

PIFSC Report on the American Samoa Longline Fishery January-March 2008¹

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Summary statistics of American Samoa longline catch and effort for the first quarter of 2008, based on date of haul, are shown in Table 1. The table is derived from all logbook data submitted as of May 8, 2008. As of this date, the documented delinquency rate for the first quarter of 2008 was 5.19%, according to the Department of Marine and Wildlife Resources (DMWR) Daily Effort Census and Delinquency Reporting System.

According to the longline logbook data, 26 vessels turned in some or all of their longline logs for sets made during the first quarter of 2008 (Fig. 1). These vessels made 1,078 sets (Fig. 2) and deployed 3,305,385 hooks (Fig. 3) which is low for recent years, even for the typically slowest quarter of the year (in terms of historical catch and effort). Compared to the first quarter of last year, the first quarter of 2008 showed decreases in virtually every fisheries performance measure recorded, except for the number of active vessels which was equal to the first quarter of 2007, and the number of hooks used per set which increased by 6%, from 2891 to 3066 hooks per set. The total fishing effort expended by these vessels decreased by 18% in terms of number of sets and 13% in terms of number of hooks.

The total catch for all species combined was 51,060 fish (Fig. 4) which was a 36% decrease compared to the first quarter of last year. Catch of every species decreased compared to the first quarter of last year. Albacore continued to dominate the catch with 34,317 fish caught in the first quarter of 2008 (Fig. 5), a 32% decrease from the 50,380 albacore caught in the first quarter of last year. Bigeye tuna catch (Fig. 6) showed a larger decrease of 51% and yellowfin tuna catch (Fig. 8) an even larger decrease of 57%. Skipjack tuna catch (Fig. 7) decreased by 28%, wahoo catch (Fig. 10) dropped by 33%. The catch of sharks (Fig. 12) showed a decrease of 26%, and the catch of billfish (Fig. 11) was down 30% over their first quarter catch of last year. The catch of mahimahi (Fig. 9) was a mere 7% of its reported level in the first quarter of 2007, i.e., a 93% decrease.

The catch per 1000 hooks (CPUE) also decreased for all species compared with the first quarter of 2007, but not as much as the percentage decreases in catch. The albacore CPUE (Fig. 13) was down by 22%; bigeye tuna CPUE (Fig. 14) showed a larger decrease of 43%; and yellowfin tuna CPUE (Fig. 16) showed an even larger decrease of 51%. Skipjack tuna CPUE (Fig. 15) was down by 18%, wahoo CPUE (Fig. 18) dropped by 23%, sharks CPUE (Fig. 20) showed a decrease of 15%, and the CPUE of billfish (Fig. 19) was down 19% from the first quarter of last year. The CPUE of mahimahi (Fig. 17) was a mere 8% of its first quarter 2007 value.

Caution is advised when interpreting these declines in reported catch rates for incidental species because research has shown that logbook reporting of catches of incidental species is less accurate than reporting of major target species. However, all indications from logbook statistics are that fewer fish were present in the vicinity of the fleet than were available during the first quarter of last year.

¹ PIFSC Data Report DR-08-005
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Table 1. Summary of fish catch and nominal fishing effort by American Samoa Longline vessels during 1st Quarter 2008 based on longline logbooks submitted through May 8, 2008

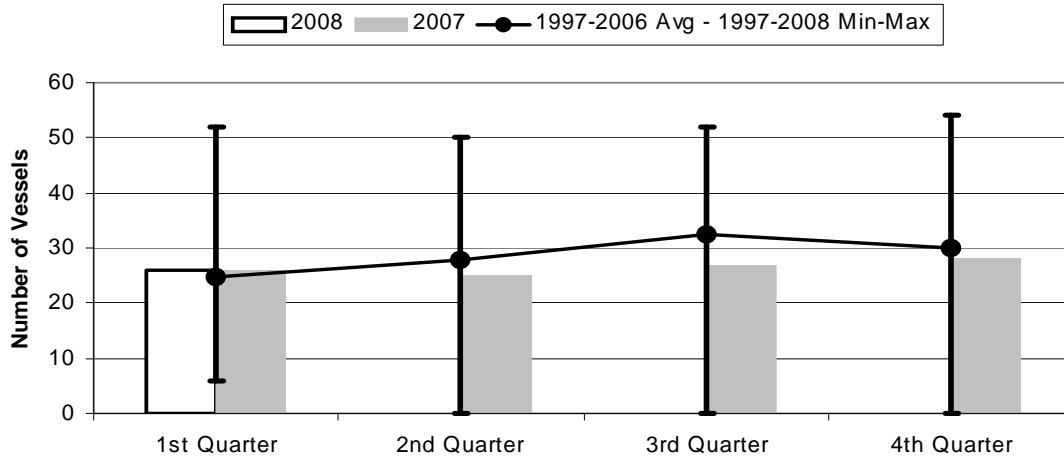
TRIP INFORMATION

Number of Vessels:	26
Number of Trips:	72
Number of Sets:	1078
1000's of Hooks Set:	3305
Number of Lightsticks Used:	5

