

# **PIFSC Report on the Logbook Program for the American Samoa Longline Fishery October-December 2008<sup>1</sup>**

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Summary statistics of American Samoa longline catch and effort for the fourth quarter of 2008, based on date of haul, are shown in Table 1. The table is derived from all logbook data submitted as of February 5, 2009. As of February 5, 2009, the documented delinquency rate for the fourth quarter of 2008 was 2.7%, with data from 1 out of 36 large longline vessel trips not yet received or entered in the database.

According to the longline logbook data, 24 vessels turned in some or all of their longline logs for sets made during the fourth quarter of 2008 (Fig 1). These 24 vessels made 1,235 sets (Fig 2) and deployed 3,783,253 hooks. The fourth quarter of 2008 showed declines in both effort and catch for most species over the fourth quarter of last year. Compared to the fourth quarter of 2007, the number of vessels turning in logs this quarter decreased by 14% from 28 vessels to 24, the number of sets decreased by 25% and the number of hooks used decreased by 24%. The average number of hooks used per set increased slightly (0.8%) from 3036 to 3063.

The total catch for all species combined was 77,774 fish (Fig. 4) which is a decrease of 40% compared to the fourth quarter of last year. Albacore continued to dominate the catch with 61,641 fish caught in the fourth quarter of 2008 (Fig. 5), a 31% decrease from the 89,389 albacore caught in the fourth quarter of 2007. The catches of the other major tunas dropped to about one fourth of their 4<sup>th</sup> quarter 2007 values. Bigeye tuna catch (Fig. 6) showed a decrease of 76%, yellowfin tuna catch (Fig. 8) showed a decrease of 71% and skipjack tuna (Fig. 7) decreased by 74% from their 4<sup>th</sup> quarter 2007 values. The catches of wahoo (Fig. 10) and sharks (Fig. 12) both dropped by 31% and the catch of billfish (Fig. 11) was down 37% from its value a year ago. The only catch to show an increase was for mahimahi (Fig. 9) which increased by 4%.

The CPUE (number of fish caught per 1000 hooks) of albacore decreased by 9%. The CPUE of the other major tunas dropped to about one third of their 4<sup>th</sup> quarter 2007 values. Bigeye tuna CPUE (Fig. 14) showed a decrease of 69%, yellowfin tuna CPUE (Fig. 16) showed a decrease of 61% and the CPUE of skipjack tuna (Fig. 15) decreased by 65%. The CPUE of wahoo (Fig. 18) and sharks (Fig. 20) dropped by 10% and the catch of billfish (Fig. 19) was down 16% from its value a year ago. Mahimahi catch per 1000 hooks (Fig. 17) showed an increase of 28% and was the only species to show an increase.

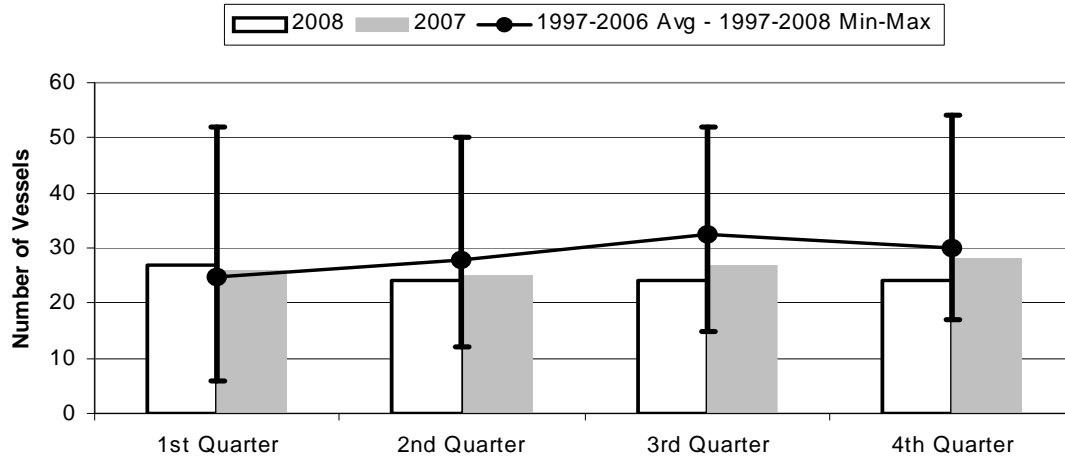
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<sup>1</sup> PIFSC Data Report DR-09-002  
Issued 23 February 2009

**Table 1. Summary of fish catch and nominal fishing effort by American Samoa Longline vessels during the fourth quarter of 2008 based on longline logbooks submitted before Feb. 5, 2009**

