## PIFSC Report on the Logbook Program for the American Samoa Longline Fishery January-March 2009<sup>1</sup>

Fisheries Monitoring and Socioeconomics Division Pacific Islands Fisheries Science Center

Summary statistics of American Samoa longline catch and effort for the first quarter of 2009, based on date of haul, are shown in Table 1. The table is derived from all logbook data submitted as of May 22, 2009.

According to the longline logbook data, 23 vessels turned in some or all of their longline logs for sets made during the first quarter of 2009 (Fig. 1). These 23 vessels made 917 sets (Fig. 2) and deployed 2,817,323 hooks. The first quarter of 2009 showed declines in both effort and catch for most species over the first quarter of 2008. Compared to the first quarter of 2008, the number of vessels turning in logs this quarter decreased by 15% from 27 vessels to 23, the number of sets decreased by 17% and the number of hooks set also decreased by 17%. The average number of hooks used per set also increased very slightly from 3066 to 3071, reflecting a completed trend toward a fishing fleet of larger vessels deploying more hooks per set.

The total catch for all species combined was 38,531 fish (Fig. 4) which is a decrease of 26% compared to the first quarter of last year. Albacore continued to dominate the catch with 28,693 fish caught in the first quarter of 2009 (Fig. 5), a 18% decrease from the 34,945 albacore caught in the first quarter of 2008. The catch of most species showed larger declines when compared to the first quarter of 2008. Bigeye tuna catch (Fig. 6) showed a decrease of 53%, yellowfin tuna catch (Fig 8) showed a decrease of 35%, skipjack tuna (Fig. 7) catch declined by 75%, wahoo catch (Fig. 10) dropped by 32% and the sharks catch (Fig. 12) showed a decrease of 25%. The mahimahi catch (Fig 9) increased slightly from 55 fish to 57 fish while the catch of billfish (Fig. 11) was down only 1% from its value in the first quarter of 2008.

The catch per 1000 hooks of albacore decreased only 1% from 10.27 to 10.18 fish while most other species showed much larger drops in CPUE. The bigeye tuna catch per 1000 hooks (Fig. 14) showed a decrease of 43%, yellowfin tuna catch per 1000 hooks (Fig 16) showed a decrease of 21%, the catch per 1000 hooks of skipjack tuna (Fig. 15) decreased by 70%, the wahoo catch per 1000 hooks (Fig. 18) dropped by 18% and the sharks catch per 1000 hooks (Fig. 20) showed a decrease of 11%. The catch per 1000 hooks of billfish (Fig. 19) was the only one to have an increase (11%) over the first quarter of 2008. The mahimahi catch per 1000 hooks (Fig 17) stayed even at a very small value of 0.02 fish.

<sup>&</sup>lt;sup>1</sup> PIFSC Data Report DR-09-006 Issued 3 June 2009

Table 1. Summary of fish catch and nominal fishing effort by American Samoa Longline vessels during the first quarter of 2009 based on longline logbooks submitted before May 22, 2009

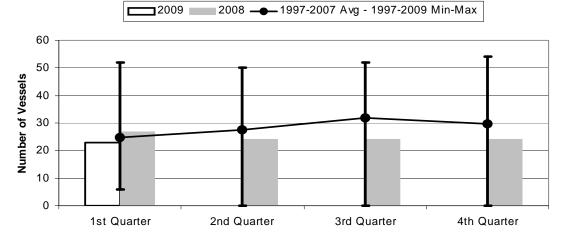
## TRIP INFORMATION

Number of Vessels: 23
Number of Trips: 43
Number of Sets: 917
1000's of Hooks Set: 2,817
Number of Light Sticks Used: 631

