#### The American Samoa Longline Limited-entry Fishery Annual Report 1 January-31 December 2022<sup>1</sup>

Fisheries Research and Monitoring Division (FRMD) Pacific Islands Fisheries Science Center (PIFSC), NOAA Fisheries NOAA Inouye Regional Center 1845 Wasp Boulevard, Building 176, Honolulu, HI 96818

Effort and catch statistics for the American Samoa longline limited-entry fishery reported by fishers on electronic and paper logs are summarized for 2022 (1 January-31 December; PIFSC 2023). Catch and effort data are summarized for all fishing sets across all fishing locations performed by the American Samoa longline fleet during the reporting period. Total fishing effort for the fleet is summarized by the number of active vessels, trips, sets, and hooks set. Catch is summarized by the number of fish caught, kept, and released for the species included as pelagic management unit species (PMUS) for the Pacific Island Region as defined by the Western Pacific Fishery Management Council. The catch per unit effort (CPUE) is also summarized for each PMUS based on the number of fish caught per 1000 hooks.

In addition, the number of fish caught (both kept and released) by year, as well as, the CPUE by quarter are summarized in figures for species of particular concern or interest from 2000 to 2022. The CPUE is summarized by quarter to display any variation that may occur seasonally.

Catch and effort statistics are based on the date fishing gear is hauled and are summarized quarterly, semi-annually, and annually in separate reports. As a result, statistics (e.g., number of vessels or trips) may be included in more than one summary period type (e.g., annual, semi-annual, quarter), and fishing trip totals for a summary period type may be either for partial or entire trips (i.e., as some trips may occur across multiple time periods). As such, catch and effort statistics are not additive (e.g., sum of catch for four quarters is not equal to the total catch for the year).

#### **References:**

Pacific Islands Fisheries Science Center, 2023: American Samoa Longline Logbook, https://www.fisheries.noaa.gov/inport/item/1775

<sup>&</sup>lt;sup>1</sup>Data reported by fishers in electronic and paper logs were queried for 2022 (1 January-31 December) from the Pacific Islands Fishery Science Center Information Management System oracle database from table LLDS\_REPORT\_STATS\_PRELIM\_AS.

PIFSC Data Report DR-23-22. Issued 19 December 2023 https://doi.org/10.25923/8bhb-2250

 Table 1.
 Catch and effort data summarized for all fishing locations and sets performed by the American Samoa limited-entry fishery for the year of 2022.

Report Coverage		Number of vessels active		11
Time Period 1 January-31 December 2022		Number of trips (partial or completed)		43
Set Types All Sets		Number of sets Number of hooks set		1,244 3,692,554
Fishing Area All Areas				
Pelagic Management Unit	Number	Number	Number	CPUE
Species (PMUS)	Caught	Kept	Released	Number Caught per 1000 Hooks
PMUS				
Billfish PMUS				
Blue marlin	832	803	29	0.23
Striped marlin	59	58	1	0.02
Shortbill spearfish	65	52	13	0.02
Swordfish	87	51	36	0.02
Other billfishes	24	20	4	0.01
Total	1,067	984	83	0.29
Shark PMUS				
Blue shark	800	0	800	0.22
Mako sharks	50	0	50	0.01
Thresher sharks	81	0	81	0.02
Oceanic whitetip shark	74	0	74	0.02
Silky shark	309	0	309	0.08
Total	1,314	0	1,314	0.36
Tuna PMUS				
Albacore	53,906	53,723	183	14.60
Bigeye tuna	973	915	58	0.26
Yellowfin tuna	5,829	5,631	198	1.58
Bluefin tuna	0	0	0	0.00
Skipjack tuna	5,099	5,071	28	1.38
Other tunas	0	0	0	0.00
Total	65,807	65,340	467	17.82
Other PMUS				
Mahimahi	591	579	12	0.16
Moonfish	21	19	2	0.01
Wahoo	1,028	1,015	13	0.28
Oilfish	454	16	438	0.12
Pomfret	362	49	313	0.10
Total	2,456	1,678	778	0.67
Total PMUS	70,644	68,002	2,642	19.13
Non-PMUS Sharks	2	0	2	0.00
Total Non-PMUS	352	78	274	0.10
Total All Species	70,996	68,080	2,916	19.23

#### Number of Vessels

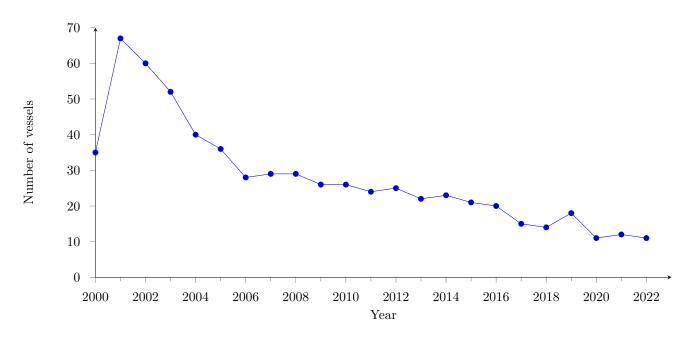


Figure 1: Annual number of active longline fishing vessels based in American Samoa from 2000-2022.

