

# **PIFSC Report on the Logbook Program for the American Samoa Longline Fishery April – June 2011<sup>1</sup>**

Fisheries Research and Monitoring Division  
Pacific Islands Fisheries Science Center

The American Samoa longline fishery's preliminary summary catch and effort statistics for the second quarter of 2011, based on date of haul, are shown in Table 1. This table was derived from all logbook data submitted to the American Samoa Department of Marine and Wildlife Resources as of September 1, 2011. Compared to the second quarter of 2010, the number of active vessels in the second quarter of 2011 decreased by about 8% from 24 vessels to 22 (Fig. 1).

The 22 vessels that were active during the second quarter of 2011 made 953 sets and deployed 2,726,198 hooks. Compared to the second quarter of 2010, the number of sets decreased by 13% (Fig. 2) and the number of hooks used decreased by 12% (Fig. 3). The average number of hooks used per set increased by just under 1%, from 2,834 last year to 2,861 this year.

The total catch for all species combined was 58,949 fish (Fig. 4) which is a decrease of 36% compared to the second quarter of last year (Fig. 4). Albacore continued to dominate the catch with 33,466 fish caught in the second quarter of 2011, a 51% decrease from the 68,028 caught in the second quarter of 2010 (Fig. 5). The number of bigeye tuna caught decreased by 42% (Fig. 6), while yellowfin tuna increased 19% (Fig. 8) and skipjack tuna increased 47% (Fig. 7). Mahimahi numbers caught increased by 26% (Fig. 9), wahoo decreased by 14% (Fig. 10), billfish numbers caught decreased by 5% (Fig. 11), and shark increased slightly (0.21% Fig. 12).

The overall catch per unit of effort (CPUE, catch per 1000 hooks) decreased by 27% compared to the second quarter of last year, from 29.6 fish per 1000 hooks to 21.6 fish per 1000 hooks. The CPUE for albacore, bigeye tuna, and wahoo decreased, while CPUE for all other species increased. CPUE for albacore decreased by 44% (Fig. 13) thereby setting a new 2<sup>nd</sup> quarter all time low catch rate since the fishery began. Bigeye tuna CPUE decreased by 33% (Fig. 14) and wahoo's CPUE decreased by about 1% (Fig. 18). CPUE for yellowfin tuna increased by 36% (Fig. 16), and skipjack tuna increased by 67% (Fig. 15). CPUE for mahimahi increased by 40% (Fig. 17), billfishes by 9% (Fig. 19), and sharks by 13% (Fig. 20).

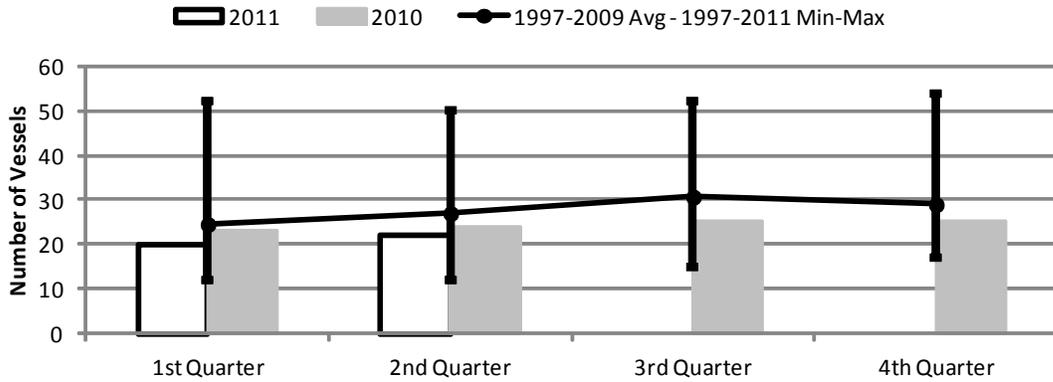
---

<sup>1</sup> PIFSC Data Report DR-11-011  
Issued 11 October 2011

**Table 1. Summary of fish catch and nominal fishing effort by American Samoa Longline vessels during the second quarter of 2011 based on longline logbooks processed as of Sept. 1, 2011.**