## **CATCH INFORMATION**

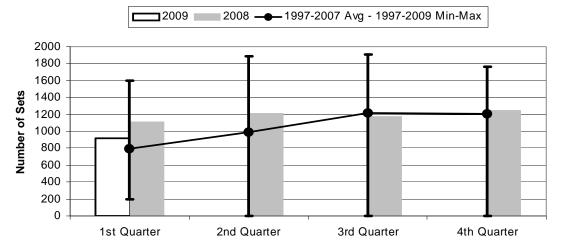
Species	Number Caught	Number Kept	Number Released	Number Caught per 1000 Hooks
BILLFISH				
Black marlin	17	2	15	0.01
Blue marlin	866	286	580	0.31
Striped marlin	59	30	29	0.02
Sailfish	56	4	52	0.02
Spearfish	54	4	50	0.02
Swordfish	35	31	4	0.01
TOTAL BILLFISH	1,087	357	730	0.39
SHARKS				
Blue shark	668	1	667	0.24
Shortfin mako shark	12	0	12	0.00
Thresher shark	40	1	39	0.01
White tip oceanic shark	85	0	85	0.03
Sharks (unknown)	73	2	71	0.03
TOTAL SHARKS	878	4	874	0.31
TUNA				
Albacore tuna	28,693	28,575	118	10.18
Bigeye tuna	1,040	1,012	28	0.37
Skipjack tuna	1,234	1,112	122	0.44
Yellowfin tuna	2,082	2,064	18	0.74
TOTAL TUNA	33,049	32,763	286	11.73
OTHER PELAGICS				
Mahimahi	57	32	25	0.02
Moonfish	99	33	66	0.04
Oilfish	908	2	906	0.32
Pomfret	140	27	113	0.05
Wahoo	2,098	1,857	241	0.74
TOTAL OTHER PELAGICS	3,302	1,951	1,351	1.17
NON-PMUS				
Pelagic fishes (unknown)	215	0	215	0.08
TOTAL NON-PMUS	215	0	215	0.08
TOTAL ALL SPECIES	38,531	35,075	3,456	13.68

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



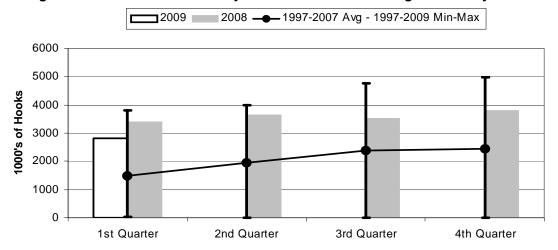
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	23	0	0	0
2008	27	24	24	24
1997-2009 Max	52	50	52	54
1997-2007 Avg	25	27	32	30
1997-2009 Min	6	0	0	0

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



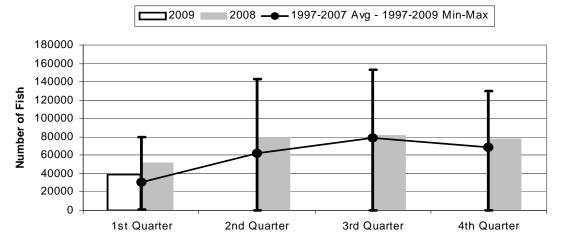
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	917	0	0	0
2008	1,109	1,215	1,171	1,246
1997-2009 Max	1,602	1,886	1,903	1,758
1997-2007 Avg	794	991	1,220	1,206
1997-2009 Min	192	0	0	0

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



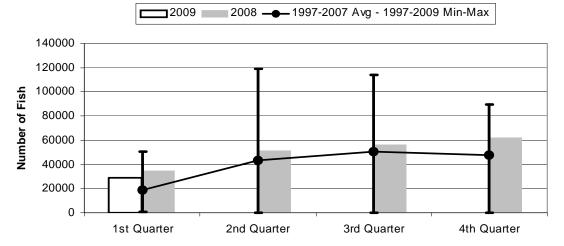
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	2,817	0	0	0
2008	3,402	3,660	3,527	3,818
1997-2009 Max	3,805	3,993	4,769	4,985
1997-2007 Avg	1,493	1,963	2,390	2,443
1997-2009 Min	41	0	0	0

