PIFSC Report on the American Samoa Longline Fishery Year 2011¹

Fisheries Research and Monitoring Division Pacific Islands Fisheries Science Center

Annual statistics of catch and effort for the 2011 American Samoa longline fishery (based on date of haul) are summarized in Table 1. All logbook data submitted by holders of American Samoa federal limited-entry longline permits as of February 9, 2012, for fishing activities during 2011 were processed by the Department of Marine and Wildlife Resources (DMWR) and are included in this report. Table 1 reflects an estimated 99% of the number of sets made by vessels during the year. (Note: all percentages in this report are rounded to nearest whole percent.) In short, virtually every significant performance metric for the 2011 longline fishery in American Samoa showed that it was the worst year on record since the fishery evolved from the alia fleet in the late 1990's and converted to primarily a big-boat fishery in 2000-01.

During calendar year 2011, 24 vessels turned in longline logs for sets made during the year (Figure 1). The logbooks submitted by the 24 vessels indicated that they made 3,776 sets and deployed a total of 10,767,655 hooks. The number of active vessels decreased by 8% from 26 vessels in 2010 to 24 vessels this year. The number of sets decreased by 17% (Figure 2) and the number of hooks set decreased by 18% (Figure 3). The average number of hooks used per set decreased by about 2% from 2,905 last year to 2,851 this year.

The total catch for all species combined was 214,409 fish (Table 1), a 35% decrease from the catch in 2010. Catches of all species decreased compared to last year. Although the main target species, albacore tuna, continued to dominate the longline catch with 130,471 fish caught in 2011, its catch continued a downward trend with a 43% decrease from 229,511 fish caught last year, the lowest since the turn of the century (Figure 4). Catches of yellowfin, bigeye, and skipjack tunas decreased by 5%, 28%, and 13%, respectively (Figure 5). The 2011 catches of other incidental pelagic species also decreased compared to 2010—by 28% for mahimahi, 32% for wahoo, 17% for billfish, and 6% for sharks (Figure 6).

The overall longline catch per unit of effort (CPUE, catch per 1000 hooks) decreased by 20% compared to last year, from 25 fish per 1000 hooks to 20 fish per 1000 hooks. CPUE for the all-important albacore tuna decreased by 30% from 17.4 to 12.1 fish per 1000 hooks, setting a new annual low for the entire time series (Figure 7). CPUE increased by 16% and 6% for yellowfin and skipjack, respectively, but decreased by 11% for bigeye tuna (Figure 8). CPUEs for mahimahi and wahoo decreased by 13% and 17%, respectively, whereas the CPUEs for billfishes and sharks increased by 3% and 15%, respectively (Figure 9).

The longline fishery in American Samoa during 2011 was definitely a challenged fishery.

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Table 1. Summary of fish catch and nominal fishing effort by American Samoa Longline vessels during calendar year 2011 based on longline logbooks submitted before February 9, 2012.

TRIP INFORMATION

Number of Vessels:24Number of Trips:274Number of Sets:3,7761000's of Hooks Set:10,767Number of Light Sticks2,938

Used:

CATCH INFORMATION

| Species | Number Caught | Number Kept | Number Released | Number Caught per 1000 Hooks |
|--------------------------|------------------|----------------|--------------------|------------------------------|
| BILLFISH | | | | |
| Black marlin | 22 | 14 | 8 | 0.00 |
| Blue marlin | 1,661 | 641 | 1,020 | 0.15 |
| Striped marlin | 288 | 92 | 196 | 0.03 |
| Sailfish | 452 | 117 | 335 | 0.04 |
| Spearfish | 1,229 | 253 | 976 | 0.11 |
| Swordfish | 318 | 213 | 105 | 0.03 |
| TOTAL BILLFISH | 3,970 | 1,330 | 2,640 | 0.37 |
| SHARKS | | | | |
| Blue shark | 3,124 | 62 | 3,062 | 0.29 |
| Shortfin mako shark | 304 | 4 | 300 | 0.03 |
| Thresher shark | 156 | 4 | 152 | 0.01 |
| White tip oceanic shark | 724 | 23 | 701 | 0.07 |
| Sharks (unknown) | 516 | 11 | 505 | 0.05 |
| TOTAL SHARKS | 4,824 | 104 | 4,720 | 0.45 |
| TUNA | | | | |
| Albacore tuna | 130,471 | 129,930 | 541 | 12.12 |
| Bigeye tuna | 7,614 | 7,232 | 382 | 0.71 |
| Bluefin tuna | 28 | 20 | 8 | 0.00 |
| Skipjack tuna | 27,346 | 23,160 | 4,186 | 2.54 |
| Yellowfin tuna | 21,828 | 21,378 | 450 | 2.03 |
| TOTAL TUNA | 187,287 | 181,720 | 5,567 | 17.39 |
| OTHER PELAGICS | | | | |
| Mahimahi | 1,407 | 1,055 | 352 | 0.13 |
| Moonfish | 382 | 119 | 263 | 0.04 |
| Oilfish | 6,479 | 85 | 6,394 | 0.60 |
| Pomfret | 663 | 121 | 542 | 0.06 |
| Wahoo | 9,198 | 7,589 | 1,609 | 0.85 |
| TOTAL OTHER PELAGICS | 18,129 | 8,969 | 9,160 | 1.68 |
| NON-PMUS | | | | |
| Pelagic fishes (unknown) | 199 | 14 | 185 | 0.02 |
| TOTAL NON-PMUS | 199 | 14 | 185 | 0.02 |
| TOTAL ALL SPECIES | 214,409 | 192,137 | 22,272 | 19.91 |