CATCH INFORMATION

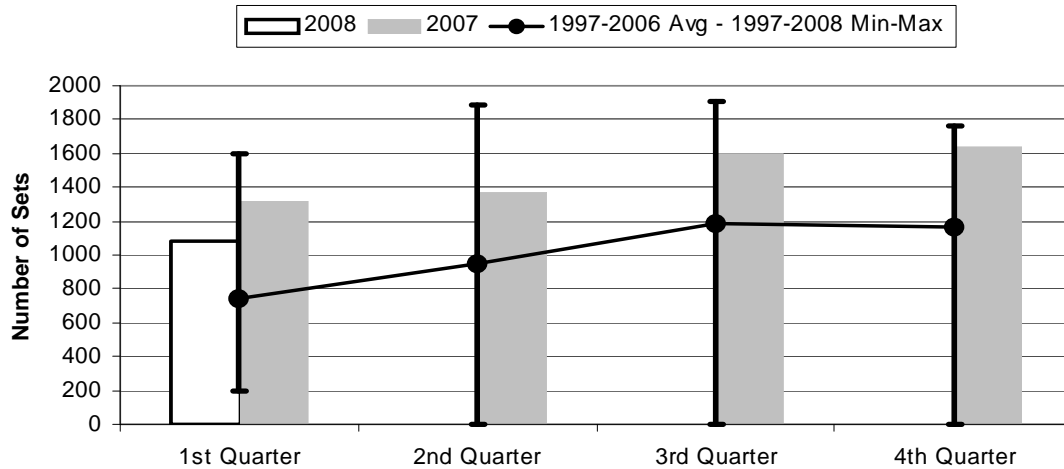
Species	# Caught	# Kept	# Finned	# Caught/ 1000 Hooks
BILLFISH				
Black marlin	8	0		0.00
Blue marlin	708	228		0.21
Striped marlin	105	6		0.03
Sailfish	81	3		0.02
Spearfish	79	4		0.02
Swordfish	52	35		0.02
TOTALS	1033	276		0.31
SHARKS				
Blue shark	797	0		0.24
Shortfin mako shark	34	0		0.01
Thresher shark	24	0		0.01
White tip oceanic shark	193	0		0.06
Sharks (misc)	48	0		0.01
TOTALS	1096	0		0.33
TUNA				
Albacore	34317	34148		10.38
Bigeye tuna	2198	2112		0.67
Skipjack tuna	4818	4462		1.46
Yellowfin tuna	3062	3041		0.93
TOTALS	44395	43763		13.43
OTHER PELAGICS				
Mahimahi	50	31		0.02
Moonfish	118	29		0.04
Oilfish	1166	0		0.35
Pomfret	137	5		0.04
Wahoo	3019	2701		0.91
TOTALS	4490	2766		1.36
NON-PMUS				
Pelagic fish (misc)	45	0		0.01
TOTALS	45	0		0.01

Figure 1. American Samoa Longline Vessels Submitting Logs by Quarter for



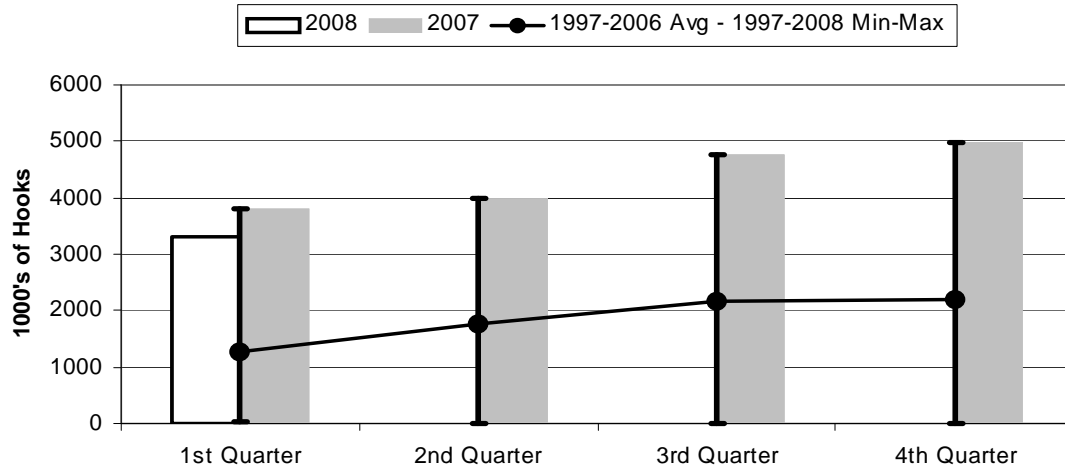
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	26	0	0	0
2007	26	25	27	28
1997-2008 Max	52	50	52	54
1997-2006 Avg	24.7	27.7	32.4	30.0
1997-2008 Min	6	0	0	0

Figure 2. Number of Sets by American Samoa Longline Vessels by Quarter for



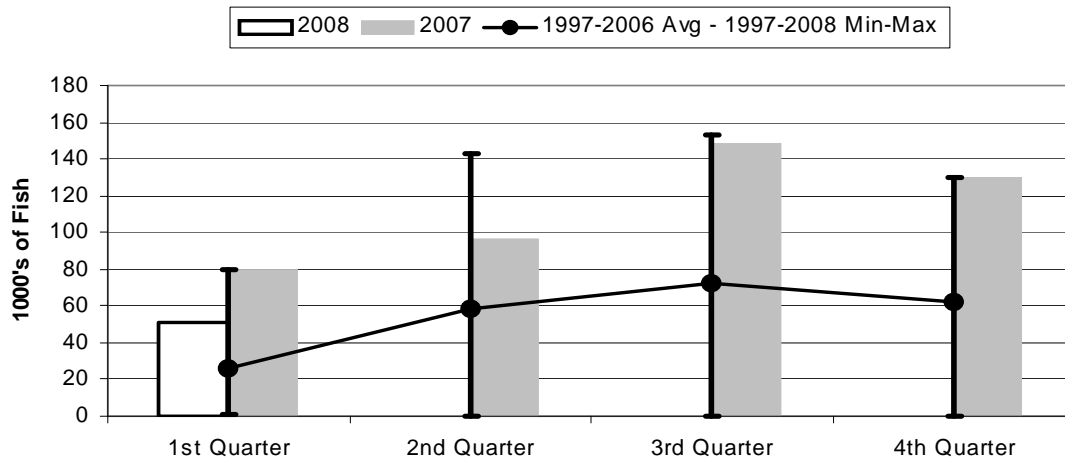
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	1078	0	0	0
2007	1316	1366	1595	1642
1997-2006 Avg	741	953	1183	1162
1997-2008 Max	1602	1886	1903	1758
1997-2008 Min	192	0	0	0

