

The Hawaii-based Longline Fishery Logbook Summary Report April-June 2006¹

Fisheries Monitoring and Analysis Program
Pacific Islands Fisheries Science Center

All Federal longline logbook data for trips completed in the second quarter of 2006 by Hawaii-based longline vessels have been received and processed and are summarized in this report (Table 1). The report includes most data from trips that began late in the second quarter and continued into the third quarter, but some data from such trips may still be forthcoming; hence, this report should be considered preliminary.

Since April 2, 2004, the Hawaii-based shallow-set longline fishery for swordfish has operated under rules that have restricted the amount of fishing effort, the kinds of hooks used, and bait types. Also, separate species-specific limits on sea turtle interactions are in effect for the swordfish fishery. The swordfish fishery reached its designated 2006 annual limit of 17 interactions with loggerhead sea turtles during the first quarter. As a result, this fishery was closed on March 20, 2006. However, the deep-set longline fishery for tunas continued to operate.

A total of 113 Hawaii-based longline vessels were active during the second quarter of 2006, 7 fewer than in the same period of 2005 (Fig. 1). There were 357 longline trips, 52 fewer than in the second quarter of 2005. All longline trips in the second quarter were deep-set tuna-targeted trips (Fig. 2). The total number of hooks set in the quarter was 8.1 million, the same number as were set in the second quarter of 2005 (Fig. 3). Most hooks set were deployed outside the U.S. Exclusive Economic Zone (EEZ) (73%) followed by the main Hawaiian Islands (MHI) EEZ (18%). Effort was also recorded in the Northwestern Hawaiian Islands (NWHI) (3%) and in the EEZs of other U.S. possessions (5%).

In the second quarter of 2006, the bigeye tuna catch was 22,317 fish (Fig. 4); 81% were caught outside the U.S. EEZ and 11% in the MHI EEZ. The bigeye tuna catch-per-unit-of-effort (CPUE) on tuna-targeted trips was 2.8 fish per 1,000 hooks (Fig. 5). The albacore catch and CPUE dropped by 29% (4,073 fish) and 35% (0.5 fish per 1,000 hooks), respectively, compared with the results in 2005 (Figs. 6-7). The yellowfin tuna catch (6,933 fish) and CPUE (0.9 fish per 1,000 hooks) in the second quarter were almost 2.5 times higher than in 2005 (Figs. 8-9).

The second quarter swordfish catch (1,222 fish) decreased 89% from the same period in 2005 because of the March closure of the shallow-set fishery targeting this species (Fig. 10). Swordfish CPUE on tuna-targeted trips was only 0.2 fish per 1,000 hooks (Fig. 11). The second quarter striped marlin catch (4,349 fish) was below that of 2005 but the CPUE (0.5 fish per 1,000 hooks) remained the same (Figs. 12-13). The blue marlin catch and CPUE were 1,787 fish and 0.2 fish per 1,000 hooks, respectively (Figs. 14-15).

A total of 10,382 sharks were caught in the second quarter of 2006, of which 4% (374 fish) were kept. Blue shark comprised 72% of the total shark catch (7,513 fish) (Fig. 16). Blue shark CPUE on tuna-target trips was 0.9 fish per 1,000 hooks (Fig. 17).

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Table 1.--Western Pacific longline logbook summary statistics for April-June 2006, based on date of haul. Data are for vessels landing or based in Hawaii. Gear type: **all gear**; Area of operations: **all fishing areas**.

Trip information			
Number of vessels		113	
Number of trips		357	
Number of sets		3,889	
Number of hooks set		8,071,892	
Number of light sticks used		0	
Species catch information			
Species class			# caught
Species	# kept	# caught	per 1000 hooks

Pelagic Management Unit Species (PMUS)			

Billfish			
Blue Marlin	1,775	1,787	0.22
Spearfish	3,901	3,951	0.49
Striped Marlin	4,321	4,349	0.54
Swordfish	1,153	1,222	0.15
Other	132	137	0.02
Total	11,282	11,446	1.42
Sharks			
Blue	18	7,513	0.93
Mako	255	644	0.08
Thresher	88	1,706	0.21
Other	13	519	0.06
Total	374	10,382	1.29
Tuna			
Albacore	4,052	4,073	0.50
Bigeye	22,051	22,317	2.76
Bluefin	0	0	0.00
Skipjack	4,848	5,167	0.64
Yellowfin	6,750	6,933	0.86
Other	22	22	0.00
Total	37,723	38,512	4.77
Other PMUS			
Mahimahi	8,987	9,133	1.13
Moonfish	2,547	2,554	0.32
Oilfish	6,564	6,676	0.83
Pomfret	12,995	13,080	1.62
Wahoo	6,904	6,950	0.86
Total	37,997	38,393	4.76
Miscellaneous			

Non-PMUS	726	2,389	0.30

Date and time of summary:

08/09/06 (14:38:23)

