

# PIFSC Report on the Logbook Program for the American Samoa Longline Fishery April – June 2012<sup>1</sup>

Fisheries Research and Monitoring Division  
Pacific Islands Fisheries Science Center

The American Samoa longline fishery's summary catch and effort statistics for the second quarter of 2012, 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 23, 2012. Table 1 reflects an estimated 100% of the numbers of sets made by vessels during this period.

Compared to the second quarter of 2011, the number of active vessels increased by 13.6%, from 22 vessels to 25 (Fig. 1) in the second quarter of 2012. The 25 vessels that were active during the second quarter of 2012 made 1,072 sets and deployed 3,099,063 hooks. Compared to the second quarter of 2011, the number of sets increased by 8.7% (Fig. 2) and the number of hooks used increased by 10.2% (Fig. 3). The average number of hooks used per set increased by 1.4%, from 2,851 last year to 2,890 this year.

The total catch for all species combined was 73,716 fish (Fig. 4) which is an increase of 21.6% compared to the second quarter total catch last year (Fig. 4). Catches of albacore, skipjack tuna, bigeye tuna, mahimahi, and sharks increased, while catches of yellowfin tuna, wahoo, and billfish decreased compared to the second quarter last year. Albacore dominated the catch with 48,172 fish caught in the second quarter of 2012, an increase of 40.4% from the 34,320 fish caught in the same quarter last year, with catch numbers increasing slightly higher than the long term average for the second quarter (Fig. 5). The number of bigeye tuna caught increased by 14.3% (Fig. 6), while yellowfin tuna decreased 38.1% (Fig. 8), and skipjack tuna increased 21% (Fig. 7). Mahimahi numbers caught increased by 4% (Fig. 9), wahoo decreased by 40.7% (Fig. 10), billfish numbers caught decreased by 23.6% (Fig. 11), and shark increased by 63% (Fig. 12).

The overall catch per unit of effort (CPUE, catch per 1000 hooks) increased by 10.3% compared to the second quarter of last year, from 21.6 fish per 1000 hooks to 23.8 fish per 1000 hooks (Fig. 13). The CPUE for yellowfin tuna, wahoo, and billfish decreased, mahimahi remained unchanged, while CPUE for all other species increased. The CPUE for albacore increased by 27.3% (Fig. 14)—though it is still about 27.5% lower than the second quarter long term average. The CPUE for bigeye tuna increased by 3.7% (Fig. 15), yellowfin tuna CPUE decreased by 43.7% (Fig. 17), while skipjack tuna CPUE increased by 9.7% (Fig. 16). The CPUE for mahimahi remained the same (Fig. 18), billfish CPUE decreased by 30.6% (Fig. 20), wahoo CPUE decreased by 45.5% (Fig. 19), and shark CPUE increased sharply by 50% (Fig. 21).

The American Samoa longline fishery continues to experience challenging conditions with primary target species catch rates of albacore tuna in decline compared to the long term averages and catch rates of many other marketable species also in decline.

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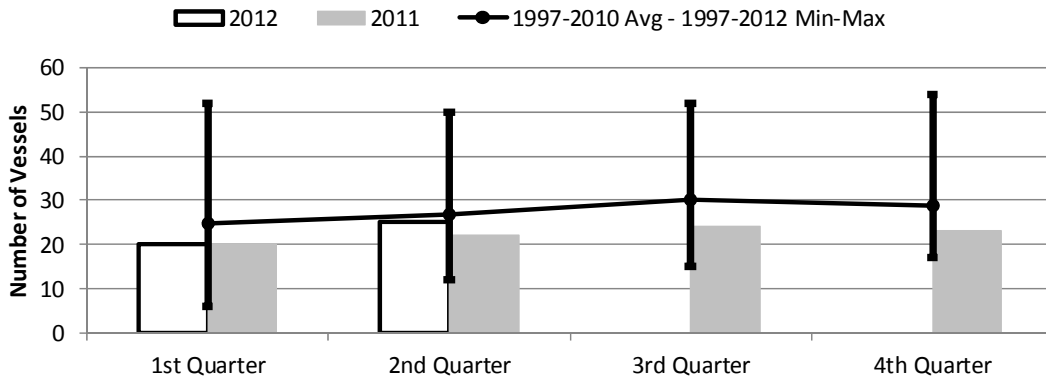
<sup>1</sup> PIFSC Data Report DR-12-012

Originally issued 6 September 2012; reissued with revised data 22 October 2012.