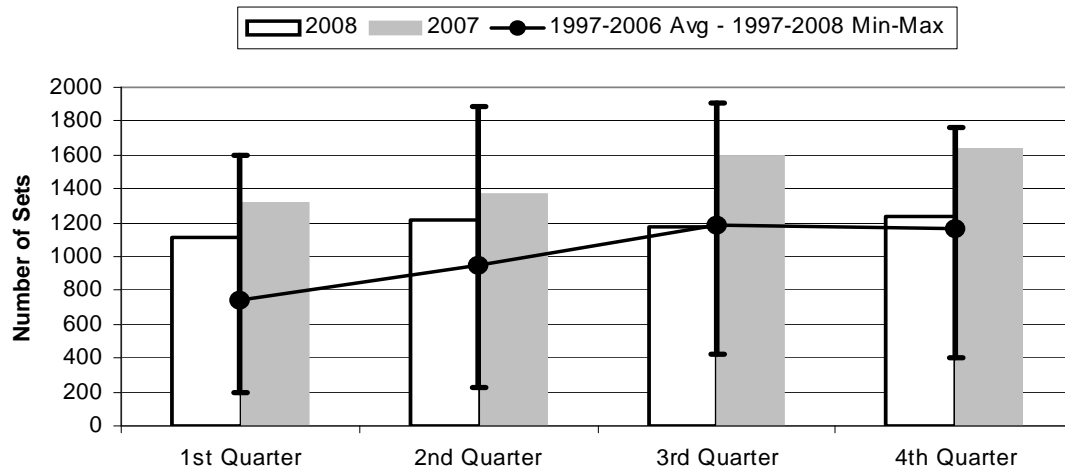
<b>TRIP INFORMATION</b>				
	Number of Vessels:		24	
	Number of Trips:		70	
	Number of Sets:		1,235	
	1000's of Hooks Set:		3,783	
	Number of Light Sticks Used:		38	
<b>CATCH INFORMATION</b>				
<b>Species</b>	<b>Number Caught</b>	<b>Number Kept</b>	<b>Number Released</b>	<b>Number Caught per 1000 Hooks</b>
<b>BILLFISH</b>				
Black marlin	23	0	23	0.01
Blue marlin	714	145	569	0.19
Striped marlin	37	13	24	0.01
Sailfish	102	12	90	0.03
Spearfish	182	10	172	0.05
Swordfish	84	56	28	0.02
<b>TOTAL BILLFISH</b>	<b>1,142</b>	<b>236</b>	<b>906</b>	<b>0.30</b>
<b>SHARKS</b>				
Blue shark	1,029	2	1,027	0.27
Shortfin mako shark	66	1	65	0.02
Thresher shark	56	0	56	0.01
White tip oceanic shark	227	0	227	0.06
Sharks	33	1	32	0.01
<b>TOTAL SHARKS</b>	<b>1,411</b>	<b>4</b>	<b>1,407</b>	<b>0.37</b>
<b>TUNA</b>				
Albacore tuna	61,641	61,580	61	16.29
Bigeye tuna	1,115	1,032	83	0.29
Skipjack tuna	4,334	3,928	406	1.15
Yellowfin tuna	2,066	2,032	34	0.55
<b>TOTAL TUNA</b>	<b>69,156</b>	<b>68,572</b>	<b>584</b>	<b>18.28</b>
<b>OTHER PELAGICS</b>				
Mahimahi	344	204	140	0.09
Moonfish	192	35	157	0.05
Oilfish	1,889	6	1,883	0.50
Pomfret	317	22	295	0.08
Wahoo	3,129	2,478	651	0.83
<b>TOTAL OTHER PELAGICS</b>	<b>5,871</b>	<b>2,745</b>	<b>3,126</b>	<b>1.55</b>
<b>NON-PMUS</b>				
Pelagic fishes (unknown)	194	4	190	0.05
<b>TOTAL NON-PMUS</b>	<b>194</b>	<b>4</b>	<b>190</b>	<b>0.05</b>
<b>TOTAL ALL SPECIES</b>	<b>77,774</b>	<b>71,561</b>	<b>6,213</b>	<b>20.56</b>

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



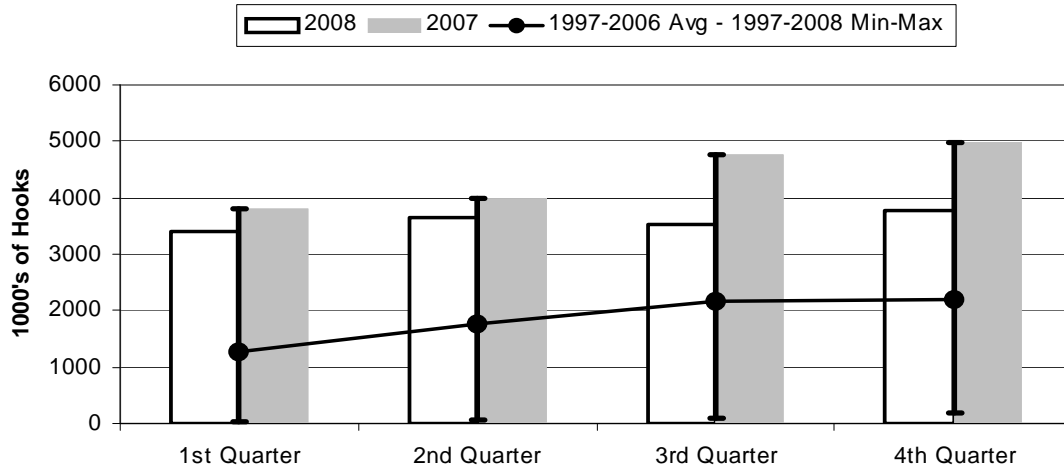
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	27	24	24	24
2007	26	25	27	28
1997-2008 Max	52	50	52	54
1997-2006 Avg	25	28	32	30
1997-2008 Min	6	12	15	17