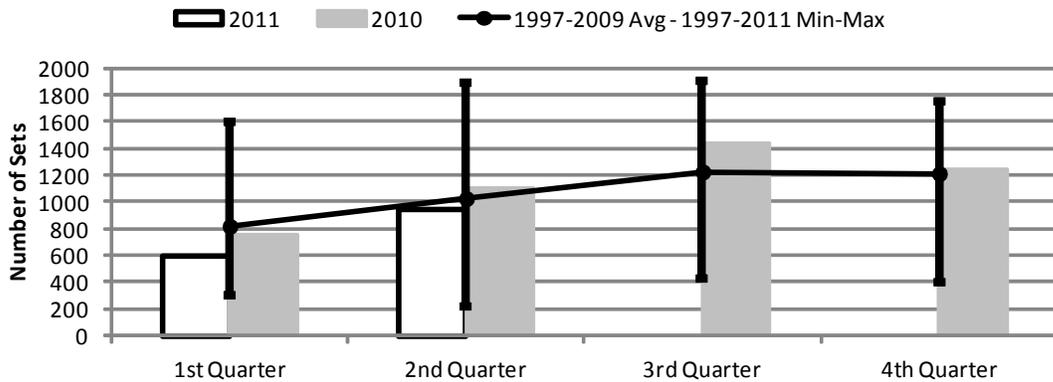
<b>TRIP INFORMATION</b>				
	Number of Vessels:		22	
	Number of Trips:		85	
	Number of Sets:		953	
	1000's of Hooks Set:		2,726	
	Number of Light Sticks Used:		68	
<b>CATCH INFORMATION</b>				
<b>Species</b>	<b>Number Caught</b>	<b>Number Kept</b>	<b>Number Released</b>	<b>Number Caught per 1000 Hooks</b>
<b>BILLFISH</b>				
Black marlin	11	5	6	0.00
Blue marlin	497	216	281	0.18
Striped marlin	74	19	55	0.03
Sailfish	146	38	108	0.05
Spearfish	530	135	395	0.19
Swordfish	79	40	39	0.03
<b>TOTAL BILLFISH</b>	<b>1,337</b>	<b>453</b>	<b>884</b>	<b>0.49</b>
<b>SHARKS</b>				
Blue shark	1,002	26	976	0.37
Shortfin mako shark	56	0	56	0.02
Thresher shark	34	2	32	0.01
White tip oceanic shark	220	7	213	0.08
Sharks (unknown)	140	0	140	0.05
<b>TOTAL SHARKS</b>	<b>1,452</b>	<b>35</b>	<b>1,417</b>	<b>0.53</b>
<b>TUNA</b>				
Albacore tuna	33,466	33,370	96	12.28
Bigeye tuna	2,251	2,185	66	0.83
Skipjack tuna	7,255	6,126	1,129	2.66
Yellowfin tuna	8,784	8,737	47	3.22
<b>TOTAL TUNA</b>	<b>51,756</b>	<b>50,418</b>	<b>1,338</b>	<b>18.98</b>
<b>OTHER PELAGICS</b>				
Mahimahi	392	319	73	0.14
Moonfish	68	17	51	0.02
Oilfish	1,178	35	1,143	0.43
Pomfret	268	45	223	0.10
Wahoo	2,419	2,121	298	0.89
<b>TOTAL OTHER PELAGICS</b>	<b>4,325</b>	<b>2,537</b>	<b>1,788</b>	<b>1.59</b>
<b>NON-PMUS</b>				
Pelagic fishes (unknown)	79	0	79	0.03
<b>TOTAL NON-PMUS</b>	<b>79</b>	<b>0</b>	<b>79</b>	<b>0.03</b>
<b>TOTAL ALL SPECIES</b>	<b>58,949</b>	<b>53,443</b>	<b>5,506</b>	<b>21.62</b>

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



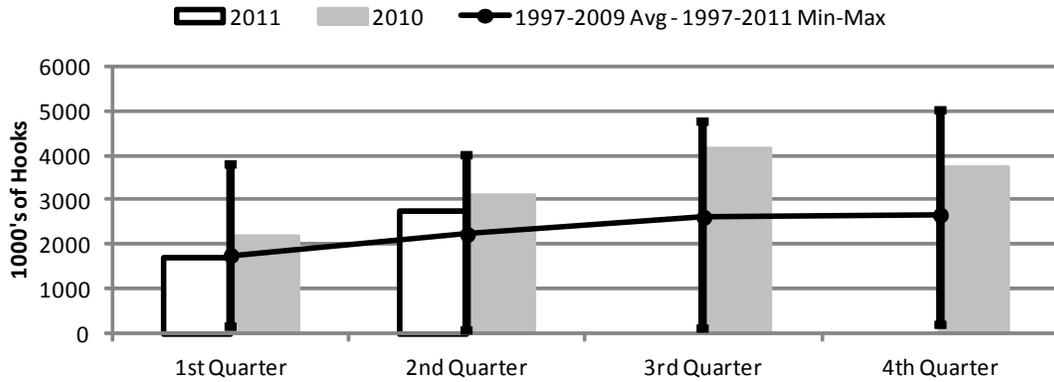
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	20	22	0	0
2010	23	24	25	25
1997-2011 Max	52	50	52	54
1997-2009 Avg	24	27	30	29
1997-2011 Min	12	12	15	17