**Table 1. Summary of fish catch and nominal fishing effort by American Samoa Longline vessels during the second quarter of 2012 based on longline logbooks processed as of Sept. 23, 2012.**

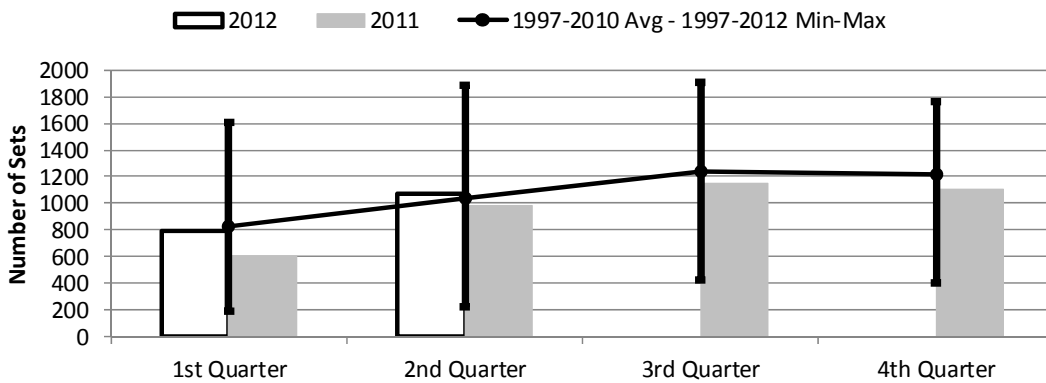
<b>TRIP INFORMATION</b>				
	Number of Vessels:		25	
	Number of Trips:		55	
	Number of Sets:		1,072	
	1000's of Hooks Set:		3,099	
	Number of Light Sticks Used:		362	
<b>CATCH INFORMATION</b>				
<b>Species</b>	<b>Number Caught</b>	<b>Number Kept</b>	<b>Number Released</b>	<b>Number Caught per 1000 Hooks</b>
<b>BILLFISH</b>				
Black marlin	11	10	1	0.00
Blue marlin	483	124	359	0.16
Striped marlin	109	28	81	0.04
Sailfish	109	16	93	0.04
Spearfish	264	29	235	0.09
Swordfish	69	49	20	0.02
<b>TOTAL BILLFISH</b>	<b>1,045</b>	<b>256</b>	<b>789</b>	<b>0.34</b>
<b>SHARKS</b>				
Blue shark	1,802	12	1,790	0.58
Shortfin mako shark	166	5	161	0.05
Thresher shark	75	0	75	0.02
White tip oceanic shark	230	0	230	0.07
Sharks (unknown)	132	1	131	0.04
<b>TOTAL SHARKS</b>	<b>2,405</b>	<b>18</b>	<b>2,387</b>	<b>0.78</b>
<b>TUNA</b>				
Albacore tuna	48,172	48,037	135	15.54
Bigeye tuna	2,633	2,602	31	0.85
Bluefin tuna	2	0	2	0.00
Skipjack tuna	9,035	7,683	1,352	2.92
Yellowfin tuna	5,688	5,355	333	1.84
<b>TOTAL TUNA</b>	<b>65,530</b>	<b>63,677</b>	<b>1,853</b>	<b>21.15</b>
<b>OTHER PELAGICS</b>				
Mahimahi	421	293	128	0.14
Moonfish	132	21	111	0.04
Oilfish	2,026	16	2,010	0.65
Pomfret	354	36	318	0.11
Wahoo	1,472	1,069	403	0.48
<b>TOTAL OTHER PELAGICS</b>	<b>4,405</b>	<b>1,435</b>	<b>2,970</b>	<b>1.42</b>
<b>NON-PMUS</b>				
Pelagic fishes (unknown)	331	0	331	0.11
<b>TOTAL NON-PMUS</b>	<b>331</b>	<b>0</b>	<b>331</b>	<b>0.11</b>
<b>TOTAL ALL SPECIES</b>	<b>73,716</b>	<b>65,386</b>	<b>8,330</b>	<b>23.79</b>

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



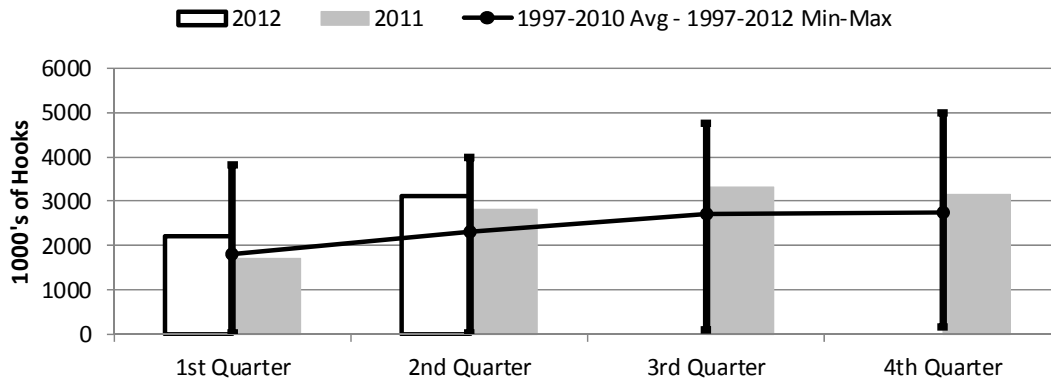
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	20	25	0	0
2011	20	22	24	23
1997-2012 Max	52	50	52	54
1997-2010 Avg	24	26	30	28
1997-2012 Min	6	12	15	17