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



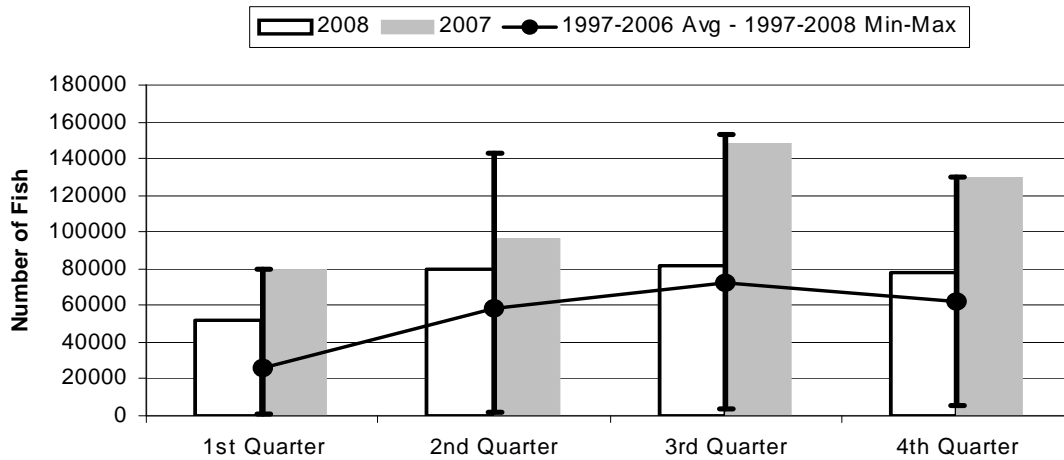
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	1,109	1,215	1,171	1,235
2007	1,316	1,366	1,595	1,642
1997-2008 Max	1,602	1,886	1,903	1,758
1997-2006 Avg	741	953	1,183	1,162
1997-2008 Min	192	223	424	402

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



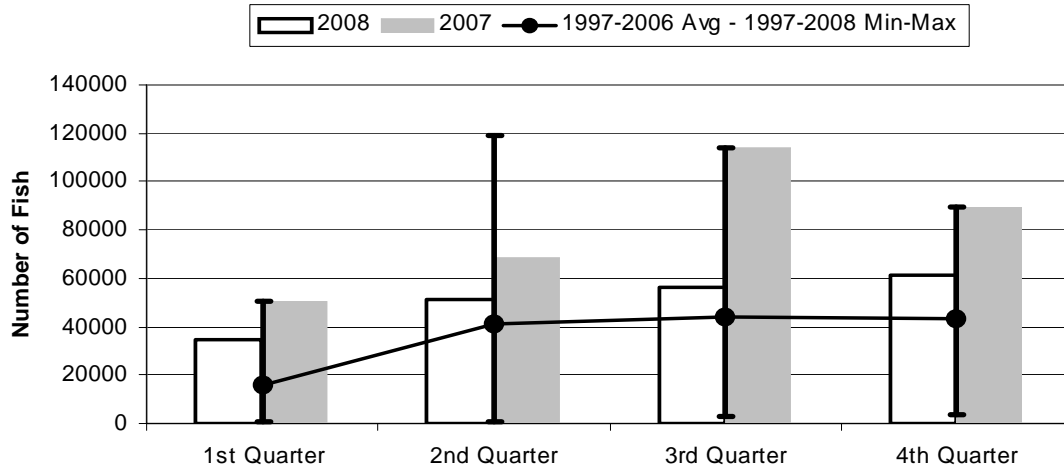
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	3,402	3,660	3,527	3,783
2007	3,805	3,993	4,769	4,985
1997-2008 Max	3,805	3,993	4,769	4,985
1997-2006 Avg	1,262	1,760	2,152	2,189
1997-2008 Min	41	51	101	175

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



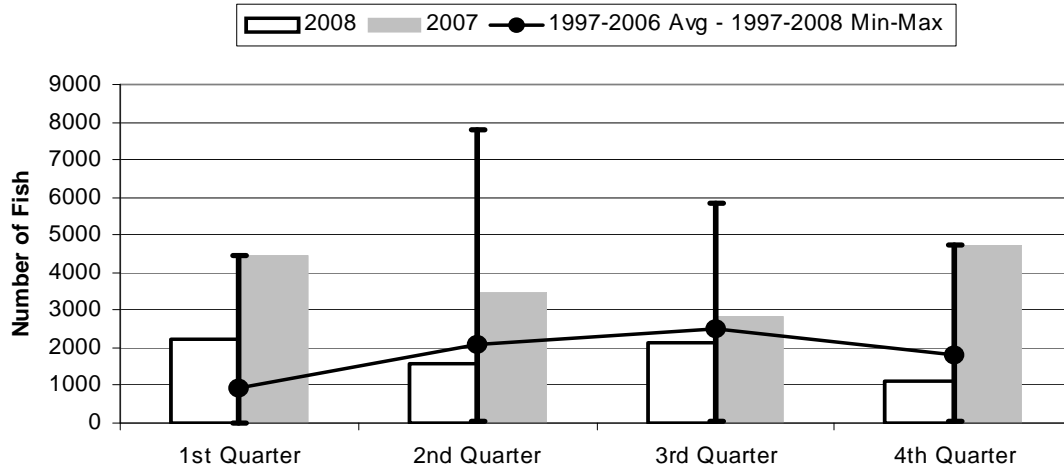
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	52,273	80,171	81,287	77,774
2007	79,567	96,950	148,564	130,238
1997-2008 Max	79,567	142,603	153,301	130,238
1997-2006 Avg	26,127	58,470	72,002	62,265
1997-2008 Min	1,315	1,416	4,127	5,204