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



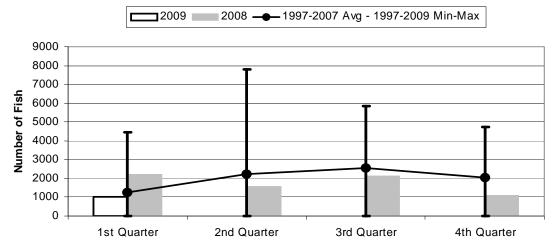
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	38,531	0	0	0
2008	52,273	80,171	81,287	78,353
1997-2009 Max	79,567	142,603	153,301	130,238
1997-2007 Avg	30,987	61,968	78,962	68,445
1997-2009 Min	1,315	0	0	0

Figure 5. American Samoa Longline Albacore Catch by Quarter for



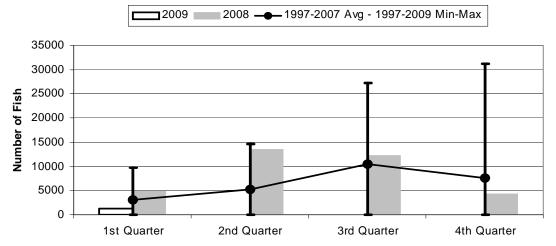
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	28,693	0	0	0
2008	34,945	51,558	56,148	62,104
1997-2009 Max	50,382	118,994	113,831	89,389
1997-2007 Avg	19,114	43,317	50,400	47,411
1997-2009 Min	940	0	0	0

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



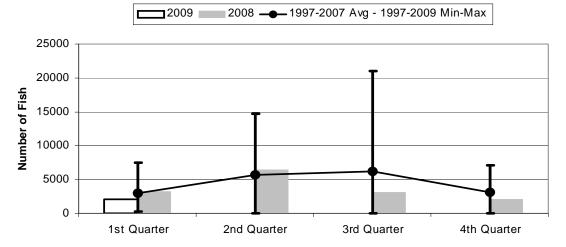
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	1,040	0	0	0
2008	2,225	1,565	2,138	1,118
1997-2009 Max	4,466	7,785	5,824	4,728
1997-2007 Avg	1,267	2,209	2,535	2,057
1997-2009 Min	6	0	0	0

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



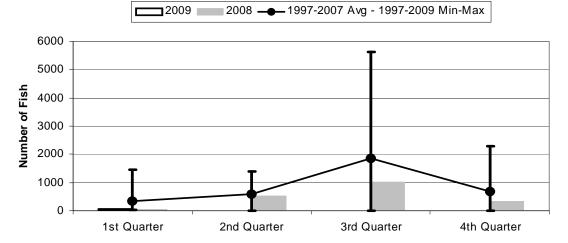
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	1,234	0	0	0
2008	4,943	13,617	12,188	4,350
1997-2009 Max	9,809	14,606	27,234	31,191
1997-2007 Avg	3,009	5,261	10,518	7,631
1997-2009 Min	0	0	0	0

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



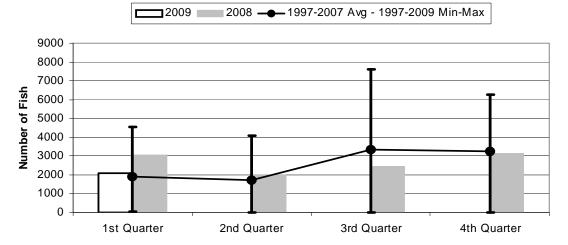
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	2,082	0	0	0
2008	3,197	6,427	3,128	2,081
1997-2009 Max	7,428	14,681	20,993	7,104
1997-2007 Avg	2,932	5,612	6,206	3,140
1997-2009 Min	213	0	0	0

Figure 9. American Samoa Mahimahi Catch by Quarter for



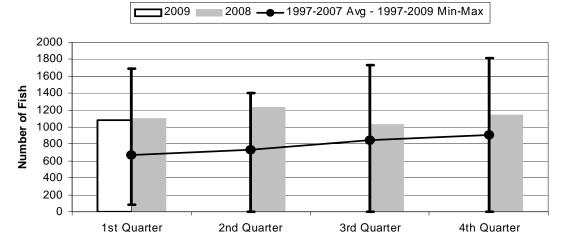
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	57	0	0	0
2008	55	516	1,013	345
1997-2009 Max	1,455	1,391	5,642	2,297
1997-2007 Avg	352	598	1,863	675
1997-2009 Min	30	0	0	0

