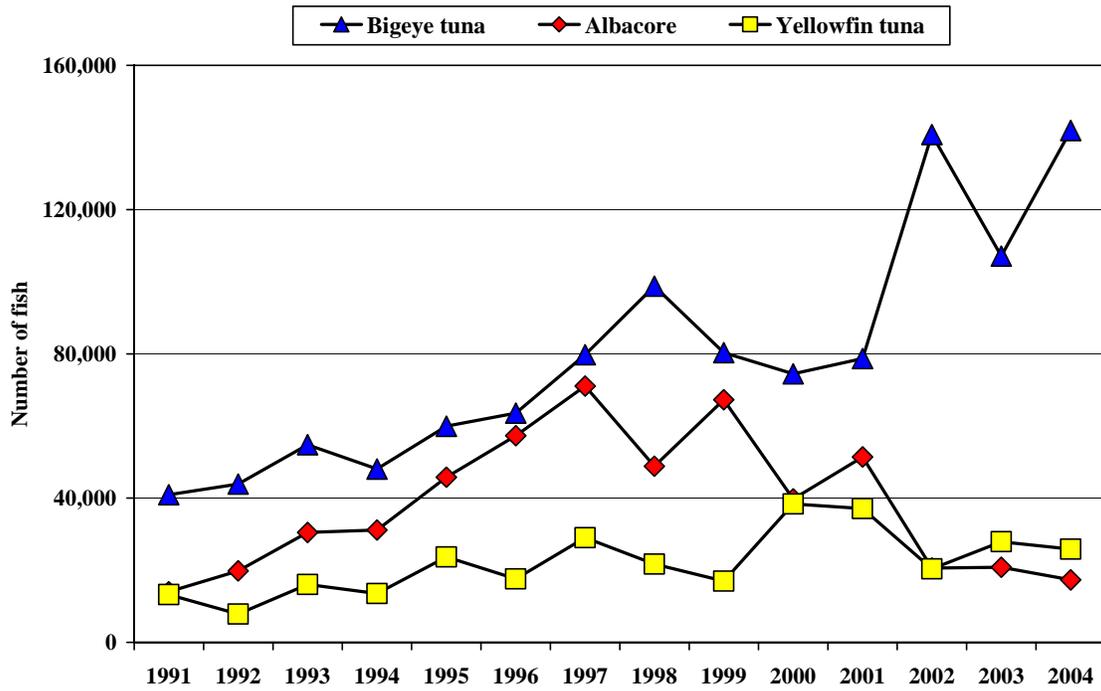


Figure A4.--Tuna catches by the Hawaii-based longline fishery, 1991-2004.

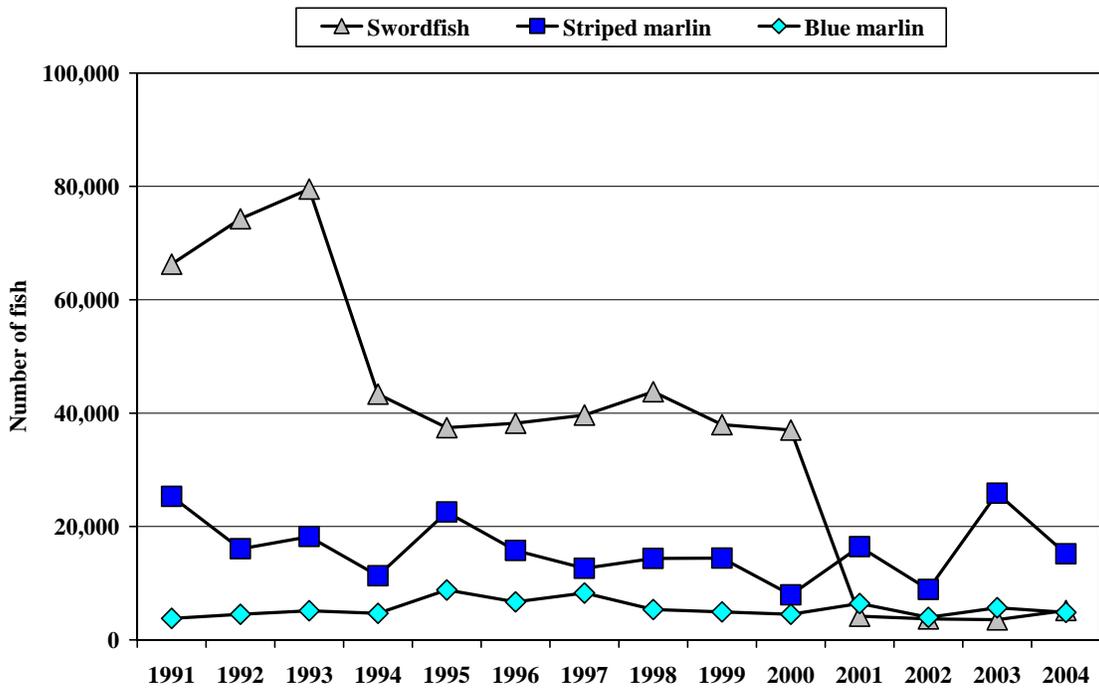


Figure A5.--Billfish catches by the Hawaii-based longline fishery, 1991-2004.