**Figure 5. American Samoa Longline Albacore Catch by Quarter for**



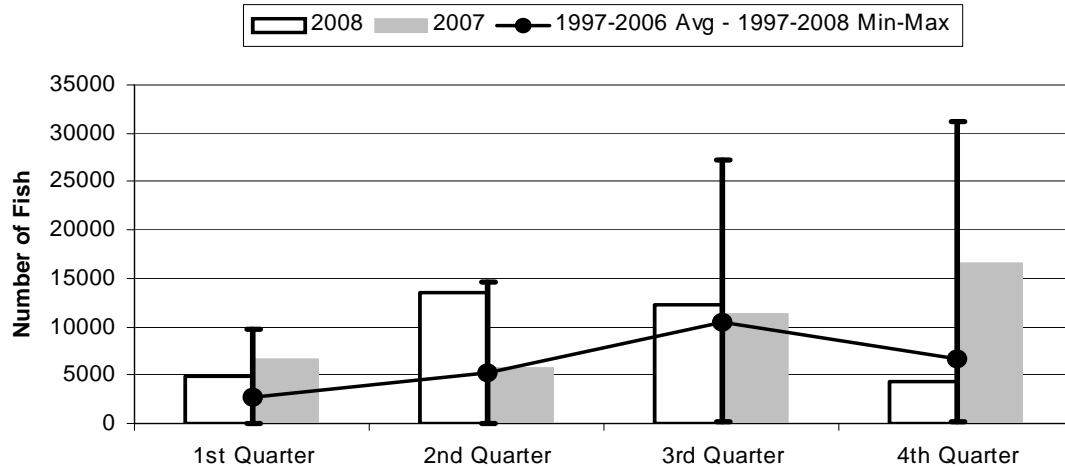
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	34,945	51,558	56,148	61,641
2007	50,382	68,288	113,831	89,389
1997-2008 Max	50,382	118,994	113,831	89,389
1997-2006 Avg	15,986	40,820	44,057	43,213
1997-2008 Min	940	851	3,182	3,466

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



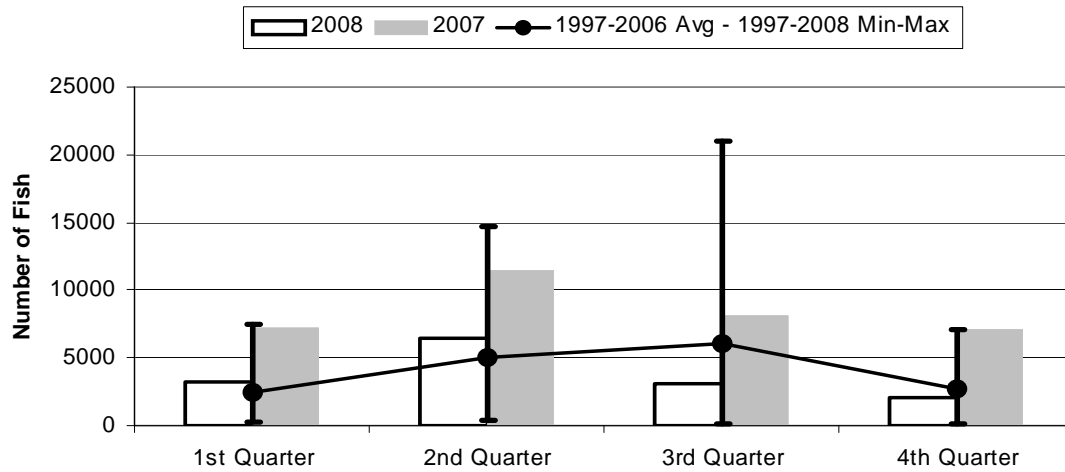
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	2,225	1,565	2,138	1,115
2007	4,466	3,485	2,850	4,728
1997-2008 Max	4,466	7,785	5,824	4,728
1997-2006 Avg	947	2,082	2,504	1,790
1997-2008 Min	6	26	55	55

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



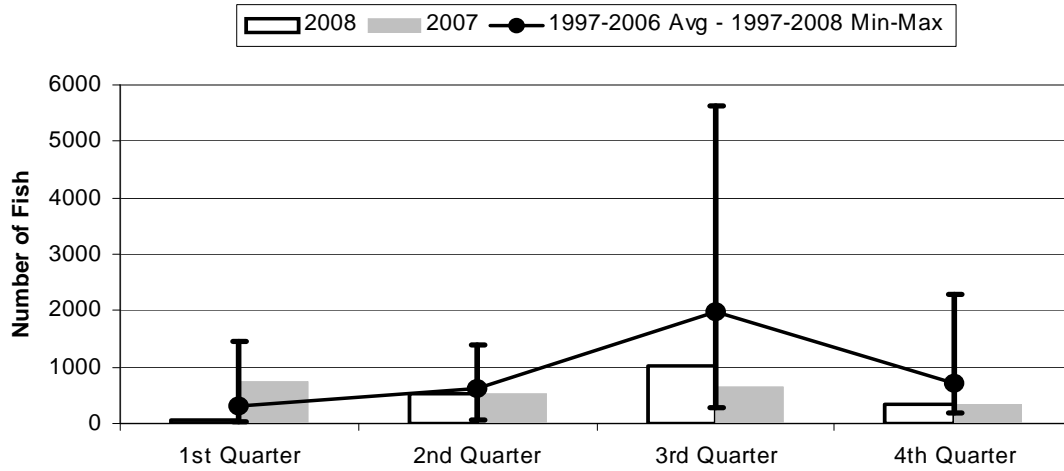
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	4,943	13,617	12,188	4,334
2007	6,735	5,708	11,327	16,635
1997-2008 Max	9,809	14,606	27,234	31,191
1997-2006 Avg	2,636	5,216	10,437	6,730
1997-2008 Min	0	6	244	178