Figure 1. American Samoa Longline Vessels by Year

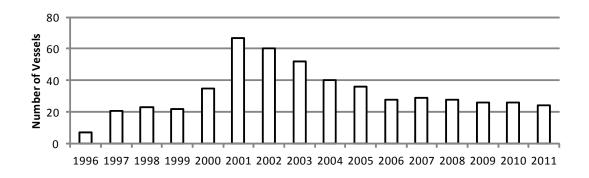


Figure 2. Number of Sets by American Samoa Longline Vessels by Year

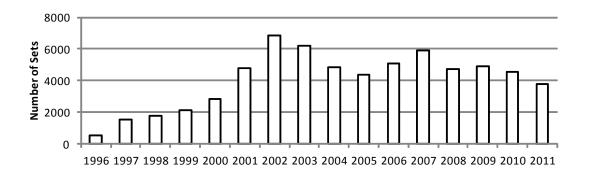


Figure 3. Number of Hooks Set by the American Samoa Longline Fleet by Year

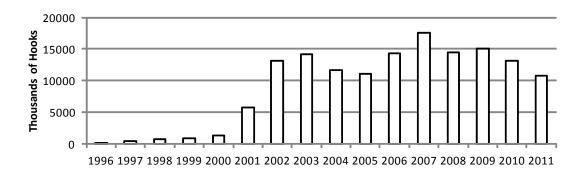


Figure 4. American Samoa Longline Albacore Catch by Year

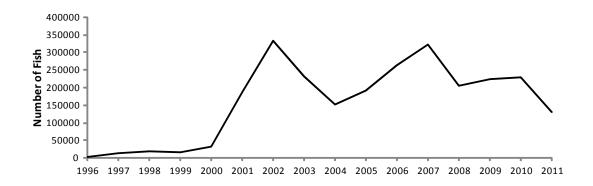


Figure 5. American Samoa Longline Tuna Catch by Year

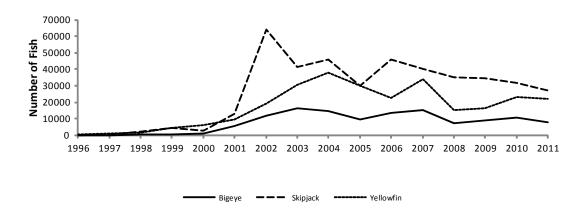


Figure 6. American Samoa Longline Catch of Miscellaneous Pelagic Fish by Year

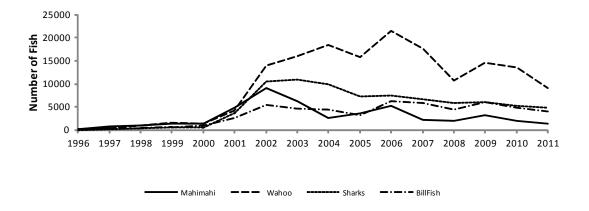


Figure 7. American Samoa Longline Albacore Catch per 1000 Hooks by Year

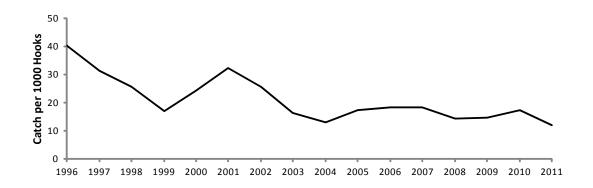


Figure 8. American Samoa Longline Tuna Catch per 1000 Hooks by Year

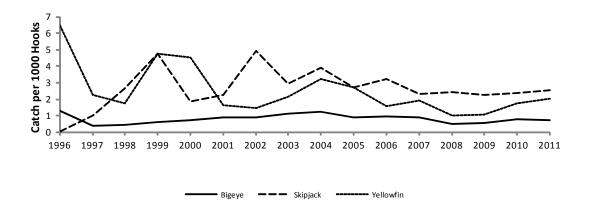


Figure 9. American Samoa Longline Catch of Other Pelagic Fish per 1000 Hooks by Year