Figure 3. Number of Hooks Set by the American Samoa Longline Fleet by Quarter for



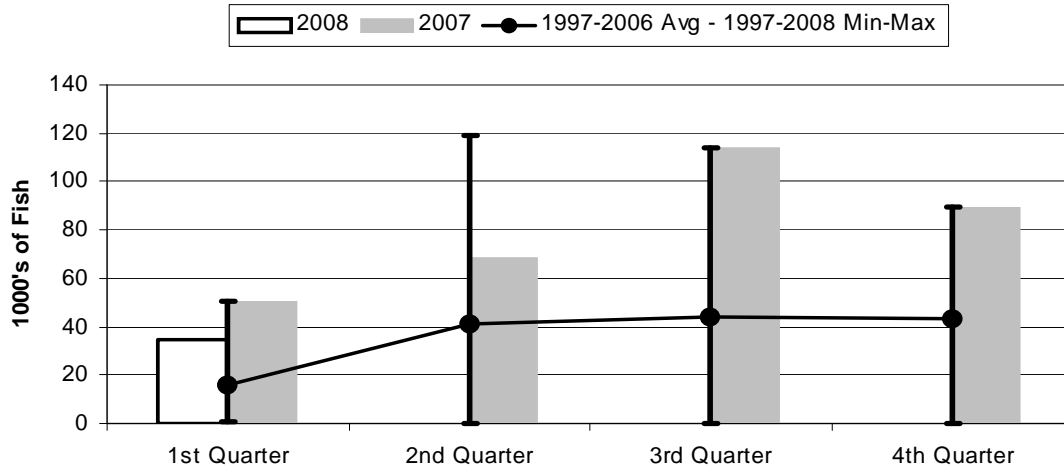
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	3305	0	0	0
2007	3805	3993	4769	4985
1997-2008 Max	3805	3993	4769	4985
1997-2006 Avg	1262	1760	2152	2189
1997-2008 Min	41	0	0	0

Figure 4. American Samoa Longline Total Catch (All Species) by Quarter for



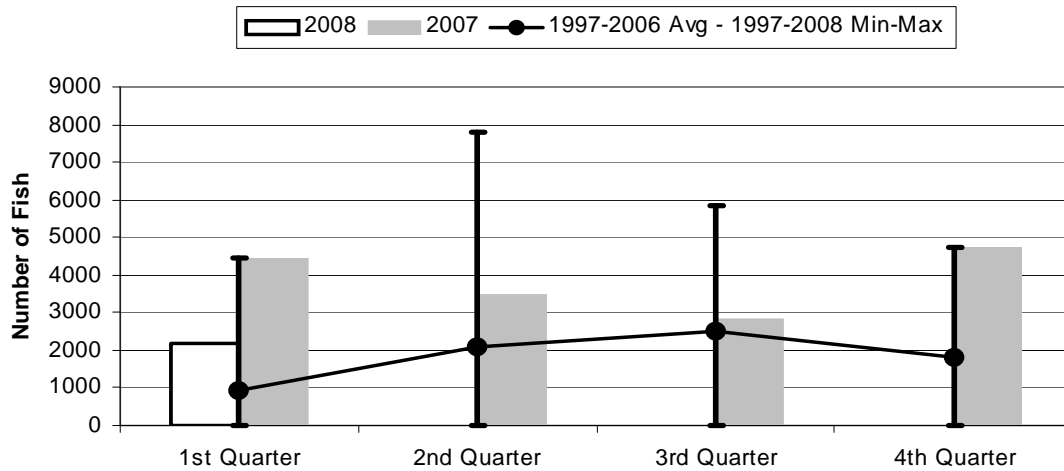
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	51.06	0.00	0.00	0.00
2007	79.57	96.95	148.56	130.24
1997-2008 Max	79.57	142.60	153.30	130.24
1997-2006 Avg	26.13	58.47	72.00	62.27
1997-2008 Min	1.32	0.00	0.00	0.00