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



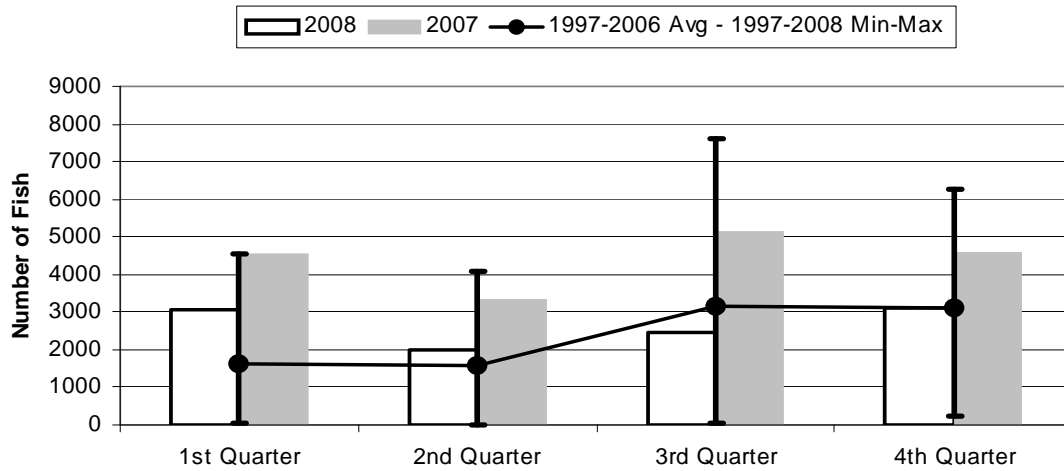
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	3,197	6,427	3,128	2,066
2007	7,174	11,488	8,135	7,104
1997-2008 Max	7,428	14,681	20,993	7,104
1997-2006 Avg	2,508	5,024	6,013	2,744
1997-2008 Min	213	356	84	177

**Figure 9. American Samoa Mahimahi Catch by Quarter for**



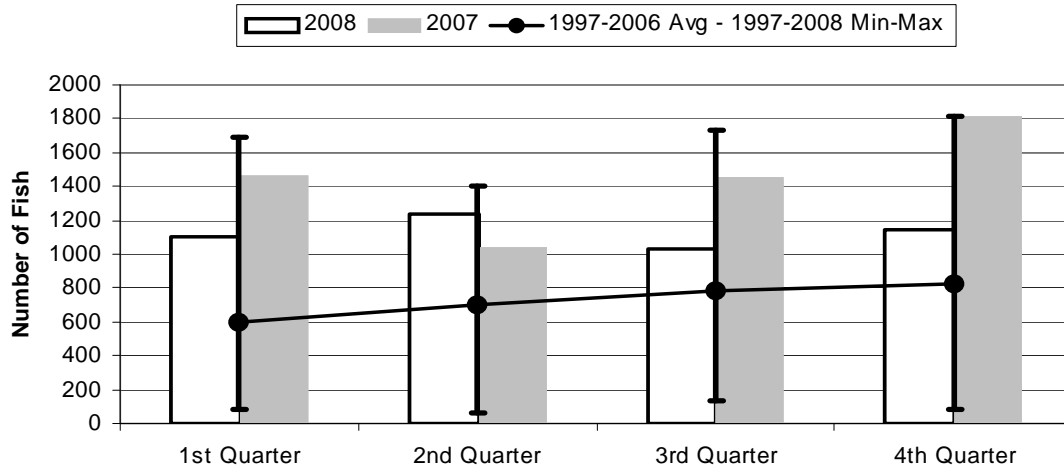
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	55	516	1,013	344
2007	729	535	655	330
1997-2008 Max	1,455	1,391	5,642	2,297
1997-2006 Avg	315	604	1,984	709
1997-2008 Min	30	59	280	181

**Figure 10. American Samoa Wahoo Catch by Quarter for**



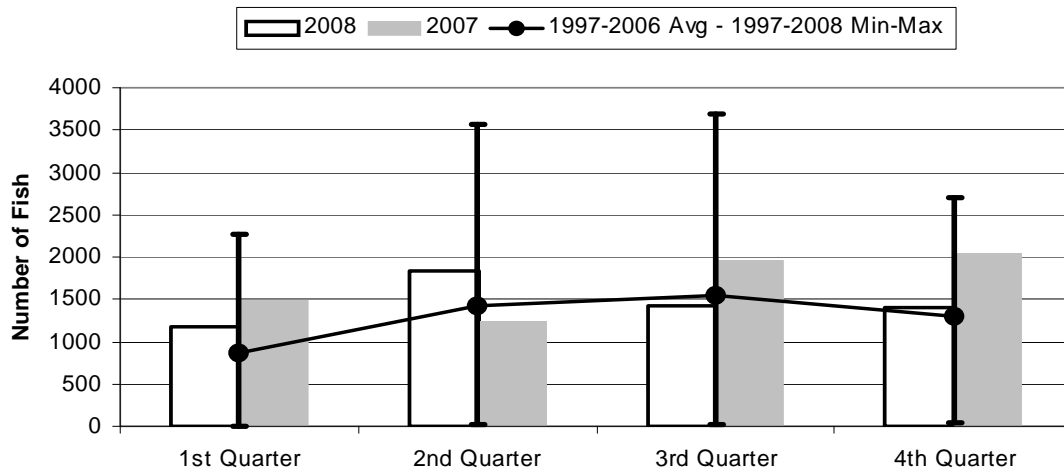
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	3,078	1,981	2,451	3,129
2007	4,524	3,336	5,135	4,573
1997-2008 Max	4,524	4,076	7,629	6,281
1997-2006 Avg	1,614	1,555	3,149	3,115
1997-2008 Min	27	20	68	210