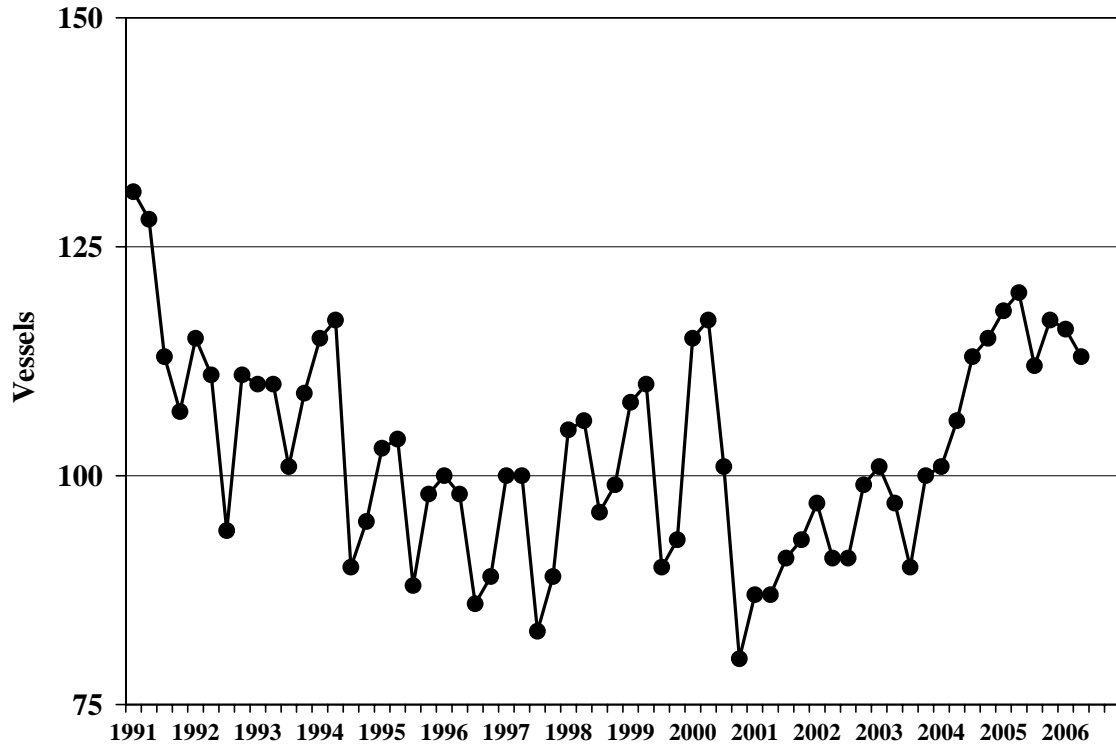


Figure 1.—Active Hawaii-based longline vessels, 1991-2006.

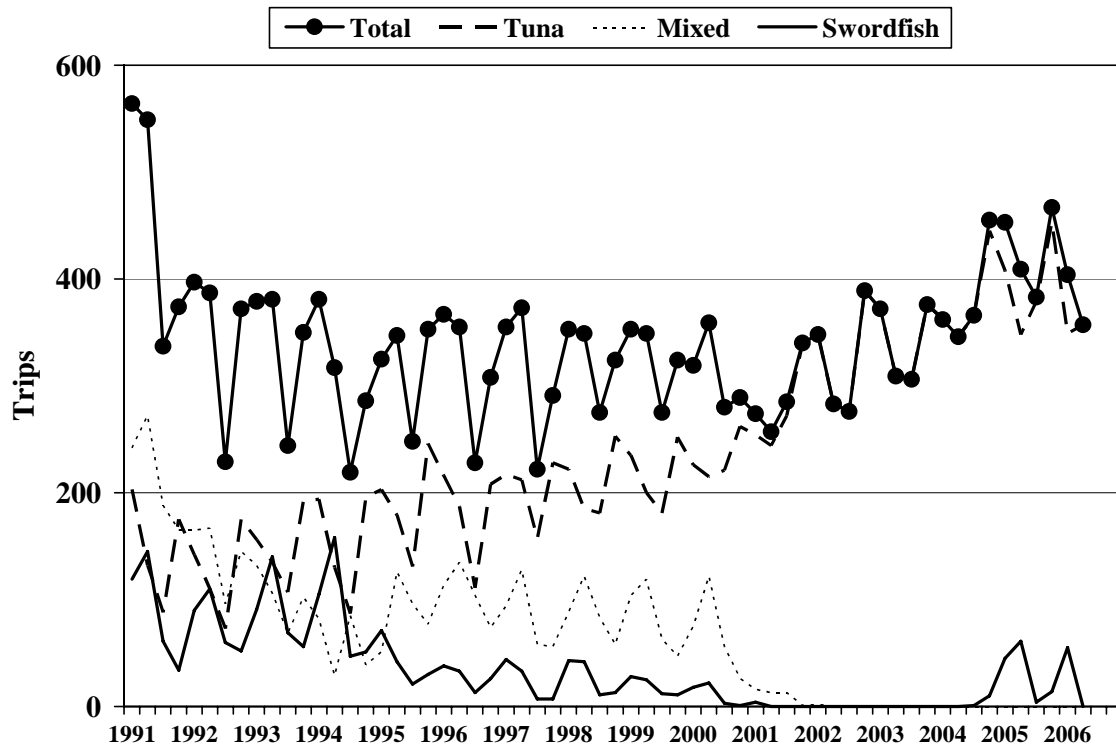


Figure 2.—Trips made by Hawaii-based longline vessels, 1991-2006.

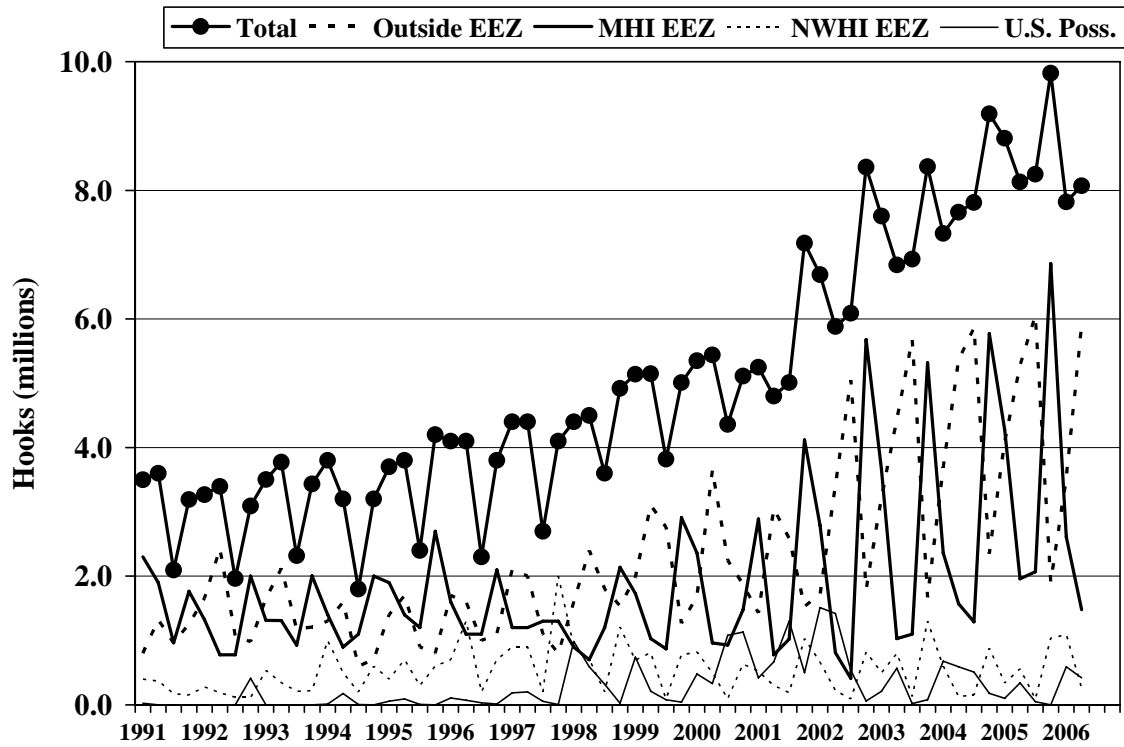


Figure 3.—Hooks set by the Hawaii-based longline fishery by quarter, 1991-2006.