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



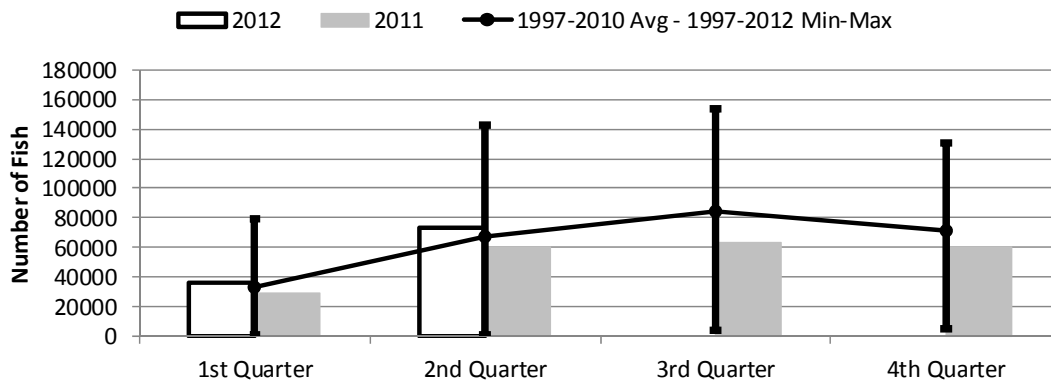
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	788	1,072	0	0
2011	601	986	1,155	1,104
1997-2012 Max	1,602	1,886	1,904	1,759
1997-2010 Avg	830	1,033	1,242	1,216
1997-2012 Min	192	223	424	401

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



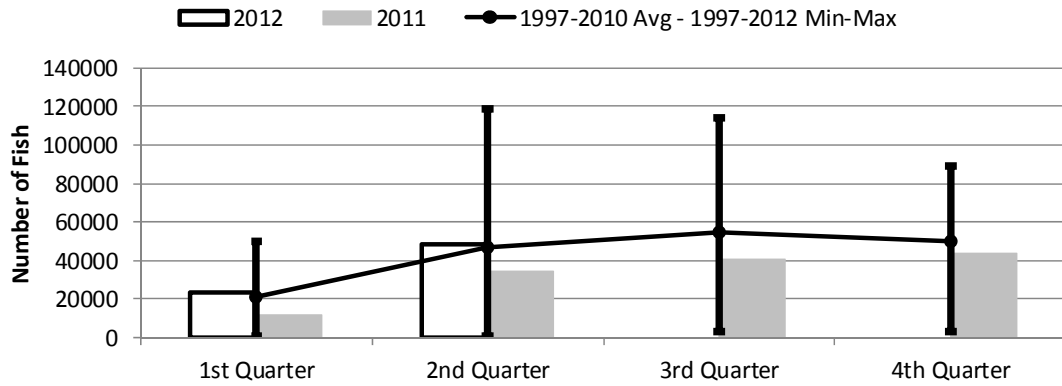
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	2,194	3,099	0	0
2011	1,695	2,811	3,317	3,138
1997-2012 Max	3,805	3,992	4,769	4,985
1997-2010 Avg	1,795	2,296	2,726	2,743
1997-2012 Min	41	50	101	175

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



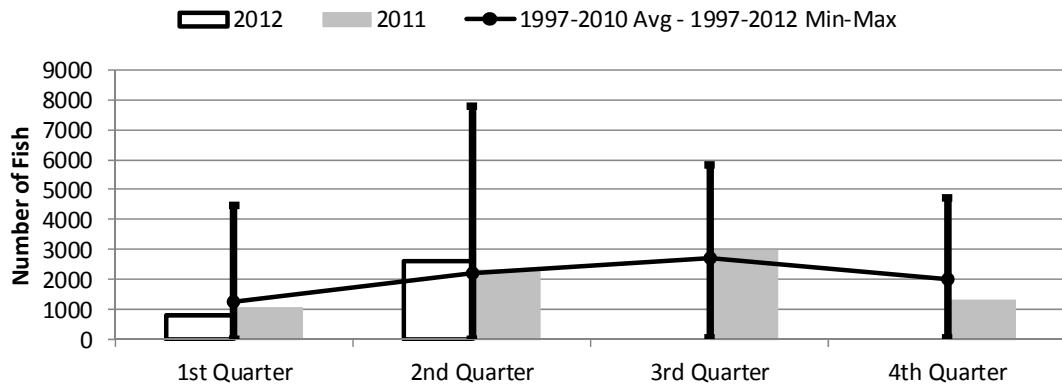
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	35,897	73,716	0	0
2011	29,498	60,624	63,705	60,582
1997-2012 Max	79,588	142,603	153,301	130,238
1997-2010 Avg	33,269	67,339	84,531	71,293
1997-2012 Min	1,315	1,416	4,127	5,201