Figure 10. American Samoa Wahoo Catch by Quarter for



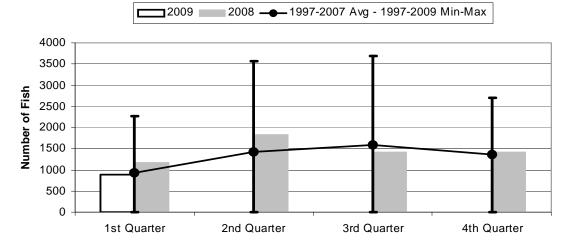
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	2,098	0	0	0
2008	3,078	1,981	2,451	3,174
1997-2009 Max	4,524	4,076	7,629	6,281
1997-2007 Avg	1,879	1,717	3,329	3,248
1997-2009 Min	27	0	0	0

Figure 11. American Samoa Billfish Catch by Quarter for



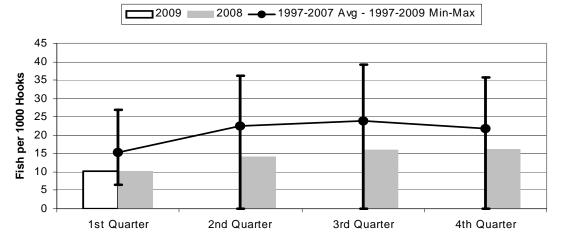
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	1,087	0	0	0
2008	1,100	1,242	1,029	1,148
1997-2009 Max	1,692	1,404	1,729	1,819
1997-2007 Avg	674	729	845	912
1997-2009 Min	83	0	0	0

Figure 12. American Samoa Shark Catch by Quarter for



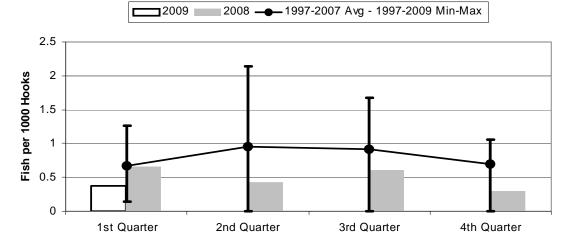
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	878	0	0	0
2008	1,174	1,826	1,428	1,421
1997-2009 Max	2,262	3,562	3,686	2,695
1997-2007 Avg	920	1,415	1,589	1,371
1997-2009 Min	5	0	0	0

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



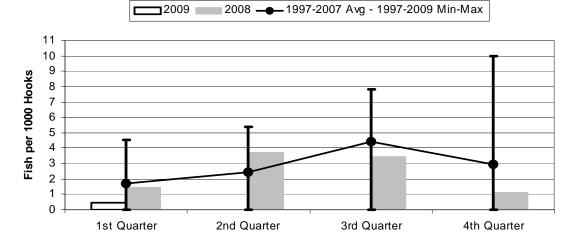
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	10.18	0.00	0.00	0.00
2008	10.27	14.09	15.92	16.27
1997-2009 Max	27.01	36.18	39.13	35.75
1997-2007 Avg	15.42	22.52	23.91	21.74
1997-2009 Min	6.58	0.00	0.00	0.00

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



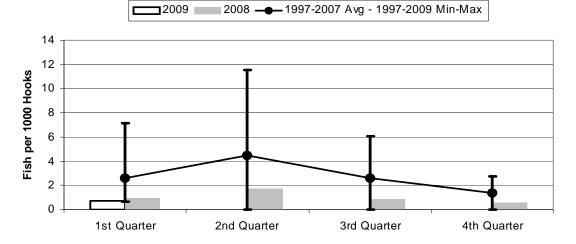
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	0.37	0.00	0.00	0.00
2008	0.65	0.43	0.61	0.29
1997-2009 Max	1.27	2.15	1.68	1.05
1997-2007 Avg	0.66	0.96	0.91	0.69
1997-2009 Min	0.15	0.00	0.00	0.00