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



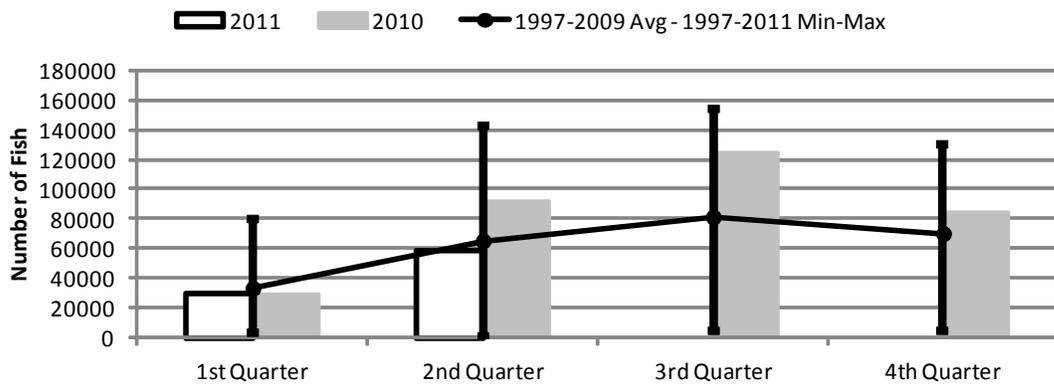
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	596	953	0	0
2010	756	1,098	1,439	1,241
1997-2011 Max	1,602	1,886	1,904	1,758
1997-2009 Avg	821	1,028	1,227	1,214
1997-2011 Min	297	223	424	402

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



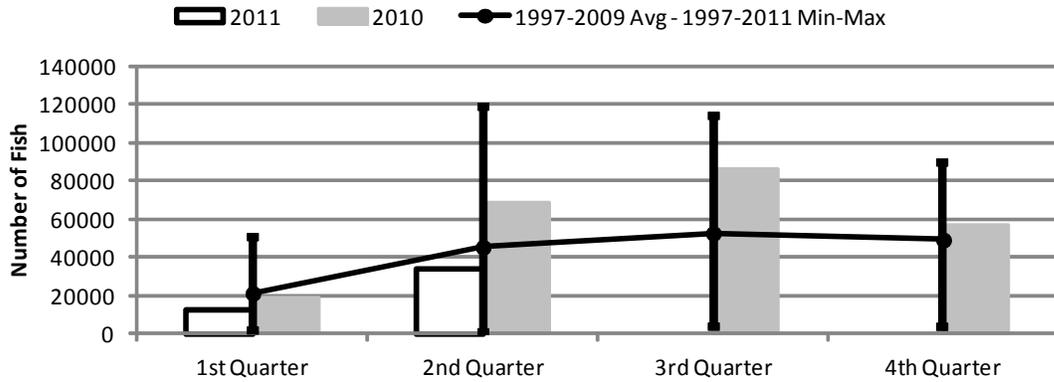
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	1,684	2,726	0	0
2010	2,187	3,112	4,157	3,717
1997-2011 Max	3,804	3,992	4,769	4,985
1997-2009 Avg	1,762	2,233	2,616	2,668
1997-2011 Min	147	50	101	175

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



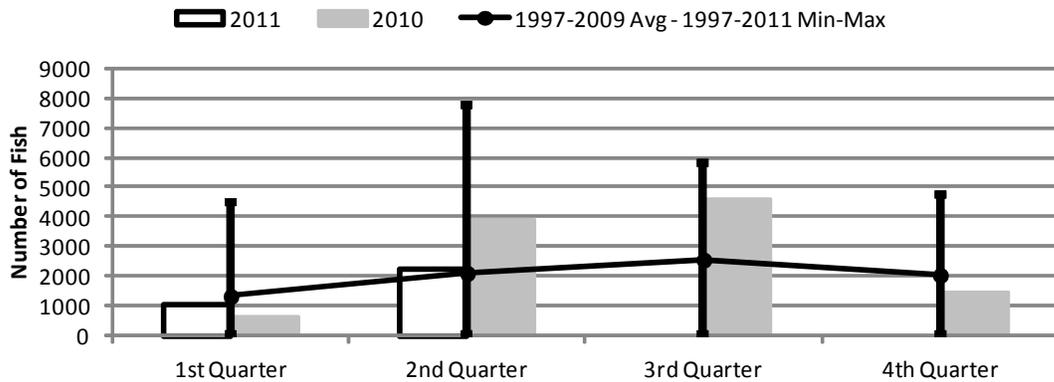
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	29,435	58,949	0	0
2010	29,416	92,191	124,233	84,087
1997-2011 Max	79,567	142,603	153,301	130,238
1997-2009 Avg	33,469	65,425	81,477	70,314
1997-2011 Min	2,950	1,416	4,127	5,204