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



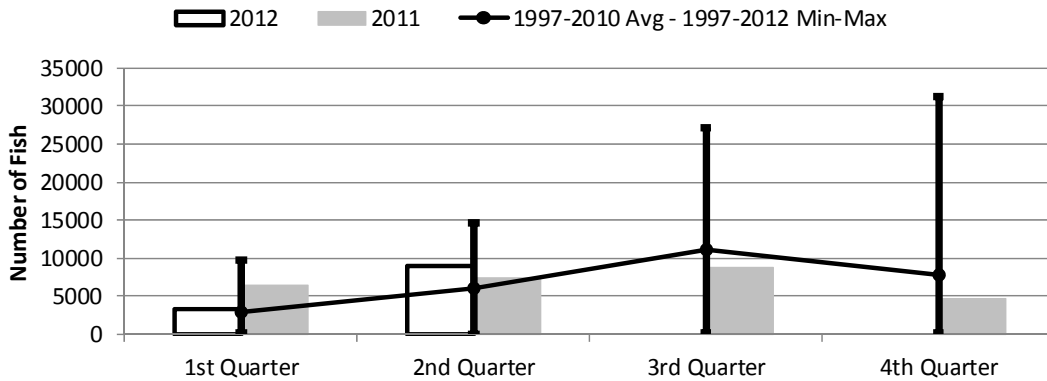
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	23,443	48,172	0	0
2011	11,899	34,320	40,269	43,983
1997-2012 Max	50,382	118,994	113,831	89,389
1997-2010 Avg	21,134	47,018	55,018	49,745
1997-2012 Min	940	851	3,182	3,465

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



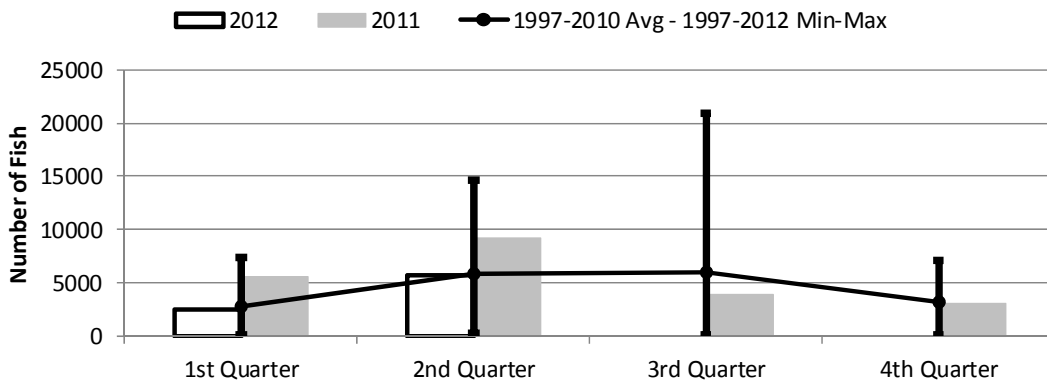
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	800	2,633	0	0
2011	1,043	2,303	2,948	1,320
1997-2012 Max	4,470	7,785	5,824	4,728
1997-2010 Avg	1,283	2,236	2,702	1,997
1997-2012 Min	6	26	55	55

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



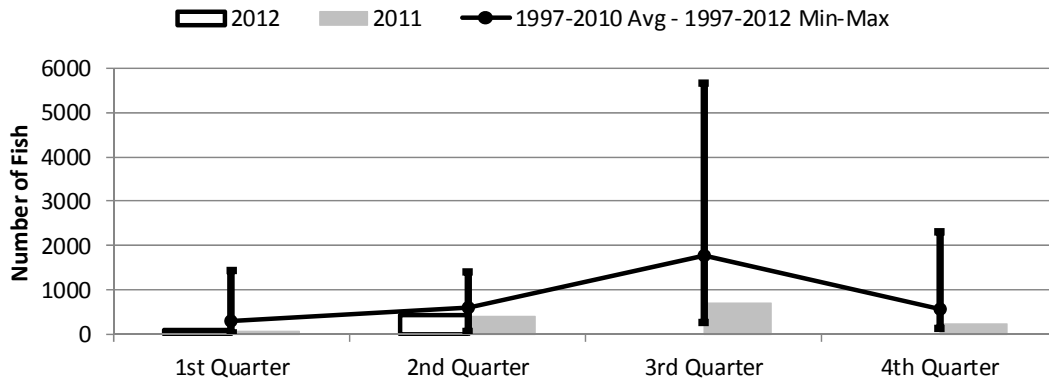
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	3,307	9,035	0	0
2011	6,446	7,465	8,717	4,718
1997-2012 Max	9,801	14,606	27,234	31,191
1997-2010 Avg	2,994	6,021	11,139	7,828
1997-2012 Min	116	6	244	178