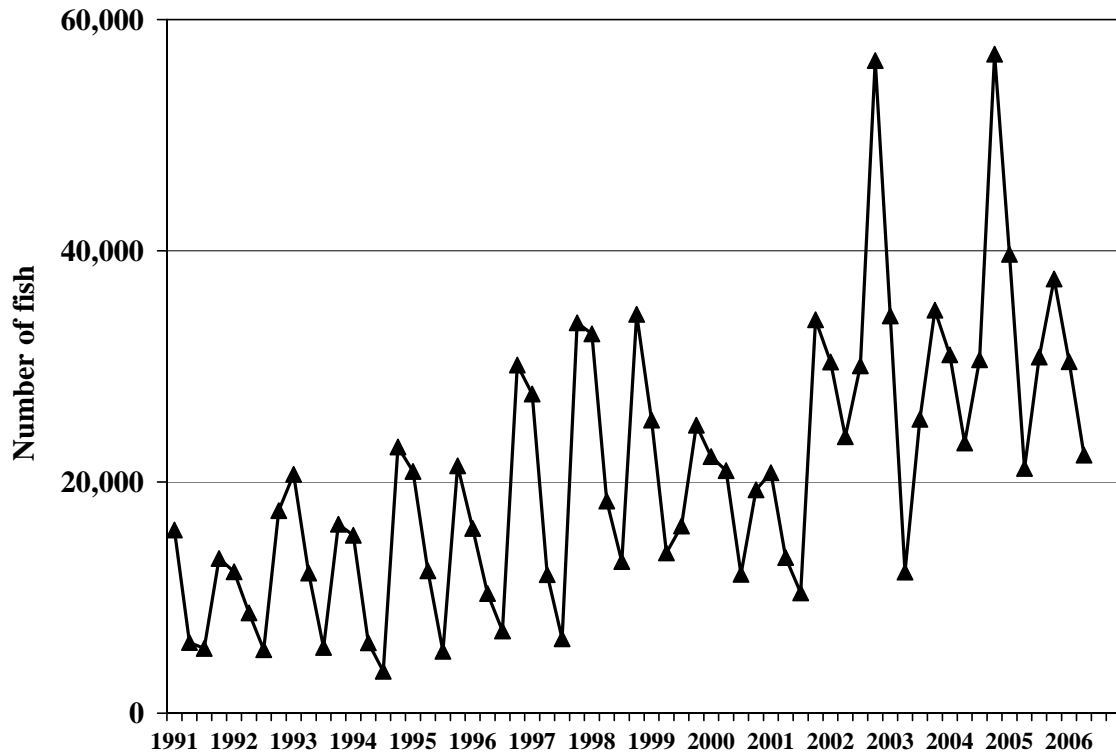


Figure 4.—Hawaii-based longline catch of bigeye tuna by quarter, 1991-2006.

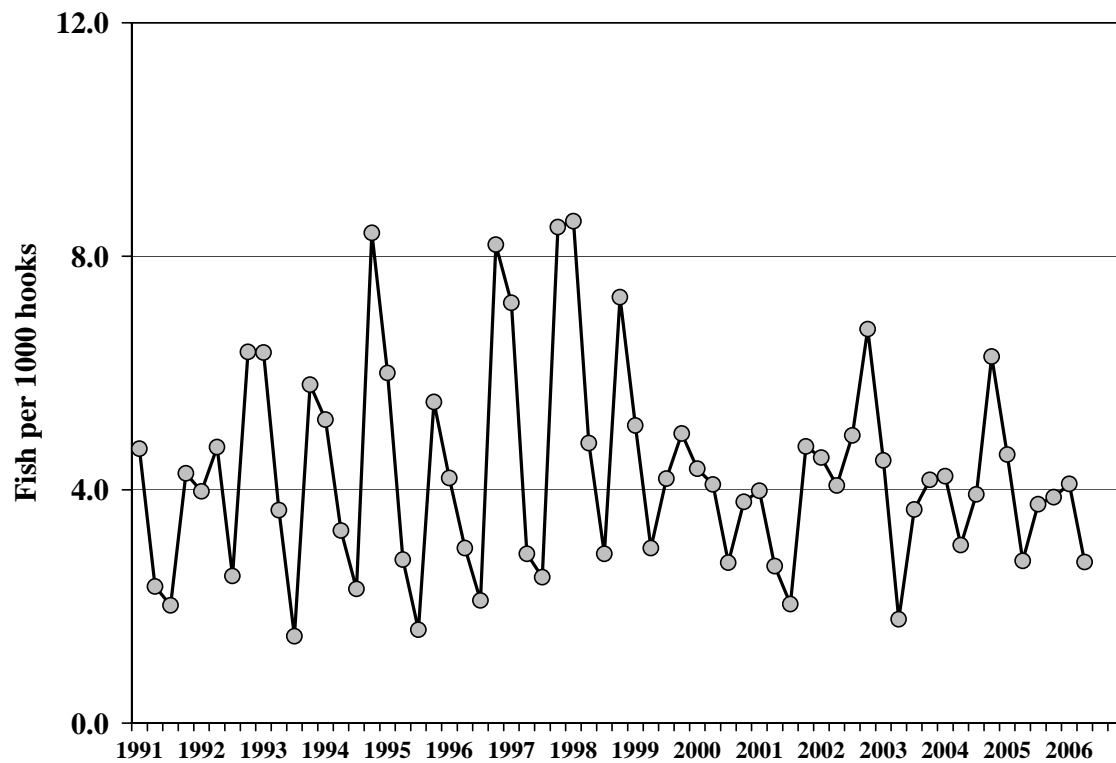


Figure 5.—Bigeye tuna CPUE for tuna-targeted trips by quarter, 1991-2006.