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



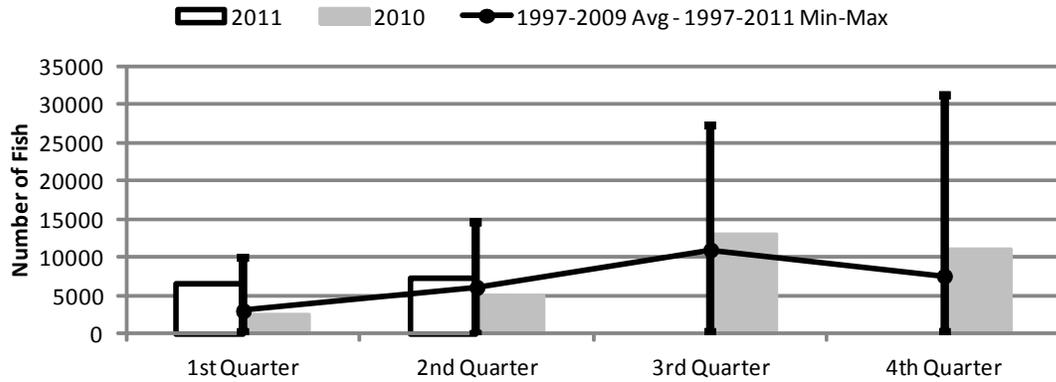
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	11,873	33,466	0	0
2010	18,828	68,028	85,638	57,017
1997-2011 Max	50,382	118,994	113,831	89,389
1997-2009 Avg	21,241	45,402	52,663	49,188
1997-2011 Min	1,732	851	3,182	3,466

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



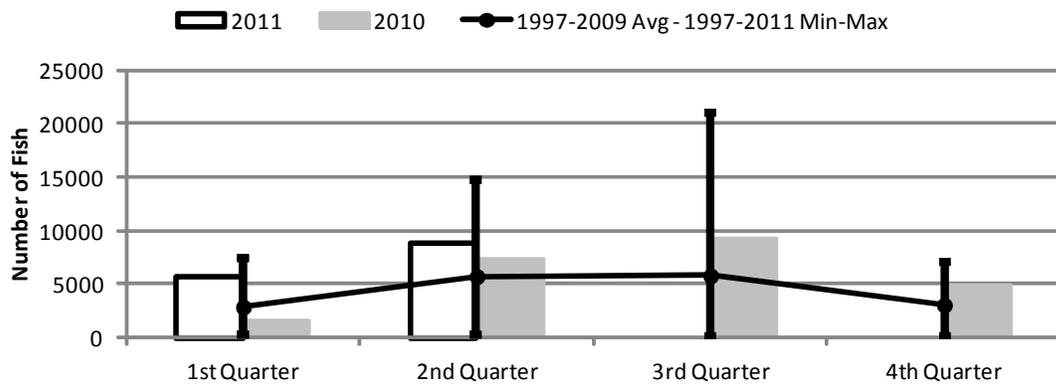
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	1,041	2,251	0	0
2010	633	3,875	4,566	1,436
1997-2011 Max	4,466	7,785	5,824	4,728
1997-2009 Avg	1,332	2,109	2,559	2,041
1997-2011 Min	48	26	55	55

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



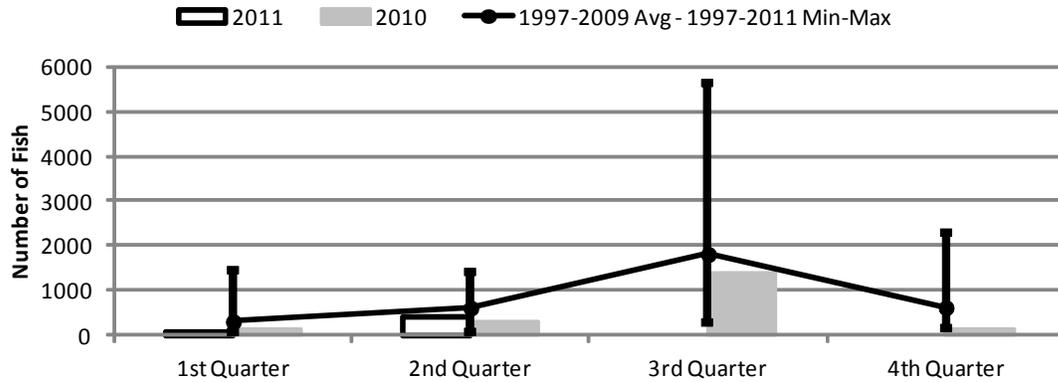
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	6,443	7,255	0	0
2010	2,506	4,936	12,919	11,123
1997-2011 Max	9,809	14,606	27,234	31,191
1997-2009 Avg	3,032	6,105	11,002	7,574
1997-2011 Min	115	6	244	178