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



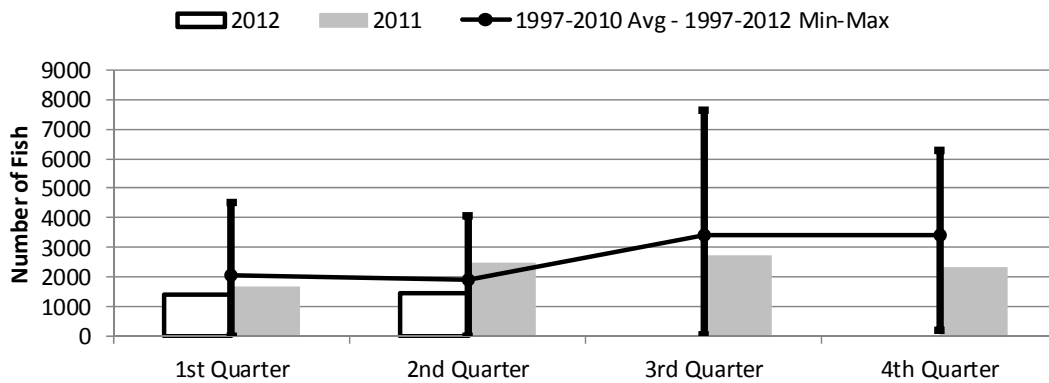
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	2,530	5,688	0	0
2011	5,645	9,185	3,887	3,111
1997-2012 Max	7,426	14,681	20,993	7,104
1997-2010 Avg	2,811	5,872	6,068	3,206
1997-2012 Min	213	356	84	177

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



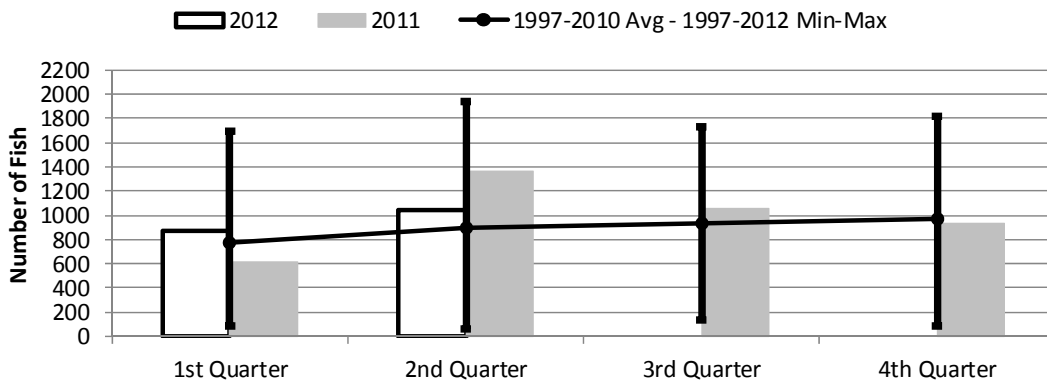
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	93	421	0	0
2011	72	405	690	240
1997-2012 Max	1,454	1,392	5,642	2,297
1997-2010 Avg	294	590	1,779	586
1997-2012 Min	30	59	280	146

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



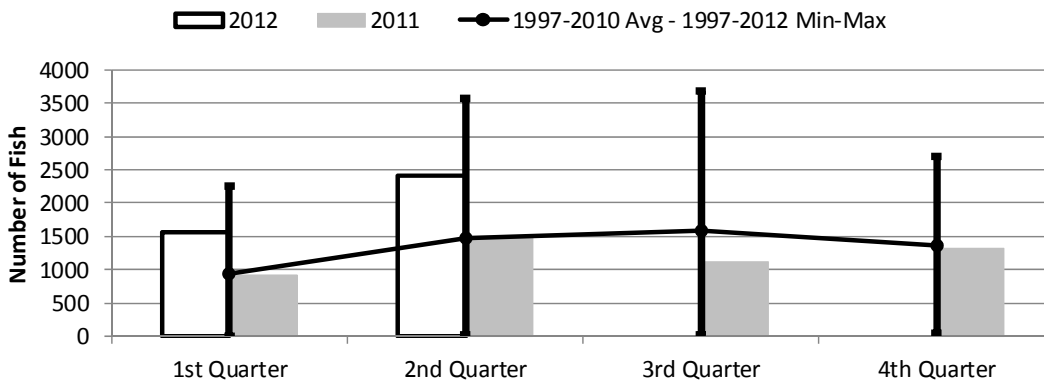
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	1,413	1,472	0	0
2011	1,682	2,484	2,701	2,331
1997-2012 Max	4,524	4,076	7,629	6,281
1997-2010 Avg	2,042	1,913	3,399	3,412
1997-2012 Min	27	20	68	210

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



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	875	1,045	0	0
2011	611	1,367	1,061	931
1997-2012 Max	1,692	1,934	1,729	1,819
1997-2010 Avg	777	900	930	973
1997-2012 Min	83	58	132	84