Figure 5. American Samoa Longline Albacore Catch by Quarter for



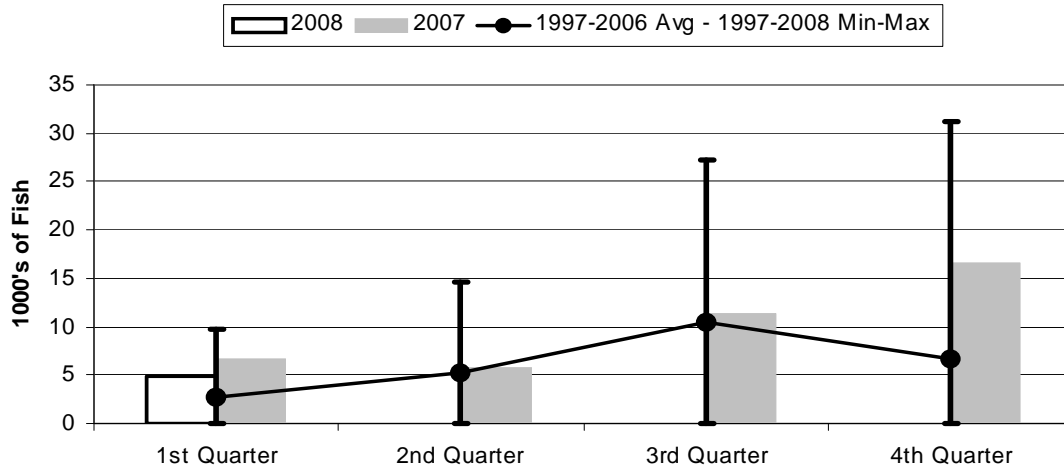
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	34.32	0.00	0.00	0.00
2007	50.38	68.29	113.83	89.39
1997-2008 Max	50.38	118.99	113.83	89.39
1997-2006 Avg	15.99	40.82	44.06	43.21
1997-2008 Min	0.94	0.00	0.00	0.00

Figure 6. American Samoa Longline Bigeye Tuna Catch by Quarter for



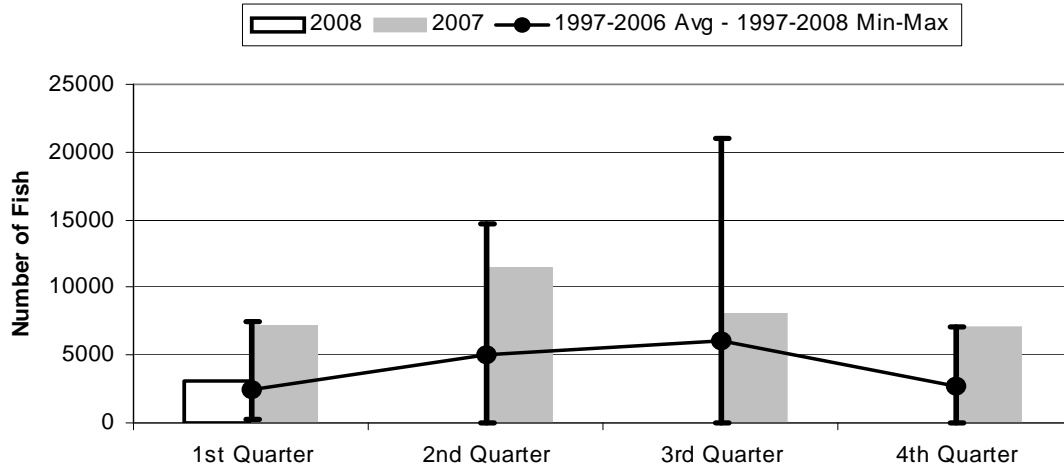
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	2198	0	0	0
2007	4466	3485	2850	4728
1997-2008 Max	4466	7785	5824	4728
1997-2006 Avg	947	2082	2504	1790
1997-2008 Min	6	0	0	0

Figure 7. American Samoa Longline Skipjack Tuna Catch by Quarter for



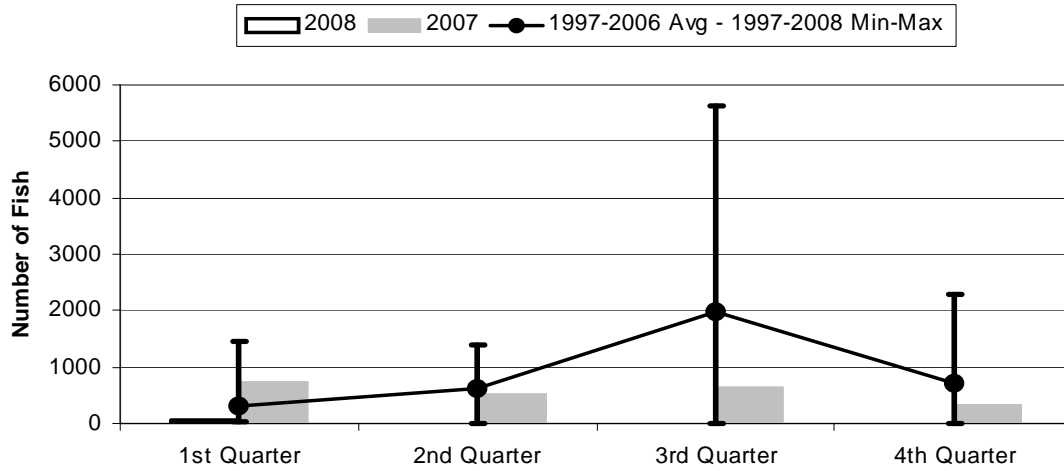
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	4.82	0.00	0.00	0.00
2007	6.74	5.71	11.33	16.64
1997-2008 Max	9.81	14.61	27.23	31.19
1997-2006 Avg	2.64	5.22	10.44	6.73
1997-2008 Min	0.00	0.00	0.00	0.00