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



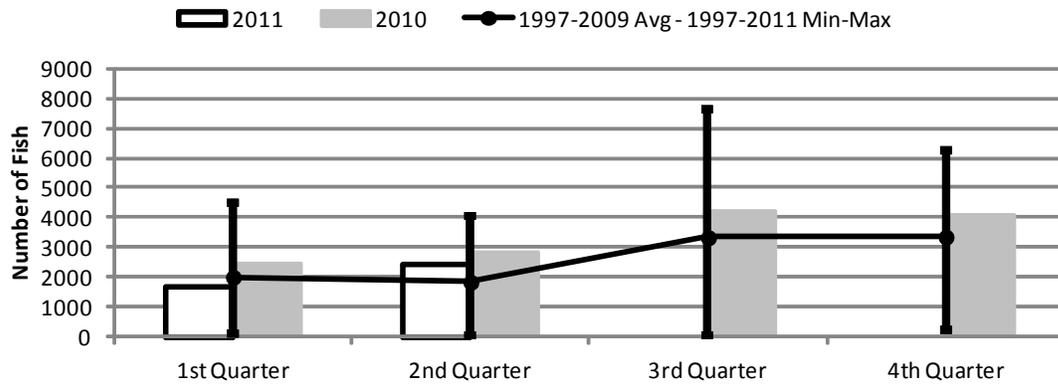
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	5,625	8,784	0	0
2010	1,547	7,376	9,295	4,869
1997-2011 Max	7,428	14,681	20,993	7,104
1997-2009 Avg	2,892	5,755	5,819	3,079
1997-2011 Min	322	356	84	177

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



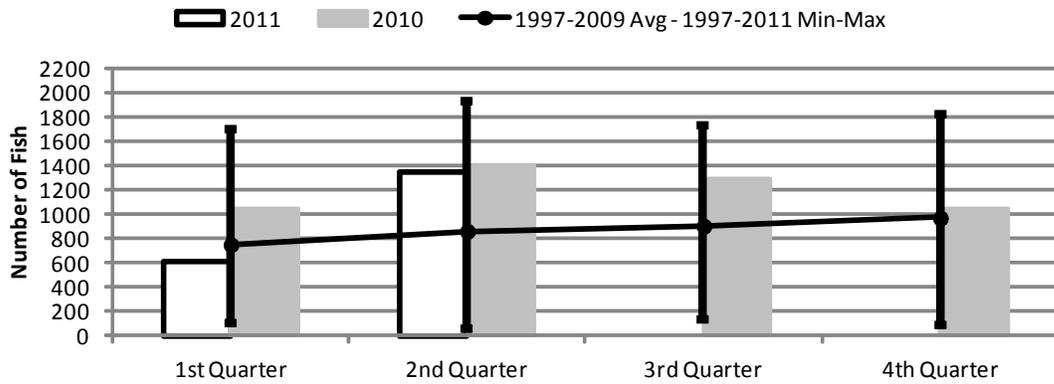
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	72	392	0	0
2010	131	311	1,367	146
1997-2011 Max	1,455	1,391	5,642	2,297
1997-2009 Avg	305	612	1,810	619
1997-2011 Min	55	59	280	146

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



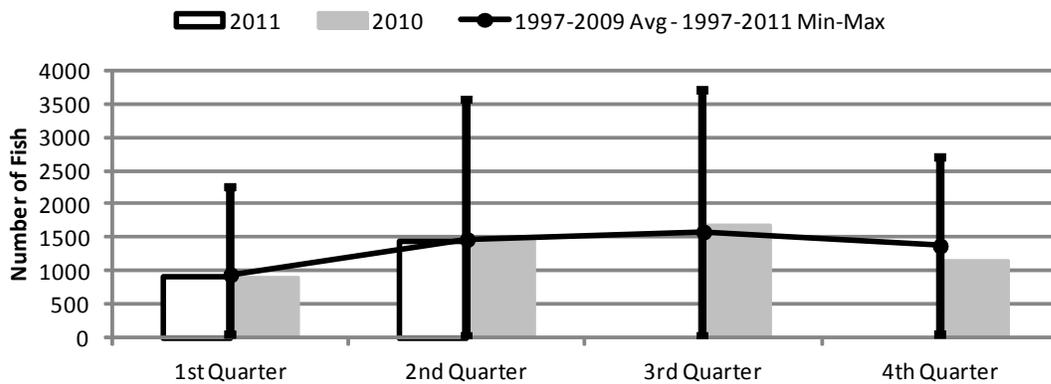
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	1,676	2,419	0	0
2010	2,441	2,810	4,220	4,115
1997-2011 Max	4,524	4,076	7,629	6,281
1997-2009 Avg	2,009	1,844	3,336	3,358
1997-2011 Min	123	20	68	210