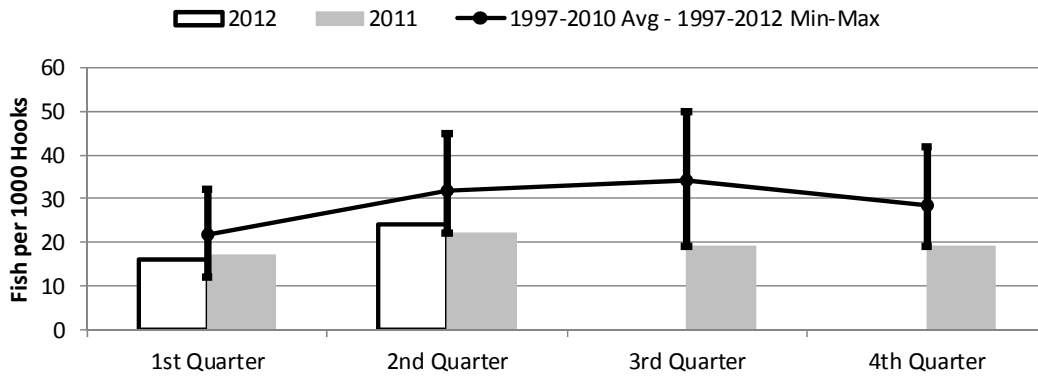
**Figure 12. American Samoa Shark Catch by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	1,565	2,405	0	0
2011	915	1,475	1,112	1,322
1997-2012 Max	2,260	3,562	3,686	2,697
1997-2010 Avg	943	1,472	1,594	1,361
1997-2012 Min	5	16	26	49

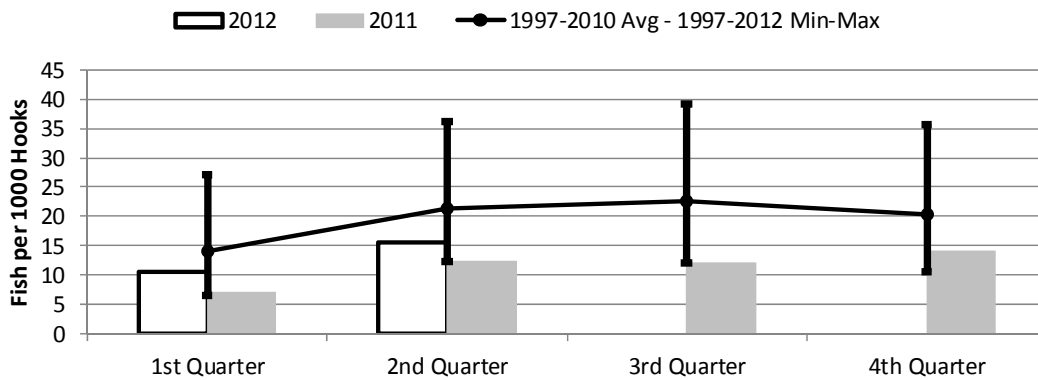


**Figure 13. American Samoa Longline Total Catch per 1000 Hooks by Quarter for**



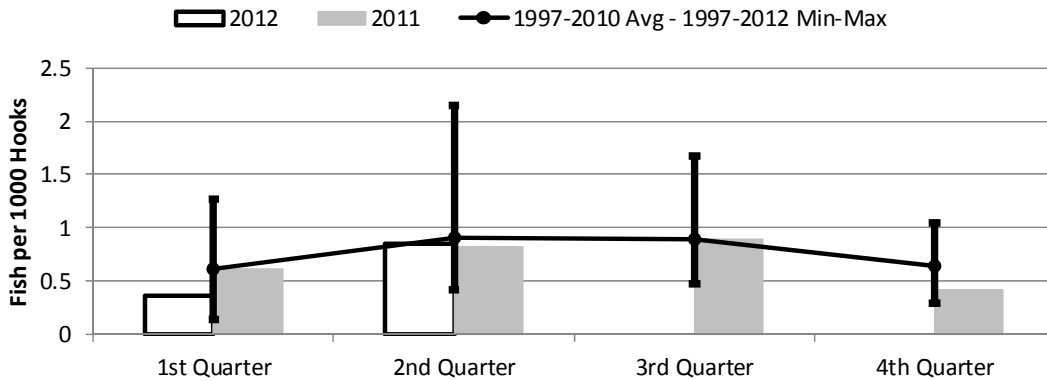
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	16	24	0	0
2011	17	22	19	19
1997-2012 Max	32	45	50	42
1997-2010 Avg	21	31	34	28
1997-2012 Min	12	22	19	19