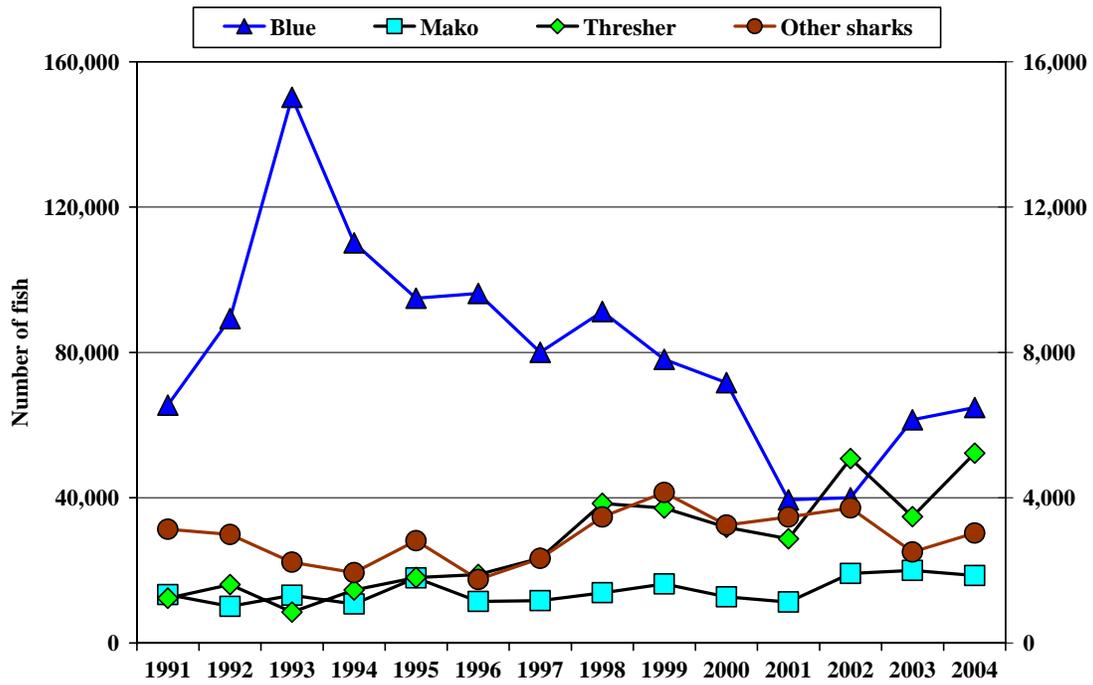


Figure A6.--Shark catches by the Hawaii-based longline fishery, 1991-2004.

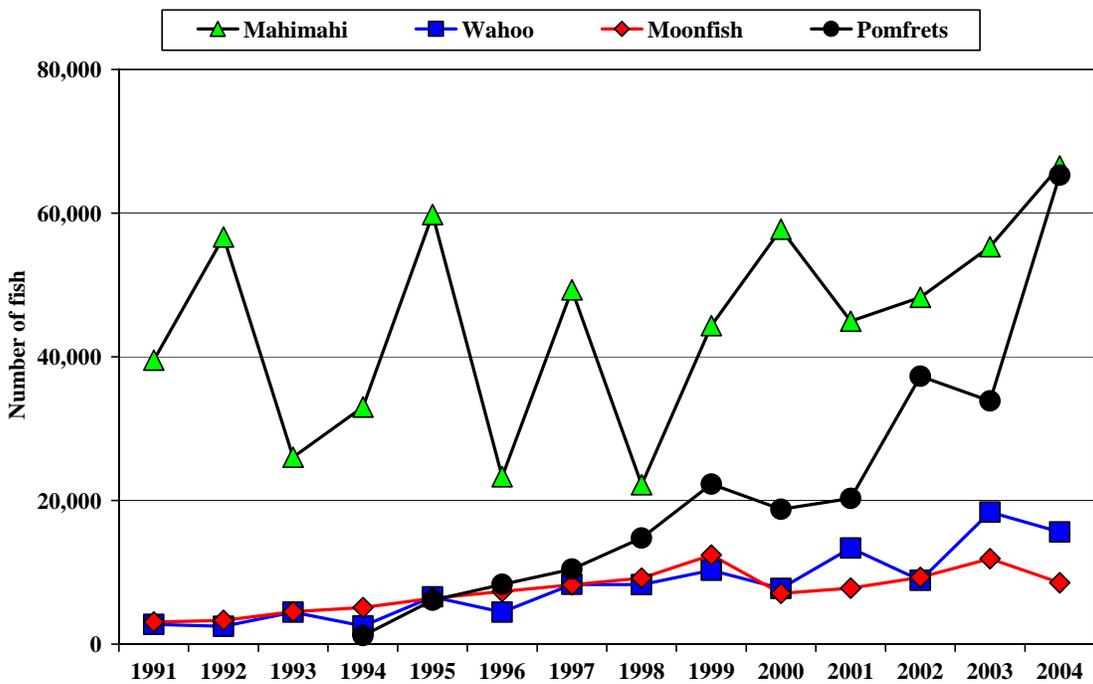


Figure A7.--Catch of miscellaneous pelagic species, 1991-2004.