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



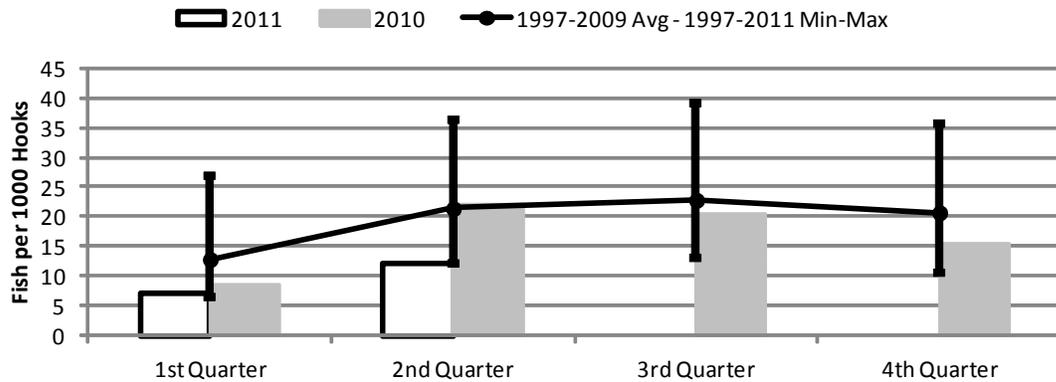
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	605	1,337	0	0
2010	1,043	1,404	1,297	1,046
1997-2011 Max	1,692	1,934	1,729	1,819
1997-2009 Avg	750	860	902	969
1997-2011 Min	101	58	132	84

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



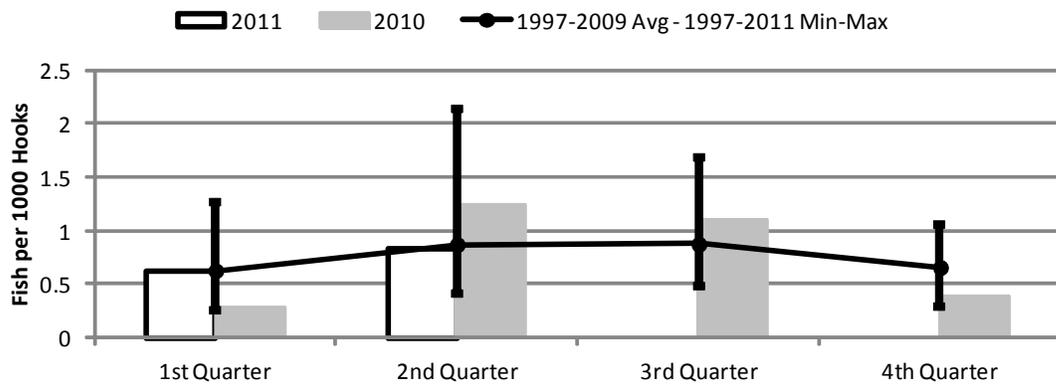
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	915	1,452	0	0
2010	887	1,449	1,682	1,141
1997-2011 Max	2,262	3,562	3,686	2,695
1997-2009 Avg	948	1,474	1,587	1,379
1997-2011 Min	42	16	26	49

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



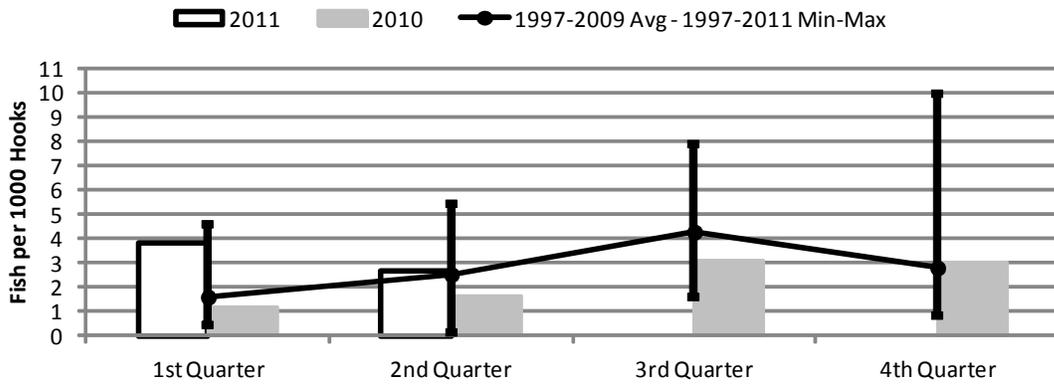
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	7.05	12.28	0.00	0.00
2010	8.61	21.85	20.60	15.34
1997-2011 Max	27.01	36.18	39.13	35.75
1997-2009 Avg	12.86	21.41	22.82	20.72
1997-2011 Min	6.58	12.28	12.96	10.54