# Number of Trips

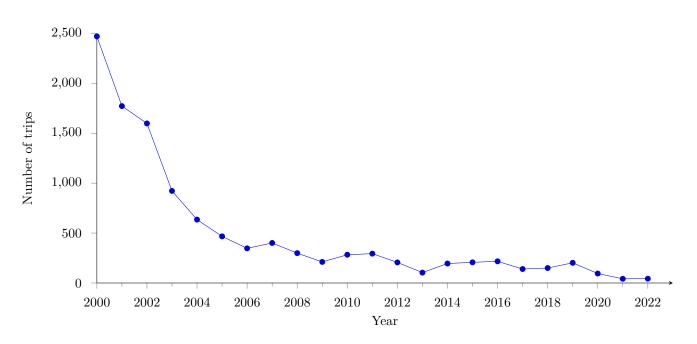


Figure 2: Annual number of trips by longline fishing vessels based in American Samoa from 2000-2022.

## Number of Sets

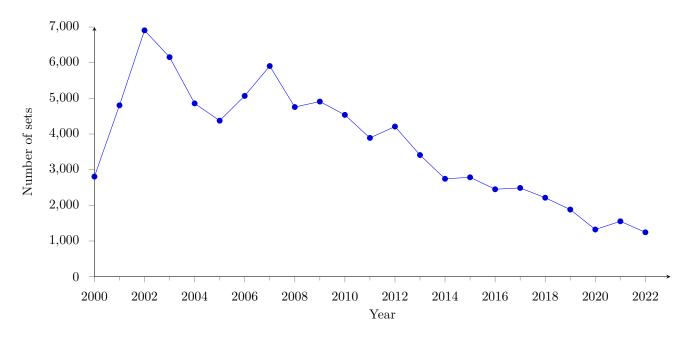
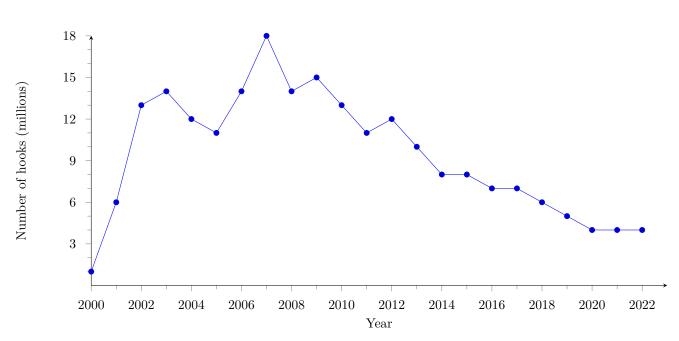


Figure 3: Annual number of sets by longline fishing vessels based in American Samoa from 2000-2022.



# Number of Hooks

Figure 4: Number of hooks in millions, set by vessels based in American Samoa by year, 2000-2022.

#### Albacore Catch

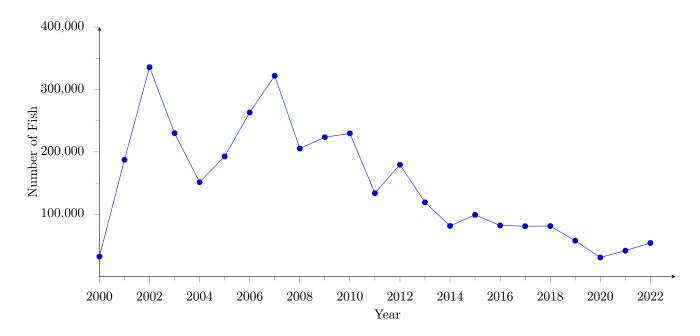


Figure 5: Annual catch (kept and released) of albacore tuna by longline vessels based in American Samoa from 2000-2022.

#### Albacore Catch per Unit Effort

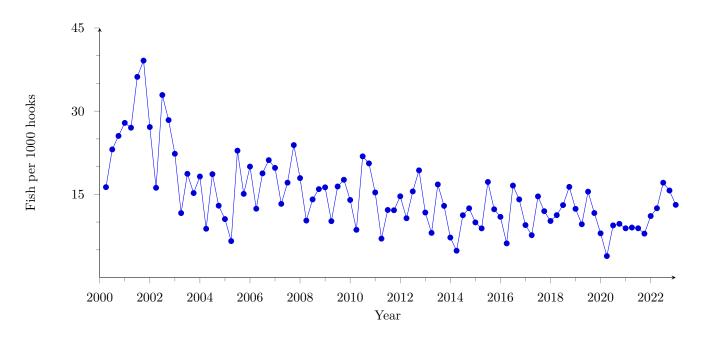


Figure 6: Quarterly catch per unit of effort (CPUE) of albacore tuna (per 1000 hooks; including both kept and released) by longline vessels based in American Samoa from 2000-2022.