**Figure 11. American Samoa Billfish Catch by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	1,100	1,242	1,029	1,142
2007	1,468	1,045	1,450	1,819
1997-2008 Max	1,692	1,404	1,729	1,819
1997-2006 Avg	594	697	785	821
1997-2008 Min	83	58	132	84

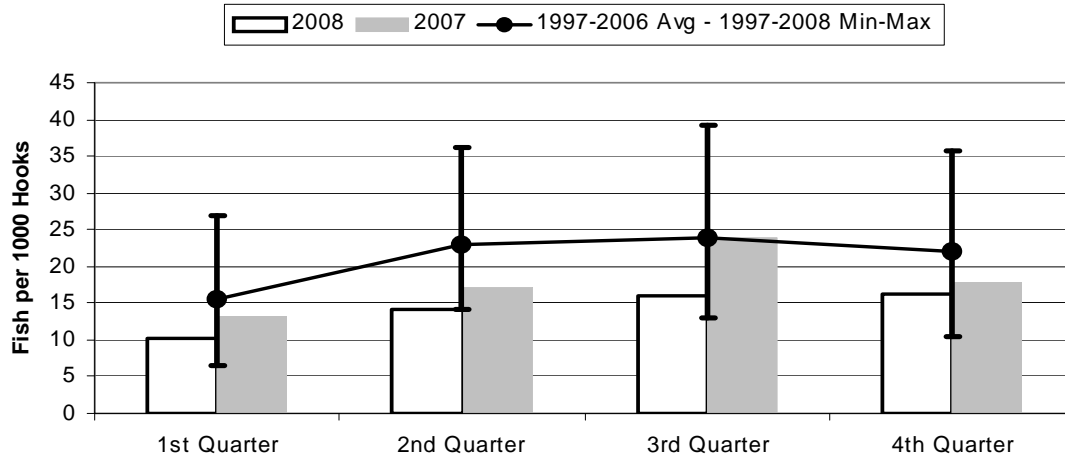
**Figure 12. American Samoa Shark Catch by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	1,174	1,826	1,428	1,411
2007	1,480	1,242	1,952	2,044
1997-2008 Max	2,262	3,562	3,686	2,695
1997-2006 Avg	864	1,432	1,553	1,303
1997-2008 Min	5	16	26	49

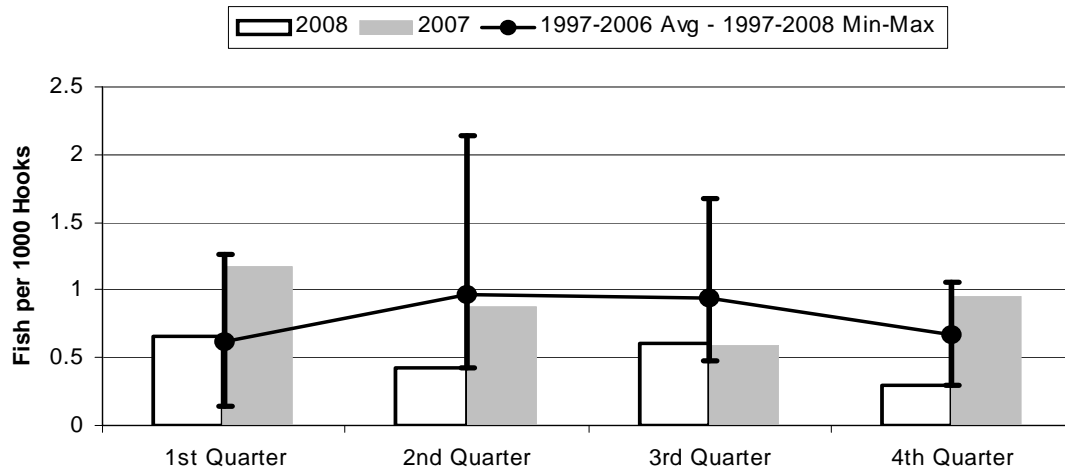


**Figure 13. American Samoa Longline Albacore Catch per 1000 Hooks by Quarter for**



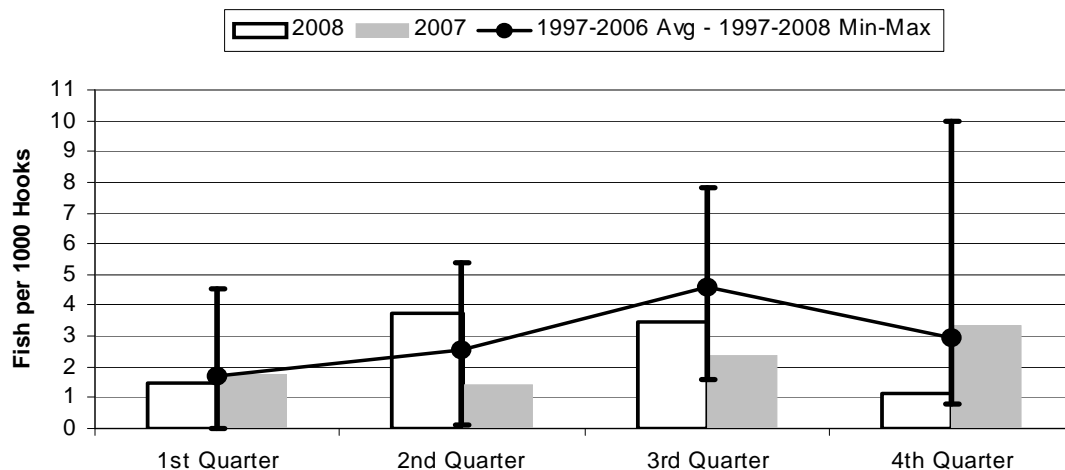
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	10.27	14.09	15.92	16.29
2007	13.24	17.10	23.87	17.93
1997-2008 Max	27.01	36.18	39.13	35.75
1997-2006 Avg	15.64	23.07	23.92	22.13
1997-2008 Min	6.58	14.09	12.96	10.54