Figure 8. American Samoa Longline Yellowfin Tuna Catch by Quarter for



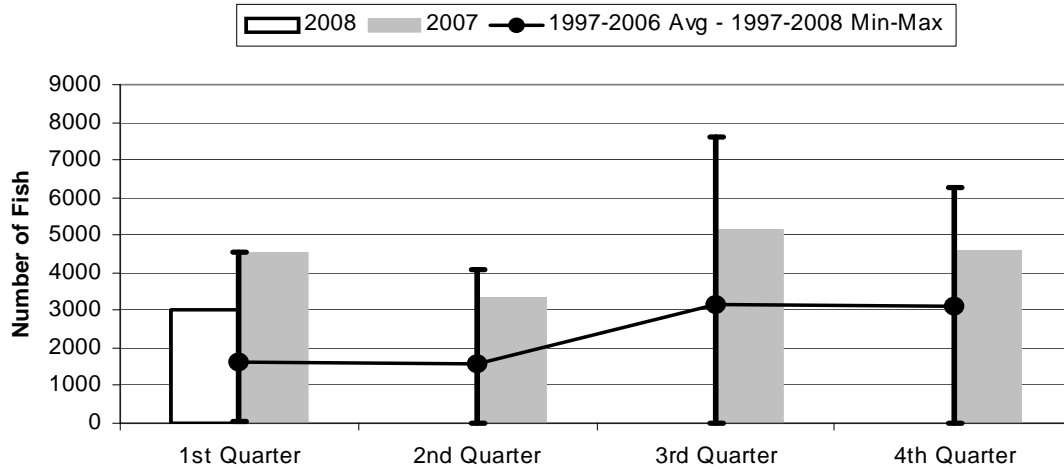
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	3062	0	0	0
2007	7174	11488	8135	7104
1997-2008 Max	7428	14681	20993	7104
1997-2006 Avg	2508	5024	6013	2744
1997-2008 Min	213	0	0	0

Figure 9. American Samoa Mahimahi Catch by Quarter for



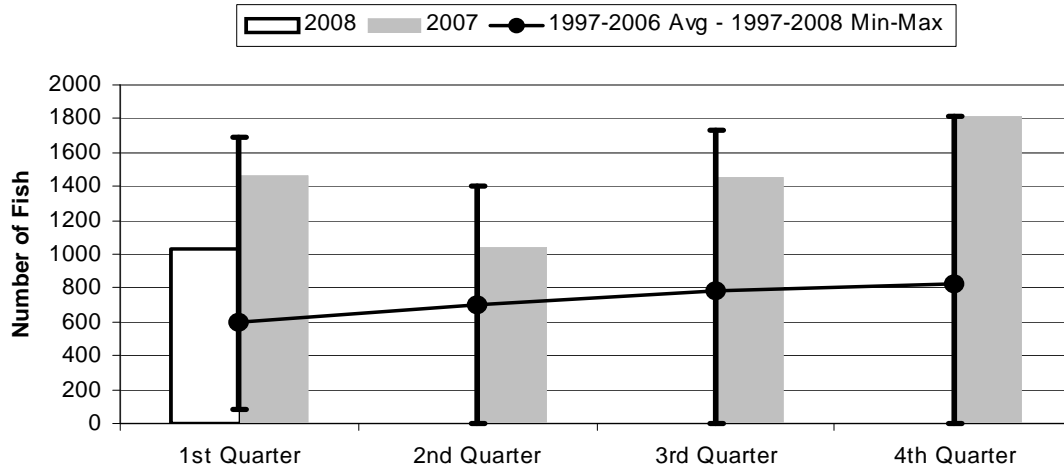
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	50	0	0	0
2007	729	535	655	330
1997-2008 Max	1455	1391	5642	2297
1997-2006 Avg	315	604	1984	709
1997-2008 Min	30	0	0	0

Figure 10. American Samoa Wahoo Catch by Quarter for



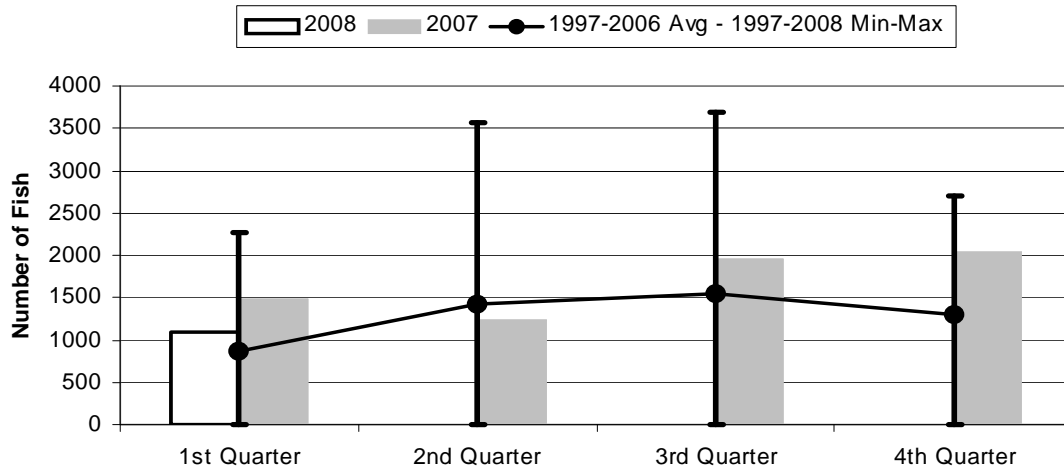
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	3019	0	0	0
2007	4524	3336	5135	4573
1997-2008 Max	4524	4076	7629	6281
1997-2006 Avg	1614	1555	3149	3115
1997-2008 Min	27	0	0	0