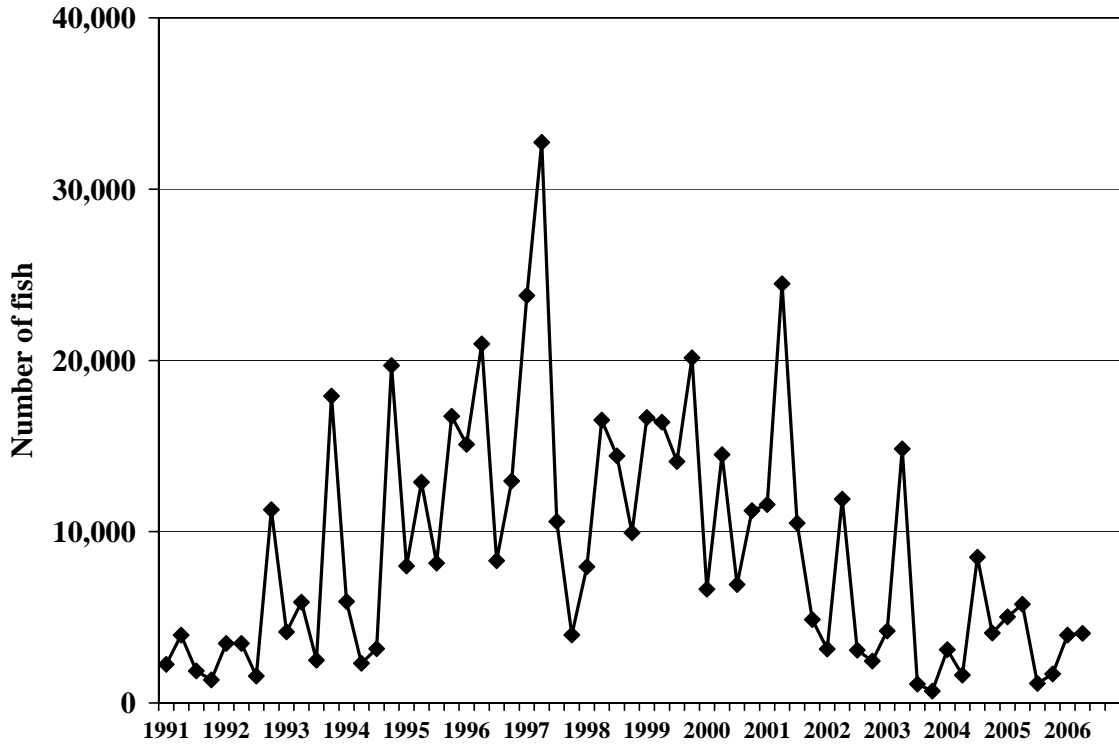


Figure 6.—Hawaii-based longline catch of albacore by quarter, 1991-2006.

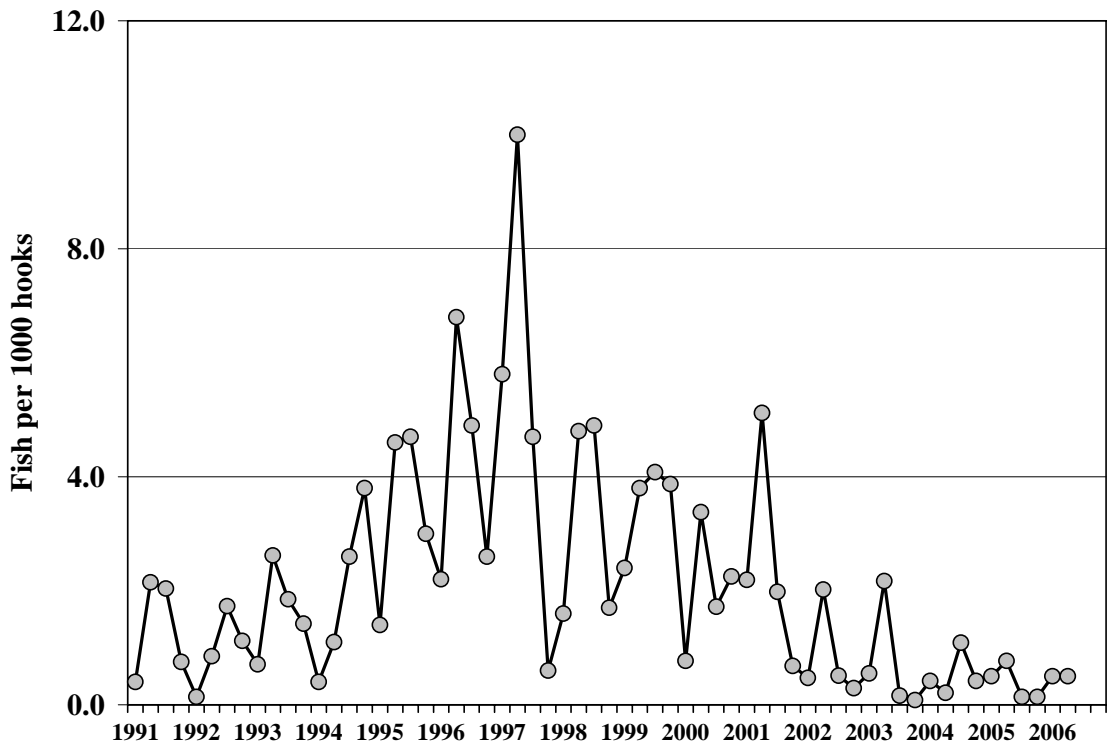


Figure 7.—Albacore CPUE for tuna-targeted trips by quarter, 1991-2006.