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



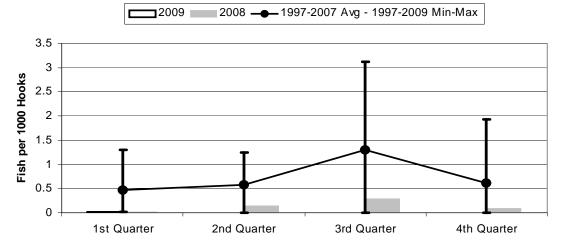
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	0.44	0.00	0.00	0.00
2008	1.45	3.72	3.46	1.14
1997-2009 Max	4.56	5.39	7.84	9.98
1997-2007 Avg	1.72	2.46	4.40	2.97
1997-2009 Min	0.00	0.00	0.00	0.00

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



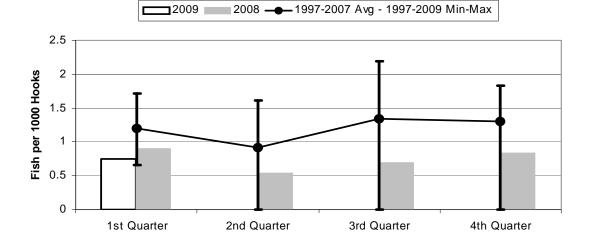
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	0.74	0.00	0.00	0.00
2008	0.94	1.76	0.89	0.55
1997-2009 Max	7.12	11.51	6.04	2.76
1997-2007 Avg	2.63	4.49	2.62	1.35
1997-2009 Min	0.66	0.00	0.00	0.00

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



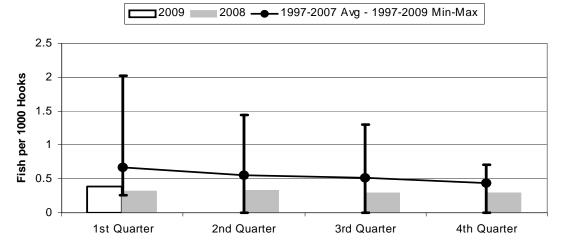
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	0.02	0.00	0.00	0.00
2008	0.02	0.14	0.29	0.09
1997-2009 Max	1.30	1.25	3.13	1.93
1997-2007 Avg	0.47	0.58	1.30	0.61
1997-2009 Min	0.02	0.00	0.00	0.00

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



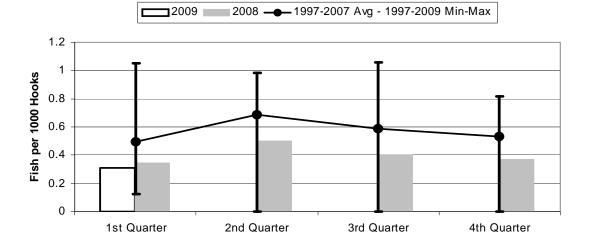
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	0.74	0.00	0.00	0.00
2008	0.90	0.54	0.69	0.83
1997-2009 Max	1.71	1.62	2.20	1.83
1997-2007 Avg	1.20	0.91	1.33	1.31
1997-2009 Min	0.66	0.00	0.00	0.00

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



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	0.39	0.00	0.00	0.00
2008	0.32	0.34	0.29	0.30
1997-2009 Max	2.02	1.44	1.31	0.71
1997-2007 Avg	0.68	0.56	0.52	0.44
1997-2009 Min	0.25	0.00	0.00	0.00

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



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2009	0.31	0.00	0.00	0.00
2008	0.35	0.50	0.40	0.37
1997-2009 Max	1.05	0.99	1.06	0.82
1997-2007 Avg	0.50	0.68	0.59	0.53
1997-2009 Min	0.12	0.00	0.00	0.00