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



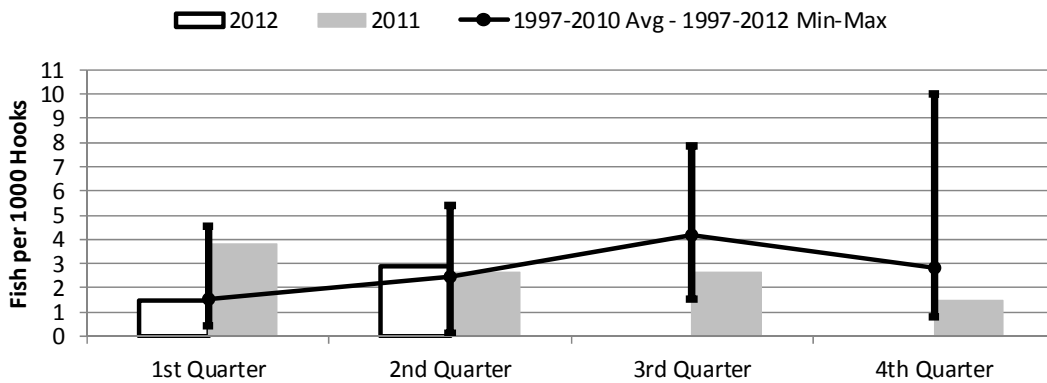
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	10.68	15.54	0.00	0.00
2011	7.02	12.21	12.14	14.01
1997-2012 Max	27.01	36.18	39.13	35.75
1997-2010 Avg	14.19	21.44	22.66	20.34
1997-2012 Min	6.58	12.21	12.14	10.54

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



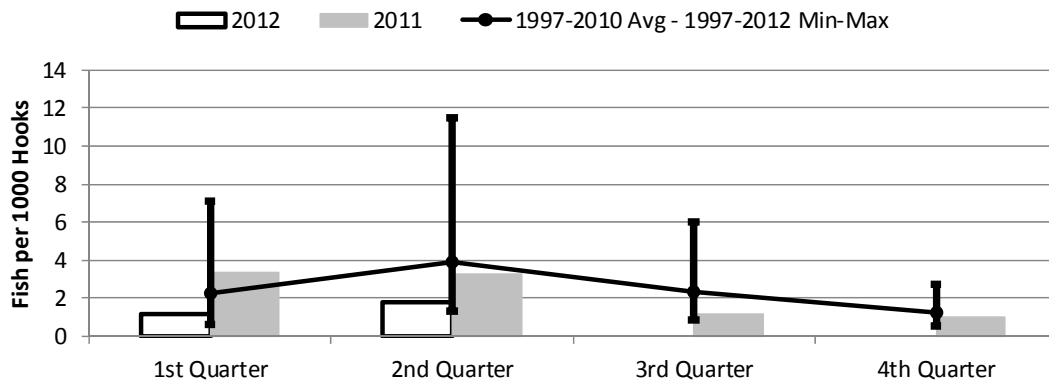
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	0.36	0.85	0.00	0.00
2011	0.62	0.82	0.89	0.42
1997-2012 Max	1.27	2.15	1.68	1.05
1997-2010 Avg	0.62	0.90	0.89	0.64
1997-2012 Min	0.15	0.41	0.48	0.29

Figure 16. American Samoa Longline Skipjack Tuna Catch per 1000 Hooks by Quarter for



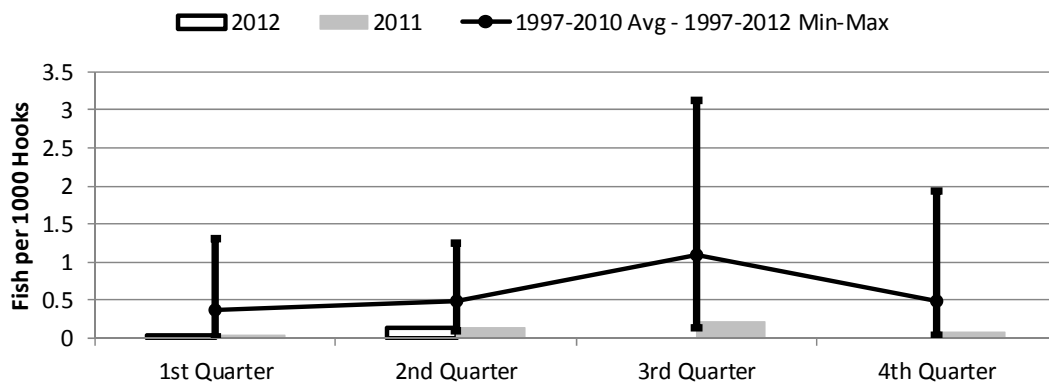
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	1.51	2.92	0.00	0.00
2011	3.80	2.66	2.63	1.50
1997-2012 Max	4.56	5.39	7.84	9.98
1997-2010 Avg	1.57	2.46	4.19	2.81
1997-2012 Min	0.44	0.12	1.56	0.79