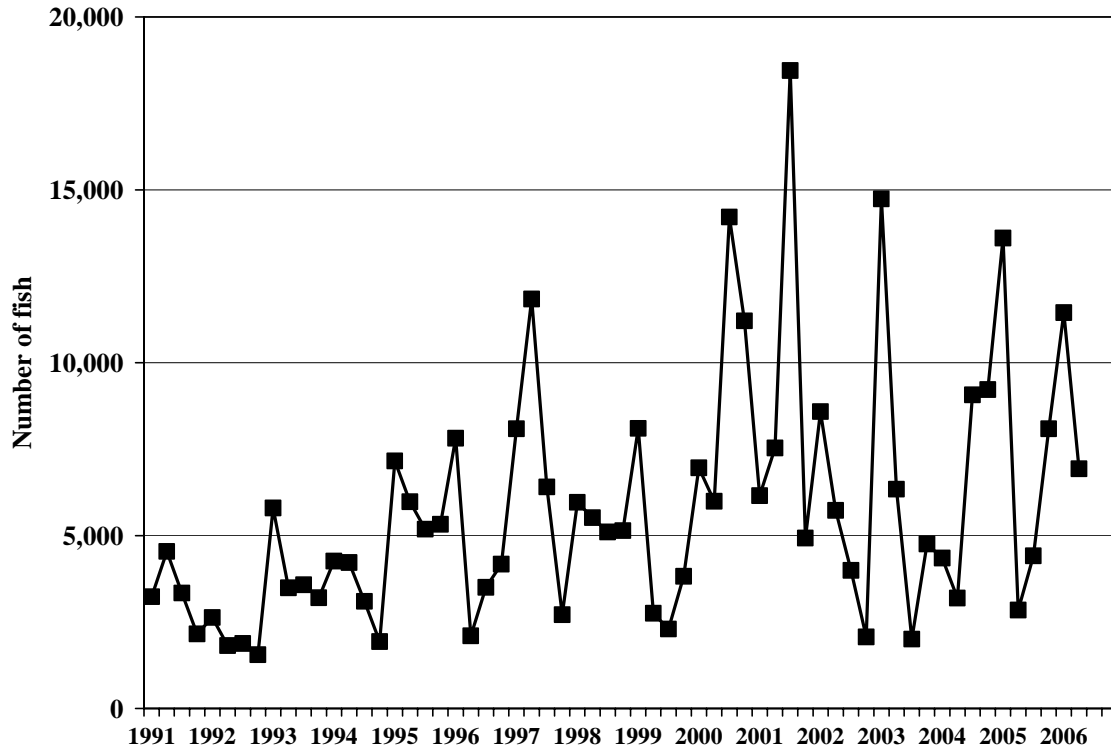


Figure 8.—Hawaii-based longline catch of yellowfin tuna by quarter, 1991-2006.

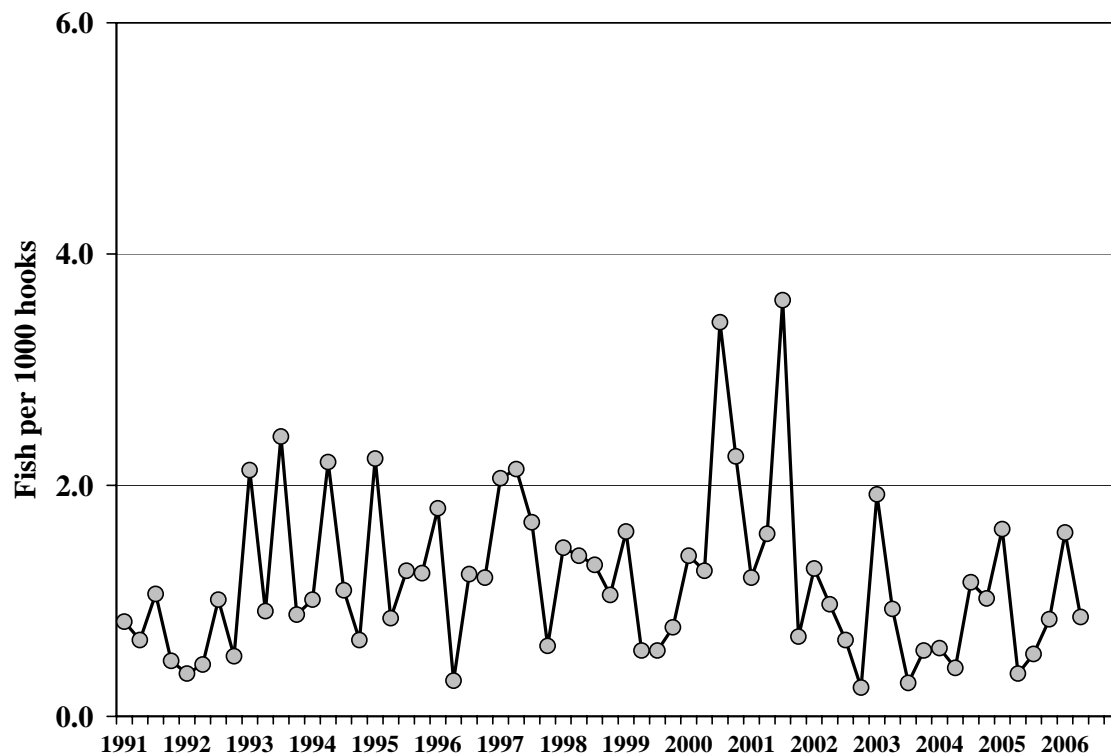


Figure 9.—Yellowfin tuna CPUE for tuna-targeted trips by quarter, 1991-2006.

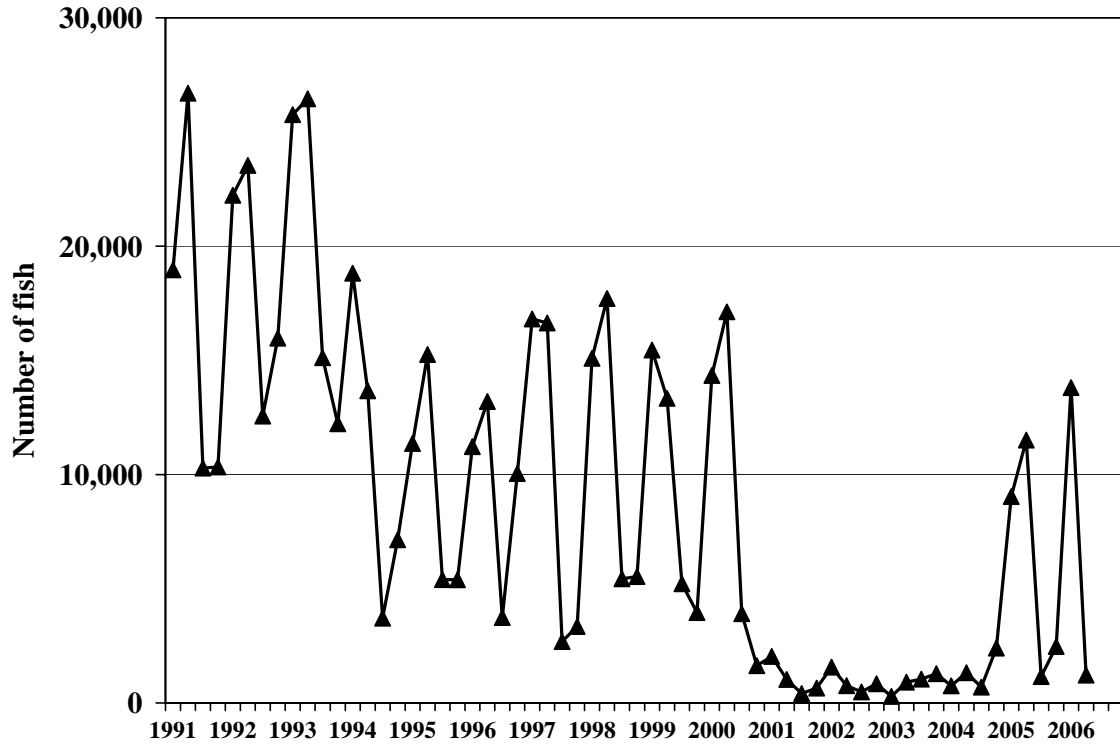


Figure 10.—Hawaii-based longline catch of swordfish by quarter, 1991-2006.