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



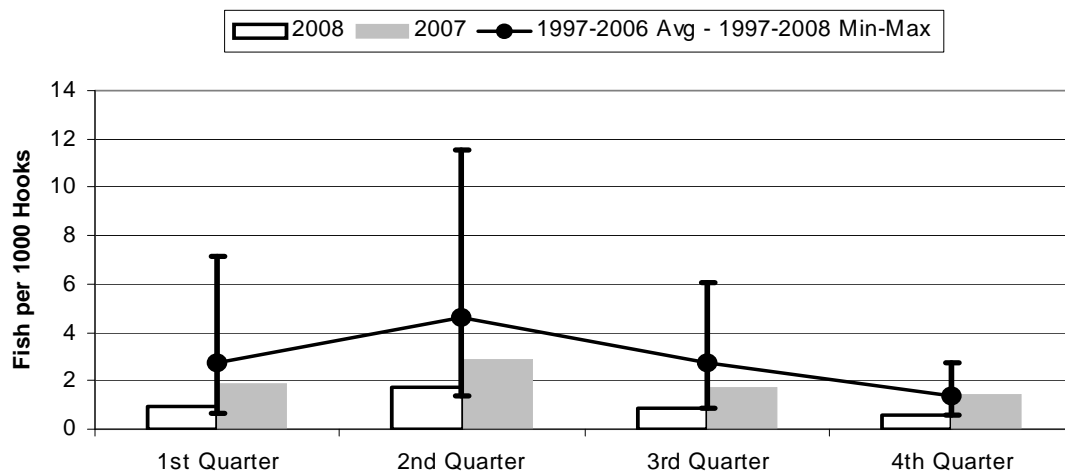
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.65	0.43	0.61	0.29
2007	1.17	0.87	0.60	0.95
1997-2008 Max	1.27	2.15	1.68	1.05
1997-2006 Avg	0.61	0.97	0.94	0.66
1997-2008 Min	0.15	0.43	0.48	0.29

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



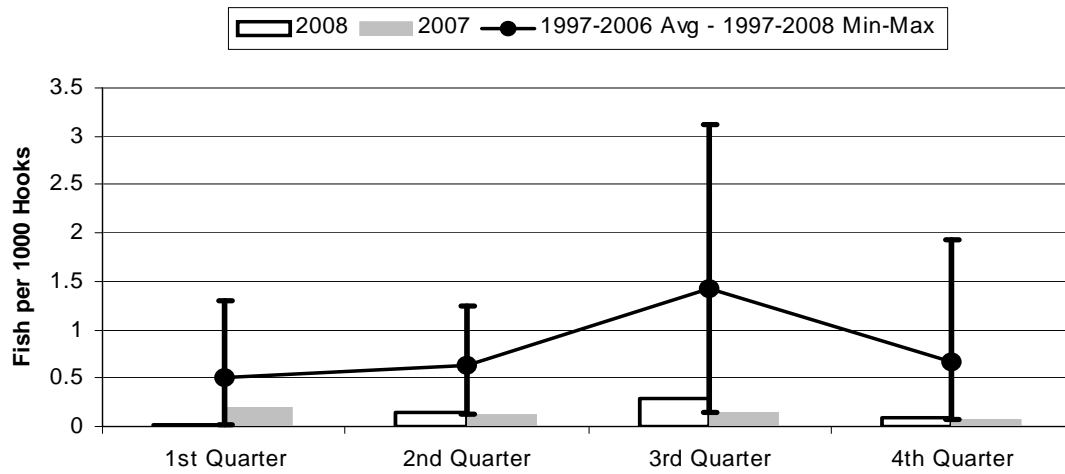
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	1.45	3.72	3.46	1.15
2007	1.77	1.43	2.38	3.34
1997-2008 Max	4.56	5.39	7.84	9.98
1997-2006 Avg	1.71	2.56	4.61	2.93
1997-2008 Min	0.00	0.12	1.56	0.79