**Figure 17. American Samoa Yellowfin Tuna Catch per 1000 Hooks by Quarter for**



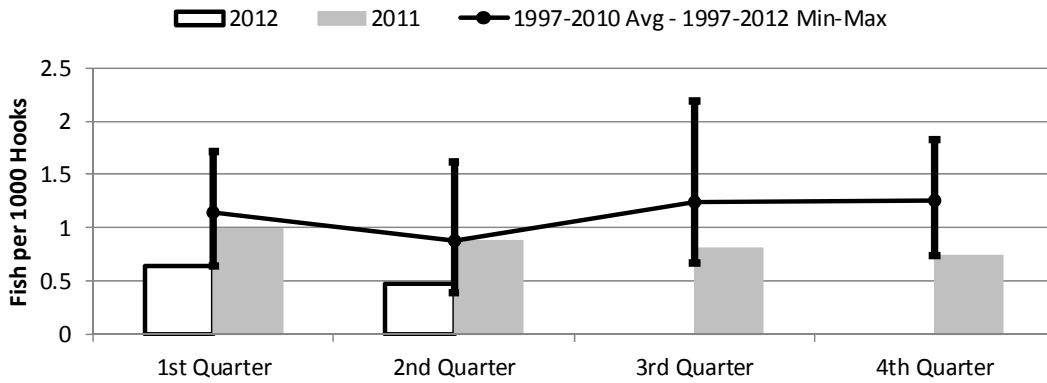
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	1.15	1.84	0.00	0.00
2011	3.33	3.27	1.17	0.99
1997-2012 Max	7.11	11.51	6.04	2.76
1997-2010 Avg	2.24	3.95	2.35	1.26
1997-2012 Min	0.66	1.34	0.83	0.55

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



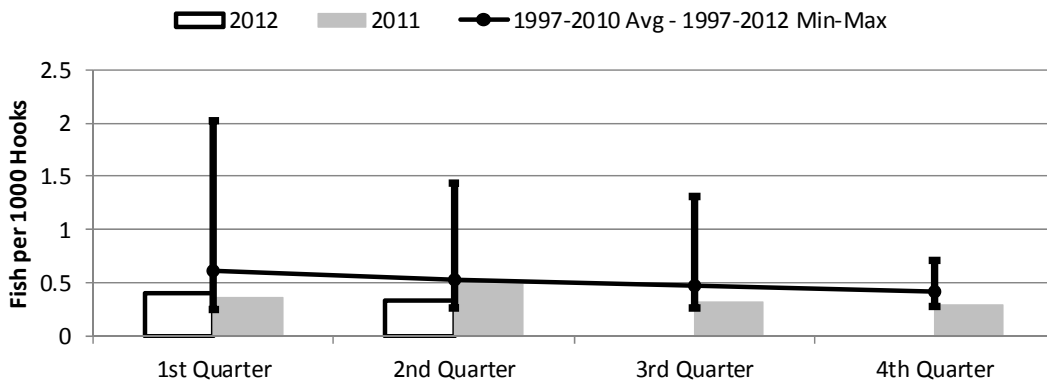
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	0.04	0.14	0.00	0.00
2011	0.04	0.14	0.21	0.08
1997-2012 Max	1.30	1.25	3.13	1.93
1997-2010 Avg	0.38	0.49	1.10	0.50
1997-2012 Min	0.02	0.10	0.14	0.04

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



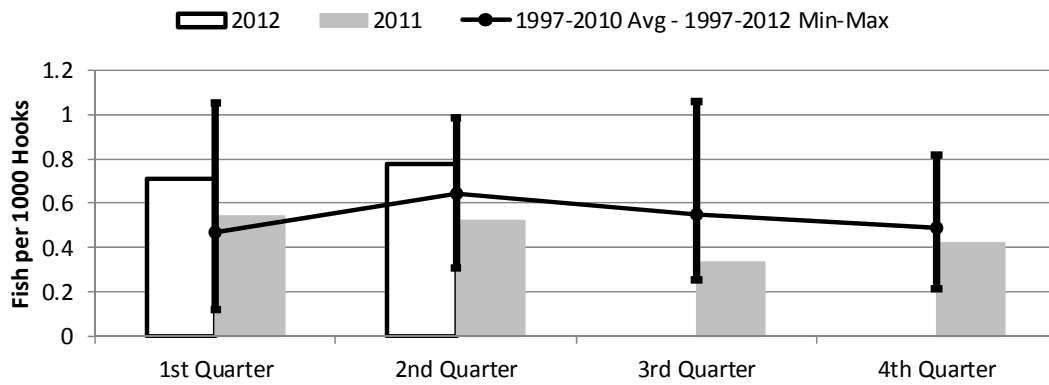
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	0.64	0.48	0.00	0.00
2011	0.99	0.88	0.81	0.74
1997-2012 Max	1.71	1.62	2.20	1.83
1997-2010 Avg	1.14	0.88	1.24	1.25
1997-2012 Min	0.64	0.39	0.67	0.74

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



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	0.40	0.34	0.00	0.00
2011	0.36	0.49	0.32	0.30
1997-2012 Max	2.02	1.44	1.31	0.71
1997-2010 Avg	0.62	0.53	0.47	0.41
1997-2012 Min	0.25	0.26	0.27	0.28

**Figure 21. American Samoa Shark Catch per 1000 Hooks by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2012	0.71	0.78	0.00	0.00
2011	0.54	0.52	0.34	0.42
1997-2012 Max	1.05	0.99	1.06	0.82
1997-2010 Avg	0.47	0.64	0.55	0.49
1997-2012 Min	0.12	0.31	0.26	0.22