Figure 11. American Samoa Billfish Catch by Quarter for



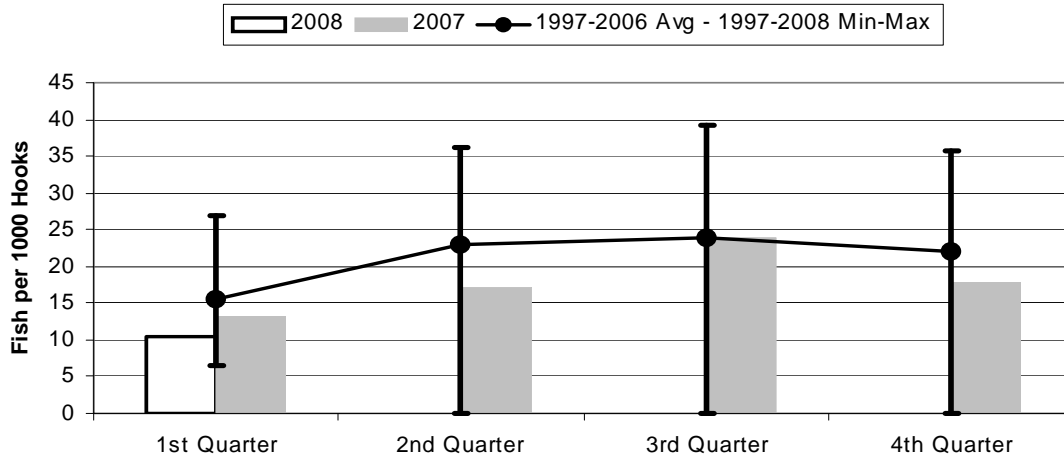
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	1033	0	0	0
2007	1468	1045	1450	1819
1997-2008 Max	1692	1404	1729	1819
1997-2006 Avg	594	697	785	821
1997-2008 Min	83	0	0	0

Figure 12. American Samoa Shark Catch by Quarter for



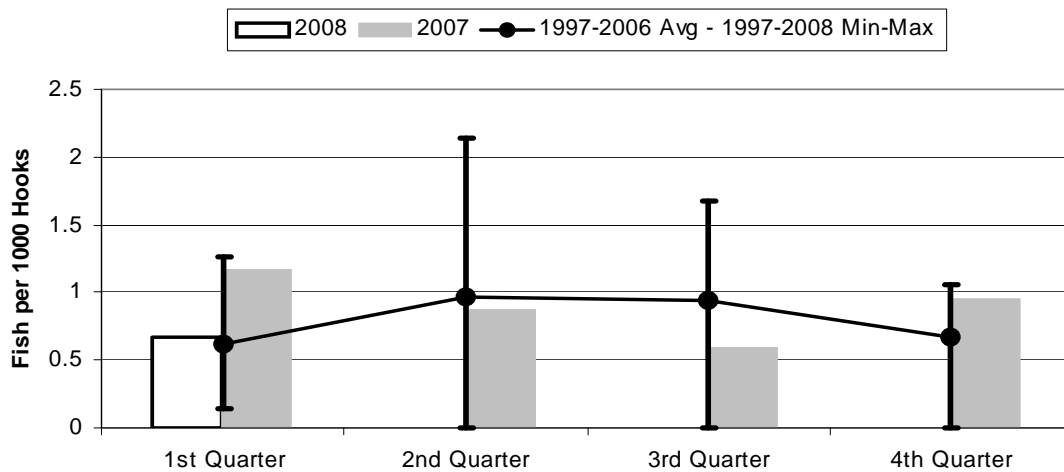
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	1096	0	0	0
2007	1480	1242	1952	2044
1997-2008 Max	2262	3562	3686	2695
1997-2006 Avg	864	1432	1553	1303
1997-2008 Min	5	0	0	0

Figure 13. American Samoa Longline Albacore Catch/1000 Hooks by Quarter for



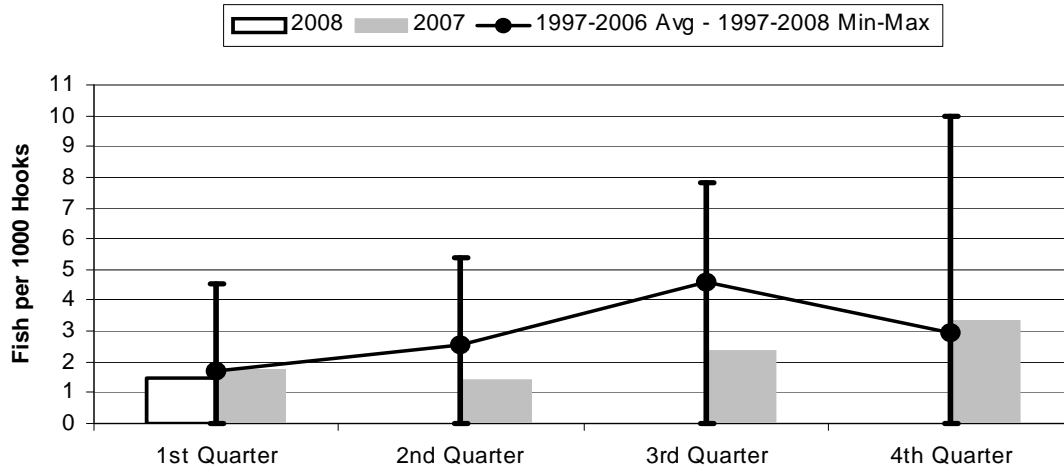
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	10.38	0.00	0.00	0.00
2007	13.24	17.10	23.87	17.93
1997-2008 Max	27.01	36.18	39.13	35.75
1997-2006 Avg	15.64	23.07	23.92	22.13
1997-2008 Min	6.58	0.00	0.00	0.00