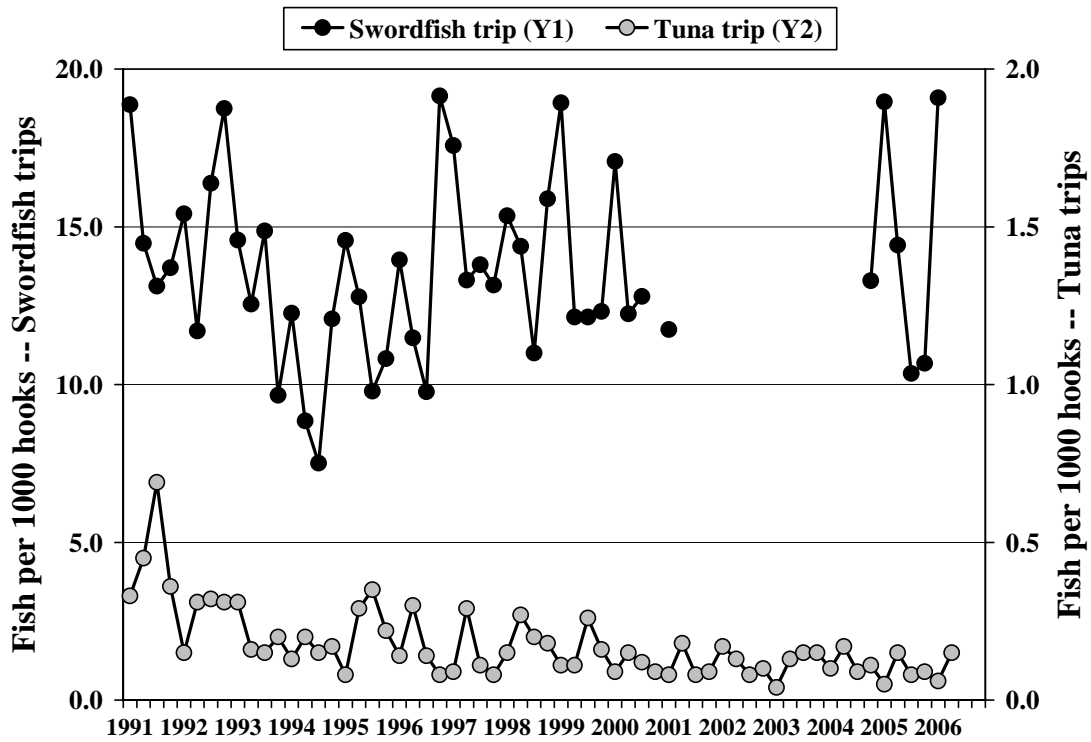


Figure 11.—Swordfish CPUE by quarter, 1991-2006.

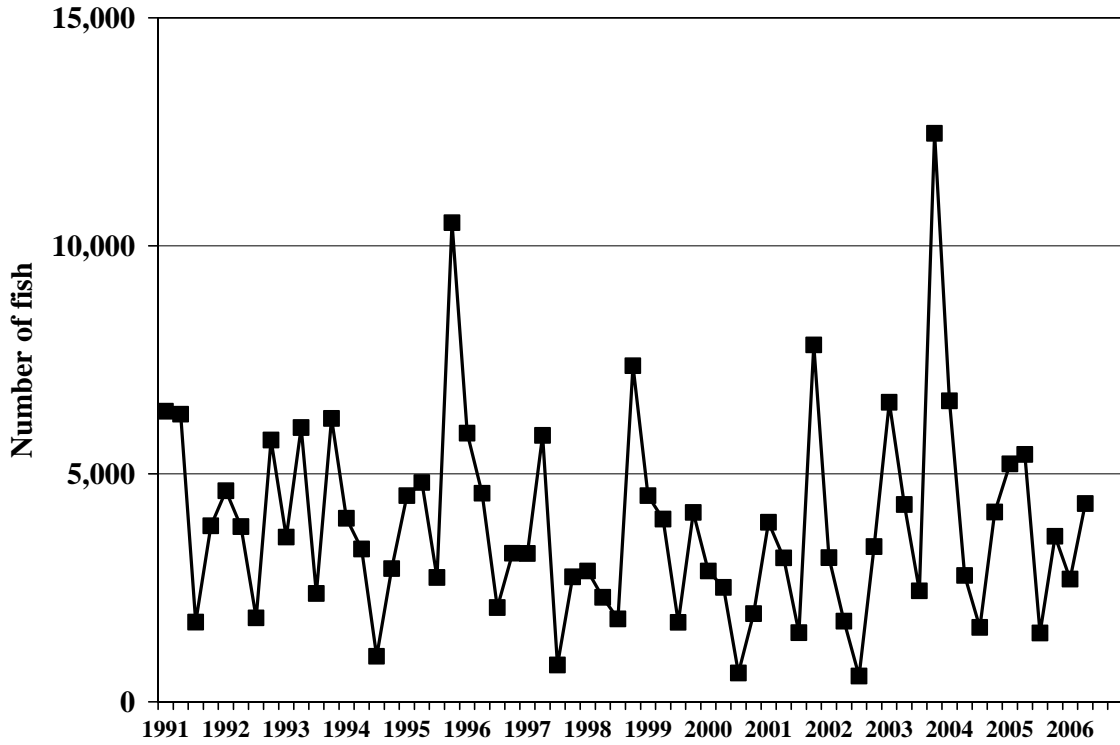


Figure 12.—Hawaii-based longline catch of striped marlin by quarter, 1991-2006.