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



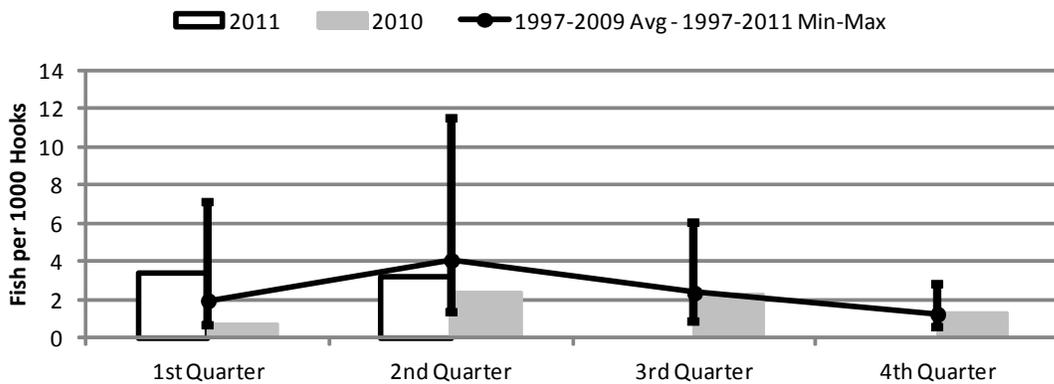
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	0.62	0.83	0.00	0.00
2010	0.29	1.24	1.10	0.39
1997-2011 Max	1.27	2.15	1.68	1.05
1997-2009 Avg	0.63	0.87	0.88	0.66
1997-2011 Min	0.26	0.41	0.48	0.29

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



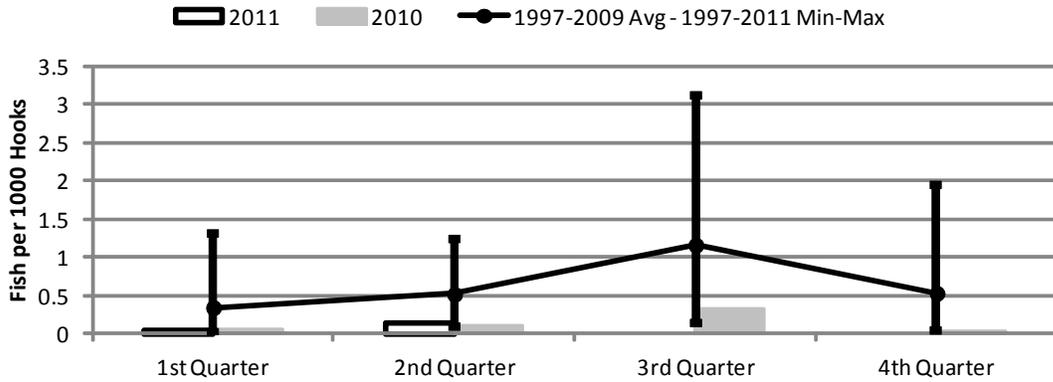
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	3.83	2.66	0.00	0.00
2010	1.15	1.59	3.11	2.99
1997-2011 Max	4.56	5.39	7.84	9.98
1997-2009 Avg	1.60	2.53	4.27	2.80
1997-2011 Min	0.44	0.12	1.56	0.79