Figure 14. American Samoa Longline Bigeye Tuna Catch/1000 Hooks by Quarter for



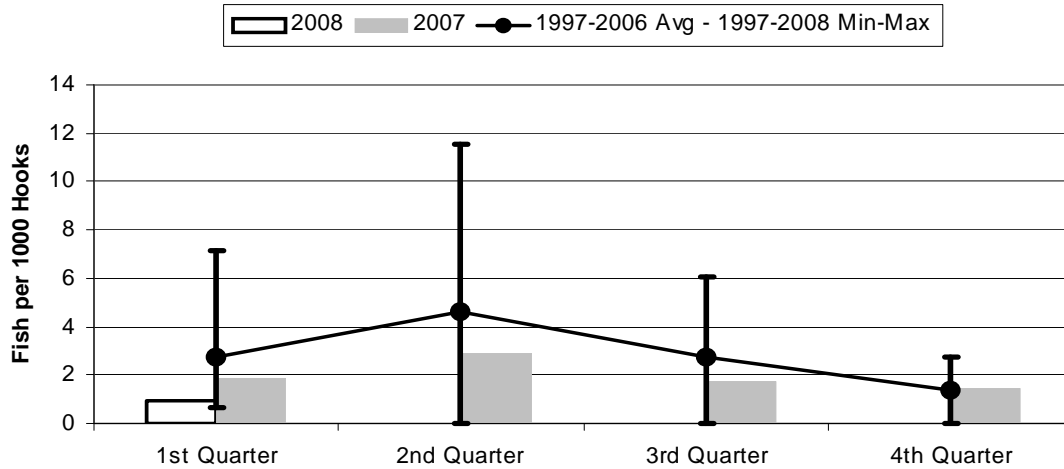
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.665	0.000	0.000	0.000
2007	1.174	0.873	0.598	0.948
1997-2008 Max	1.267	2.145	1.676	1.051
1997-2006 Avg	0.614	0.965	0.943	0.665
1997-2008 Min	0.146	0.000	0.000	0.000

Figure 15. American Samoa Longline Skipjack Tuna Catch/1000 Hooks by Quarter for



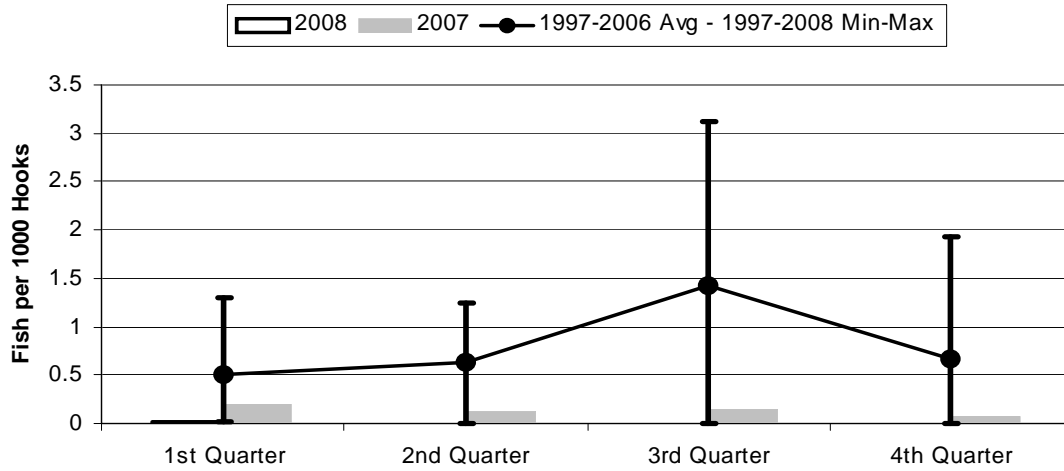
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	1.458	0.000	0.000	0.000
2007	1.770	1.430	2.375	3.337
1997-2008 Max	4.556	5.388	7.837	9.975
1997-2006 Avg	1.710	2.561	4.606	2.933
1997-2008 Min	0.000	0.000	0.000	0.000

Figure 16. American Samoa Yellowfin Tuna Catch/1000 Hooks by Quarter for



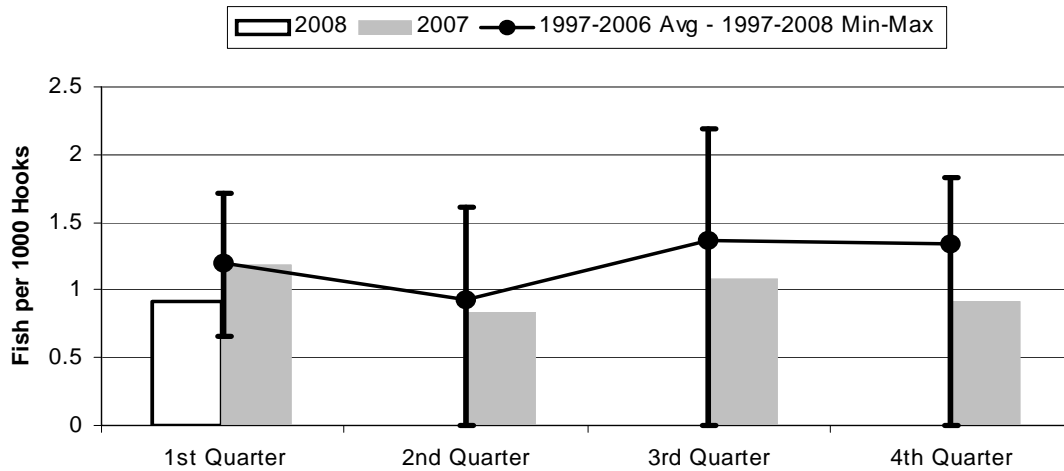
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.926	0.000	0.000	0.000
2007	1.886	2.877	1.706	1.425
1997-2008 Max	7.120	11.51	6.041	2.757
1997-2006 Avg	2.707	4.647	2.707	1.344
1997-2008 Min	0.663	0.000	0.000	0.000