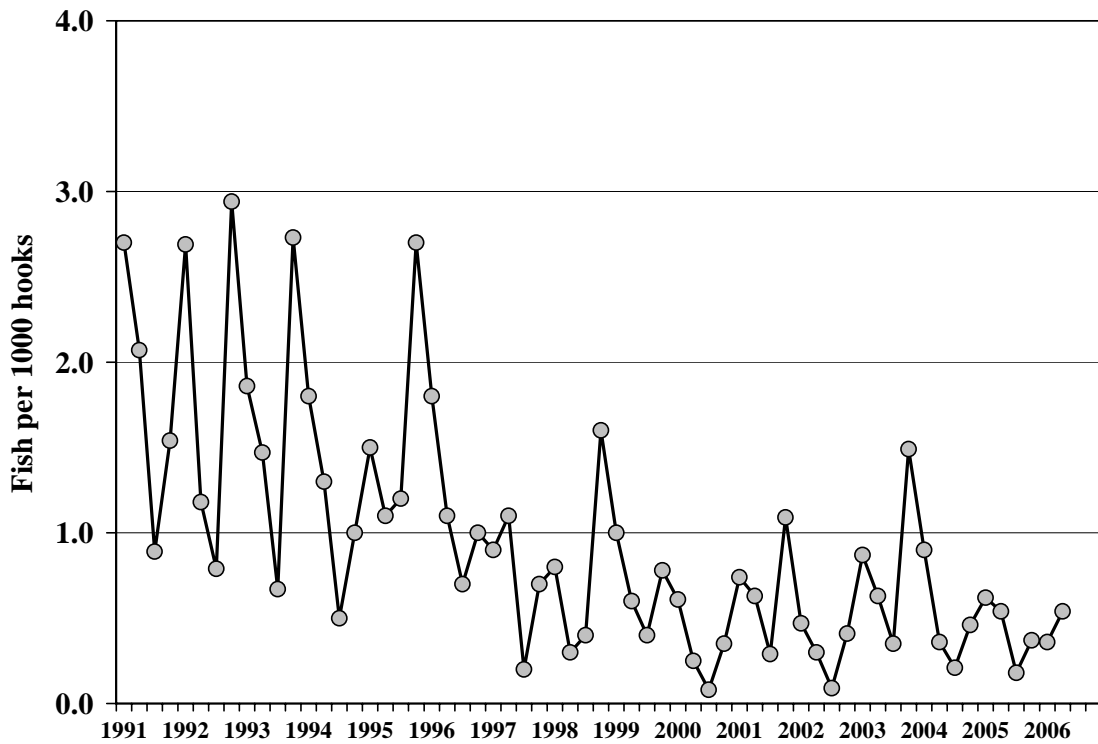


Figure 13.—Striped marlin CPUE for tuna-targeted trips by quarter, 1991-2006.

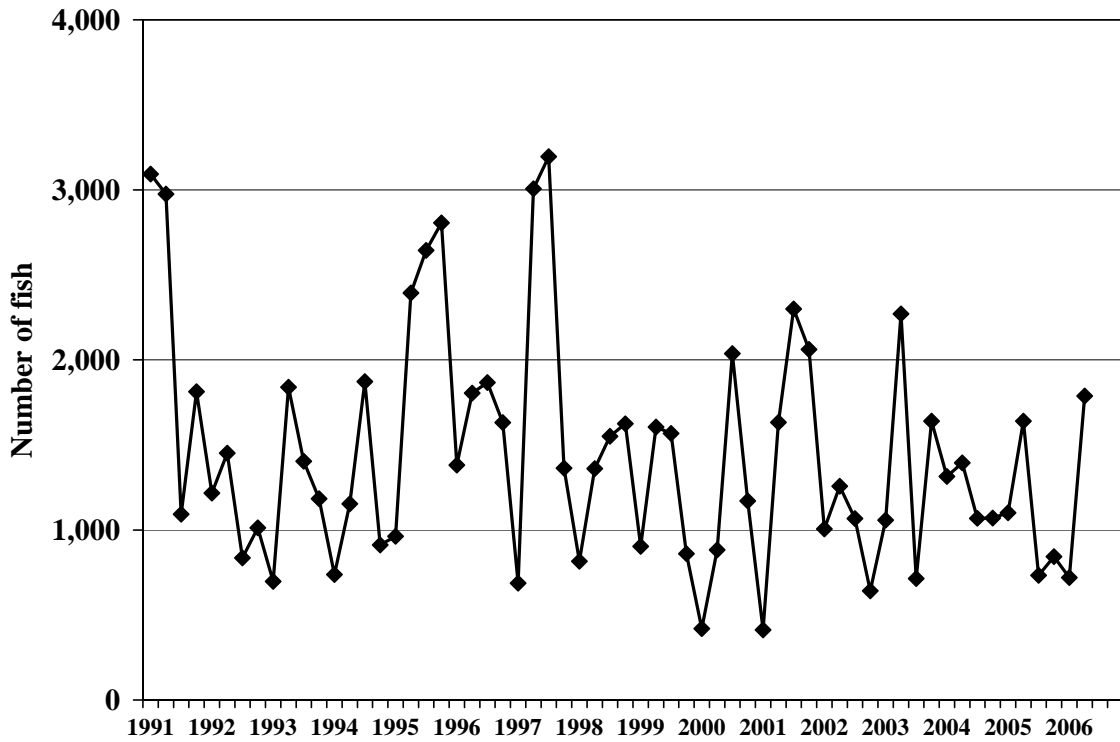


Figure 14.—Hawaii-based longline catch of blue marlin by quarter, 1991-2006.