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



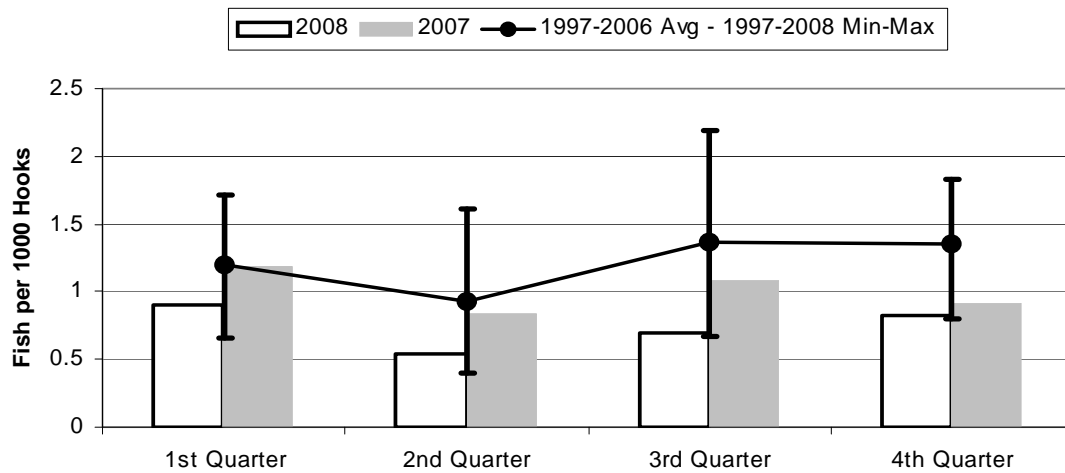
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.94	1.76	0.89	0.55
2007	1.89	2.88	1.71	1.43
1997-2006 Avg	2.71	4.65	2.71	1.34
1997-2008 Max	7.12	11.51	6.04	2.76
1997-2008 Min	0.66	1.34	0.83	0.55

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



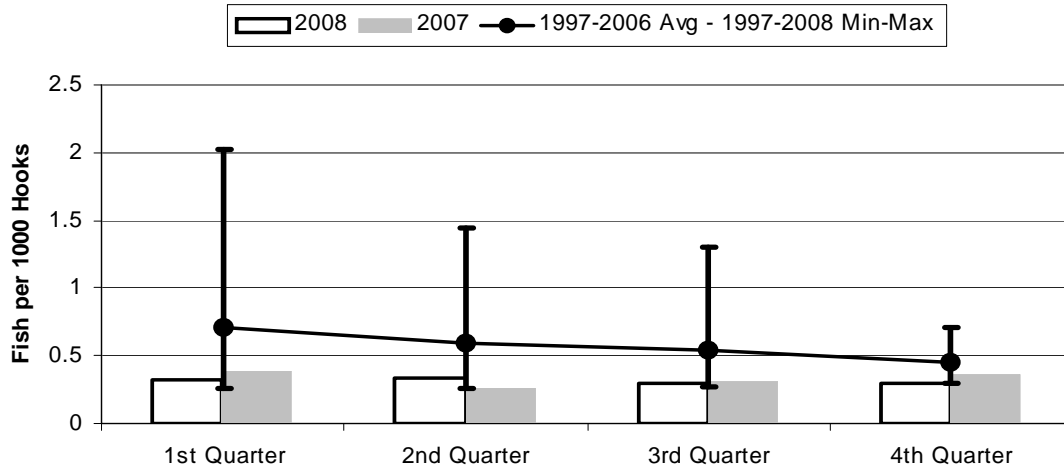
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.02	0.14	0.29	0.09
2007	0.19	0.13	0.14	0.07
1997-2008 Max	1.30	1.25	3.13	1.93
1997-2006 Avg	0.50	0.62	1.42	0.67
1997-2008 Min	0.02	0.12	0.14	0.07

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



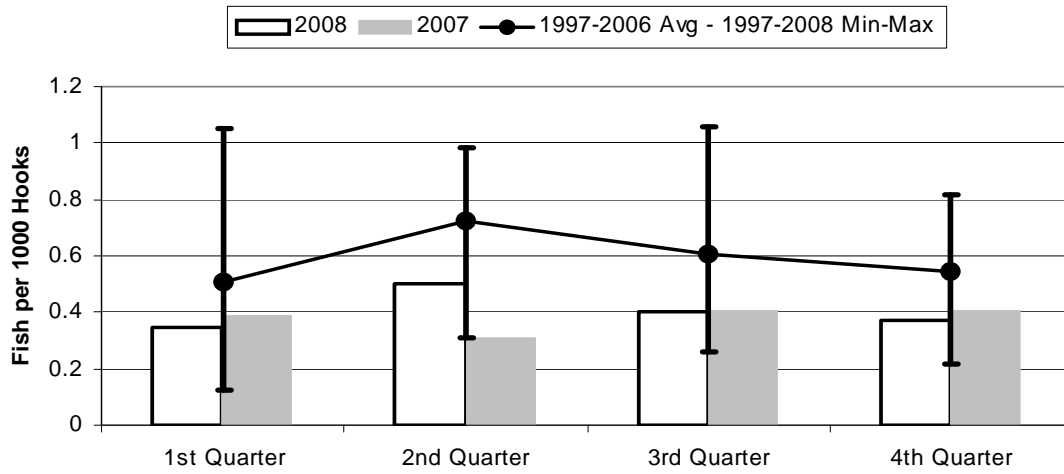
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.90	0.54	0.69	0.83
2007	1.19	0.84	1.08	0.92
1997-2006 Avg	1.20	0.92	1.36	1.35
1997-2008 Max	1.71	1.62	2.20	1.83
1997-2008 Min	0.66	0.39	0.67	0.80

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



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.32	0.34	0.29	0.30
2007	0.39	0.26	0.30	0.36
1997-2008 Max	2.02	1.44	1.31	0.71
1997-2006 Avg	0.71	0.59	0.54	0.45
1997-2008 Min	0.25	0.26	0.27	0.30

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



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2008	0.35	0.50	0.40	0.37
2007	0.39	0.31	0.41	0.41
1997-2006 Avg	0.51	0.72	0.60	0.54
1997-2008 Max	1.05	0.99	1.06	0.82
1997-2008 Min	0.12	0.31	0.26	0.22