Figure 17. American Samoa Longline Mahimahi Catch/1000 Hooks by Quarter for



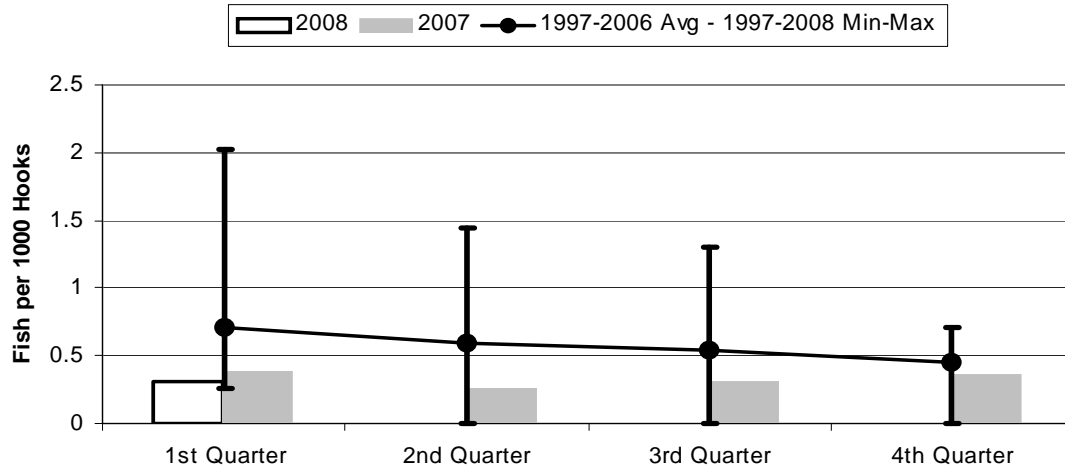
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.015	0.000	0.000	0.000
2007	0.192	0.134	0.137	0.066
1997-2008 Max	1.304	1.248	3.125	1.932
1997-2006 Avg	0.497	0.623	1.419	0.668
1997-2008 Min	0.015	0.000	0.000	0.000

Figure 18. American Samoa Wahoo Catch/1000 Hooks by Quarter for



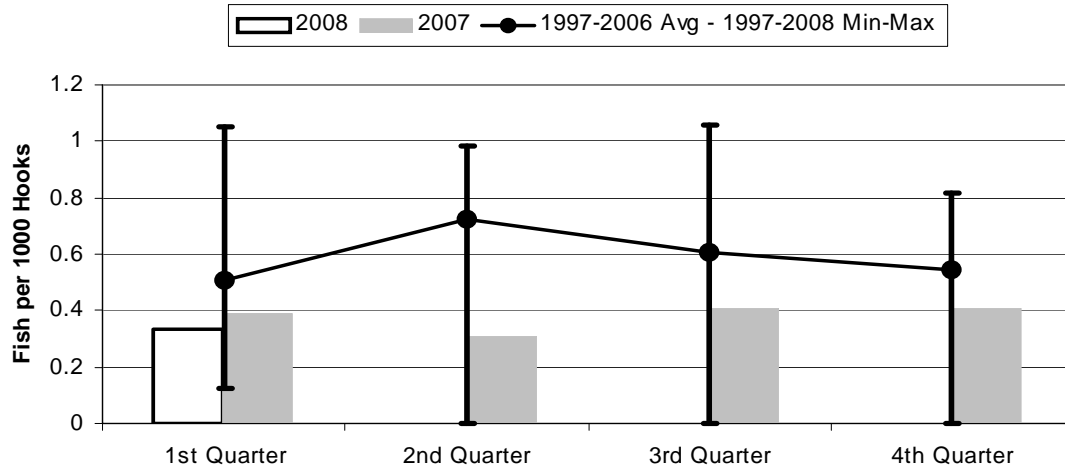
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.913	0.000	0.000	0.000
2007	1.189	0.836	1.077	0.917
1997-2006 Avg	1.199	0.923	1.360	1.346
1997-2008 Max	1.710	1.617	2.195	1.832
1997-2008 Min	0.657	0.000	0.000	0.000

Figure 19. American Samoa Billfish Catch/1000 Hooks by Quarter for



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.313	0.000	0.000	0.000
2007	0.386	0.262	0.304	0.365
1997-2008 Max	2.019	1.439	1.306	0.712
1997-2006 Avg	0.705	0.586	0.538	0.448
1997-2008 Min	0.252	0.000	0.000	0.000

Figure 20. American Samoa Shark Catch/1000 Hooks by Quarter for



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.332	0.000	0.000	0.000
2007	0.389	0.311	0.409	0.410
1997-2008 Max	1.051	0.986	1.061	0.819
1997-2006 Avg	0.507	0.721	0.605	0.543
1997-2008 Min	0.122	0.000	0.000	0.000