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



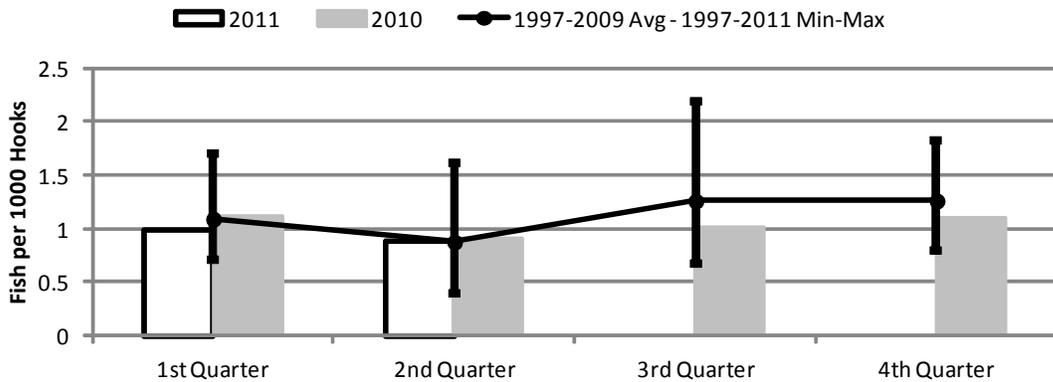
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	3.34	3.22	0.00	0.00
2010	0.71	2.37	2.24	1.31
1997-2011 Max	7.12	11.51	6.04	2.76
1997-2009 Avg	1.96	4.07	2.36	1.25
1997-2011 Min	0.66	1.34	0.83	0.55

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



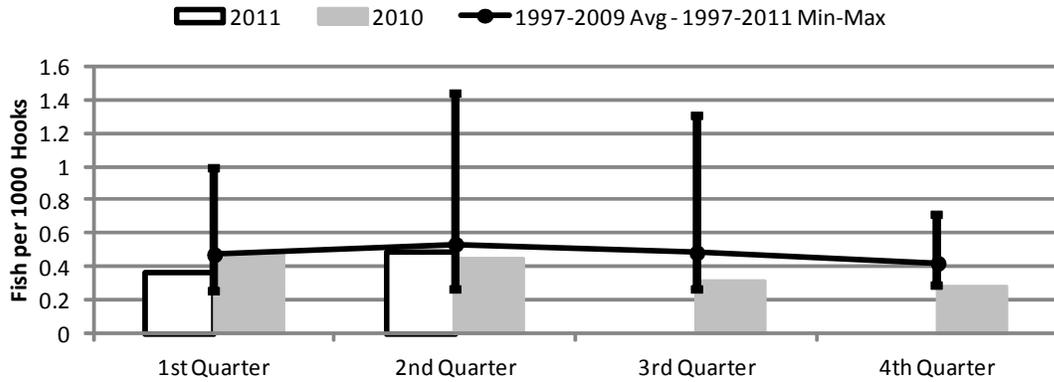
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	0.04	0.14	0.00	0.00
2010	0.06	0.10	0.33	0.04
1997-2011 Max	1.30	1.25	3.13	1.93
1997-2009 Avg	0.34	0.52	1.16	0.53
1997-2011 Min	0.02	0.10	0.14	0.04

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



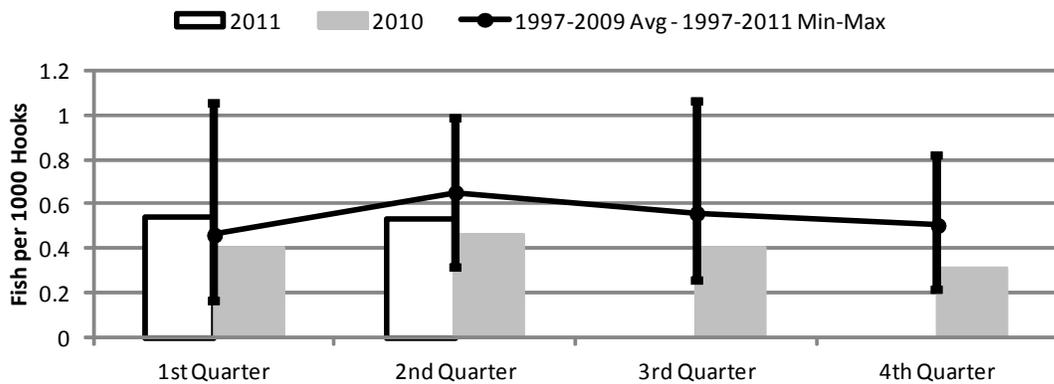
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	1.00	0.89	0.00	0.00
2010	1.12	0.90	1.02	1.11
1997-2011 Max	1.71	1.62	2.20	1.83
1997-2009 Avg	1.09	0.88	1.26	1.26
1997-2011 Min	0.70	0.39	0.67	0.80

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



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	0.36	0.49	0.00	0.00
2010	0.48	0.45	0.31	0.28
1997-2011 Max	0.99	1.44	1.31	0.71
1997-2009 Avg	0.47	0.54	0.49	0.42
1997-2011 Min	0.25	0.26	0.27	0.28

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



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2011	0.54	0.53	0.00	0.00
2010	0.41	0.47	0.40	0.31
1997-2011 Max	1.05	0.99	1.06	0.82
1997-2009 Avg	0.46	0.65	0.56	0.51
1997-2011 Min	0.16	0.31	0.26	0.22