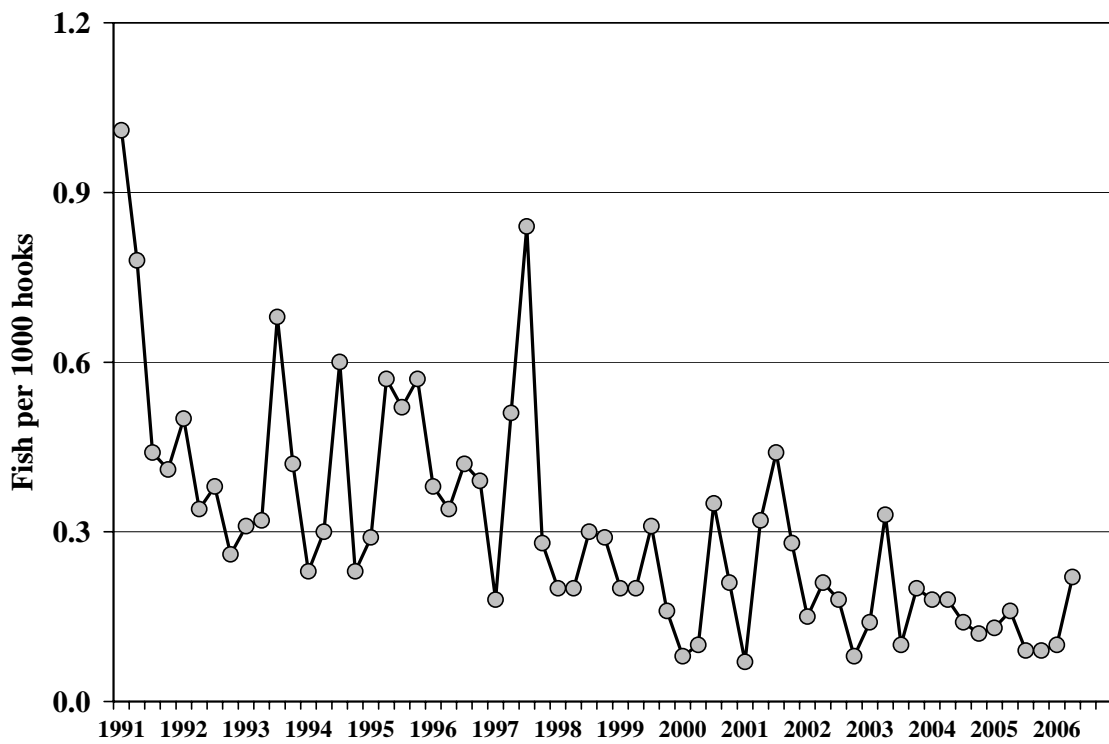


Figure 15.—Blue marlin CPUE for tuna-targeted trips by quarter, 1991-2006.

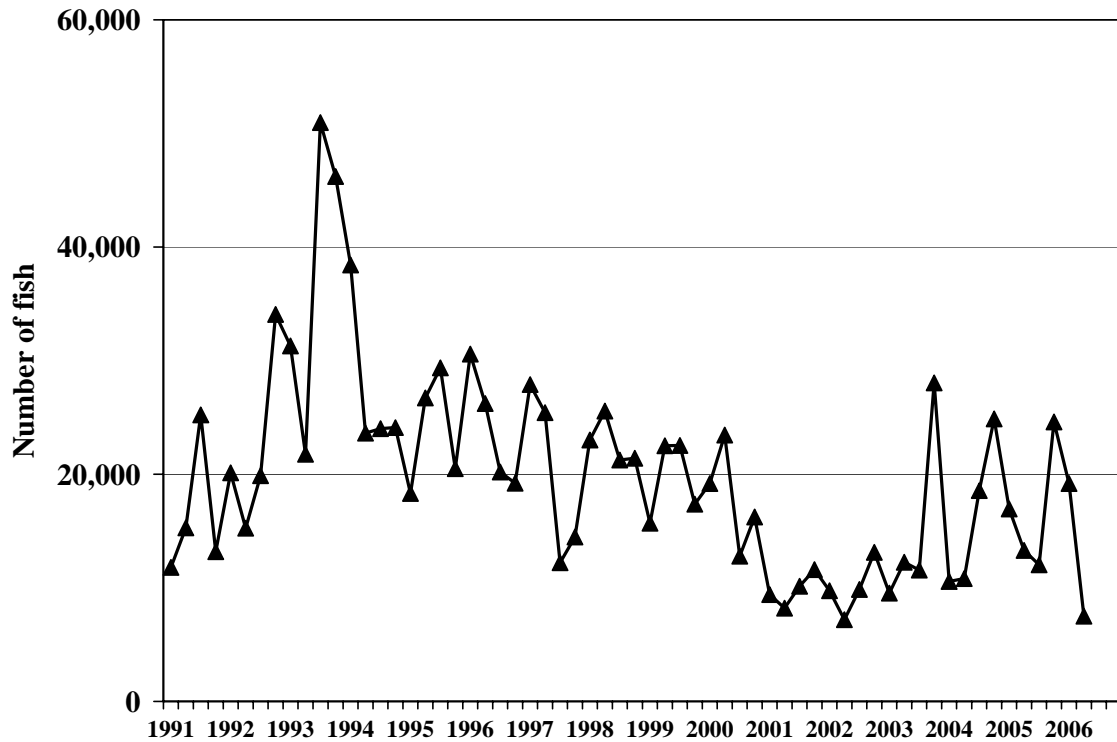


Figure 16.—Hawaii-based longline catch of blue shark by quarter, 1991-2006.

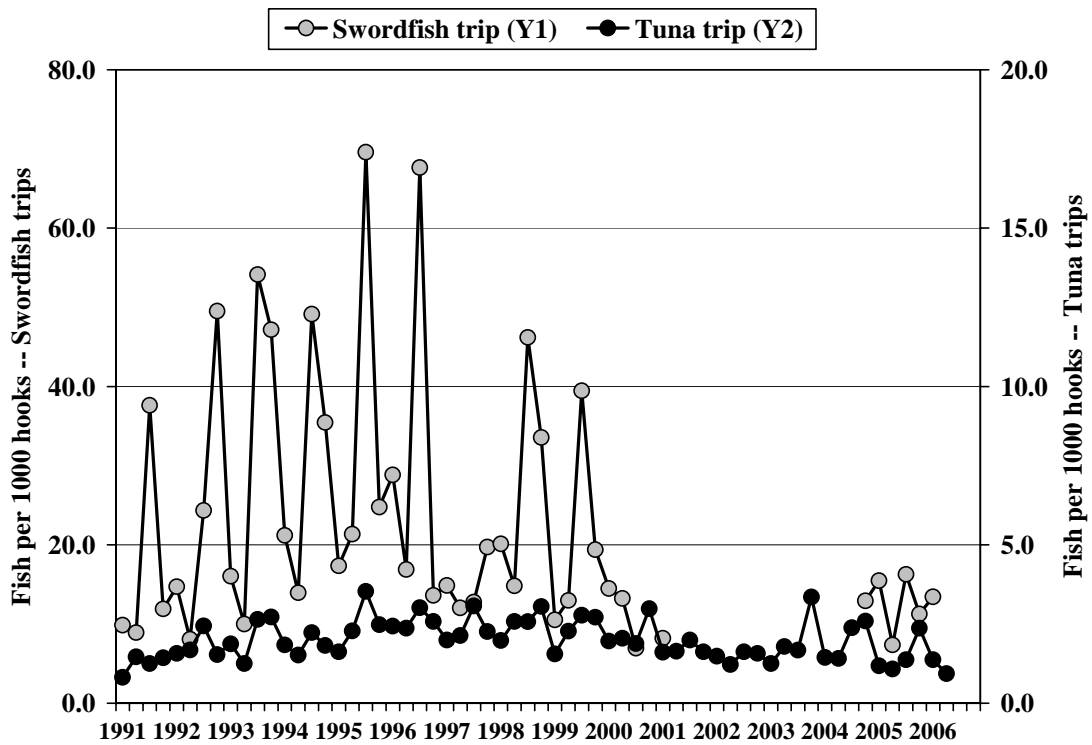


Figure 17.—Blue shark CPUE by quarter, 1991-2006.