# Bigeye Tuna Catch

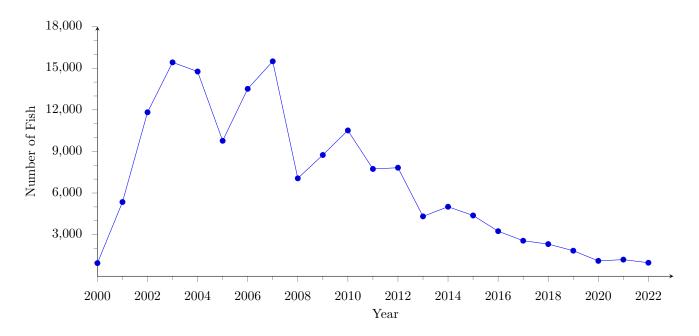


Figure 7: Annual catch (kept and released) of bigeye tuna by longline vessels based in American Samoa from 2000-2022.

# Bigeye Tuna Catch per Unit Effort

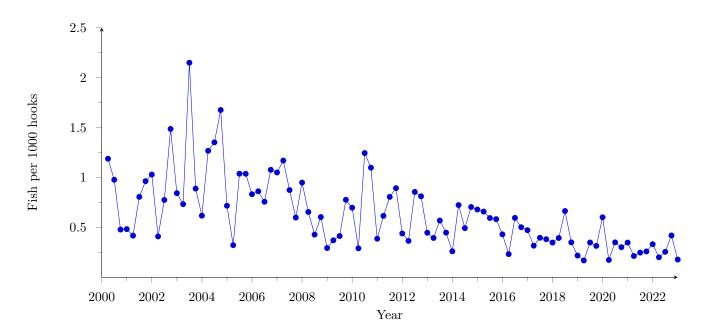


Figure 8: Quarterly catch per unit of effort (CPUE) of bigeye tuna (per 1000 hooks; including both kept and released) by longline vessels based in American Samoa from 2000-2022.

## Yellowfin Tuna Catch

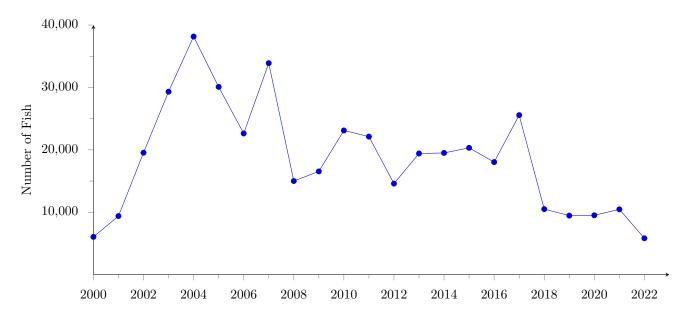


Figure 9: Annual catch (kept and released) of yellowfin tuna by longline vessels based in American Samoa from 2000-2022.

#### Yellowfin Tuna Catch per Unit Effort

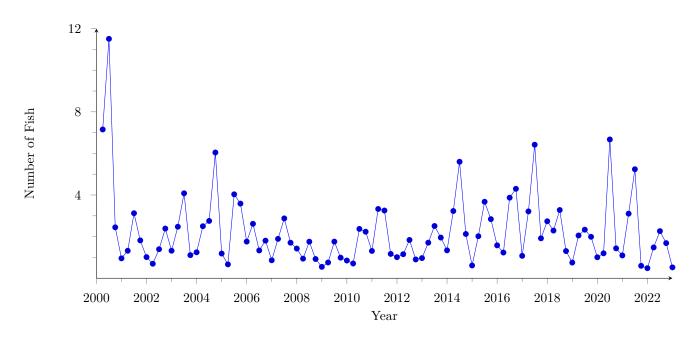


Figure 10: Quarterly catch per unit of effort (CPUE) of yellowfin tuna (per 1000 hooks; including both kept and released) by longline vessels based in American Samoa from 2000-2022.

# Skipjack Tuna Catch

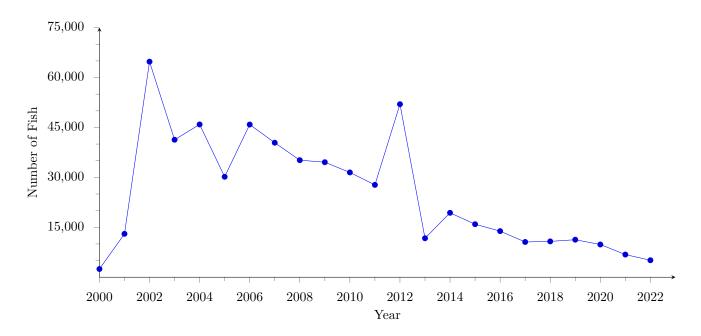


Figure 11: Annual catch (kept and released) of skipjack tuna by longline vessels based in American Samoa from 2000-2022.

# Skipjack Tuna Catch per Unit Effort

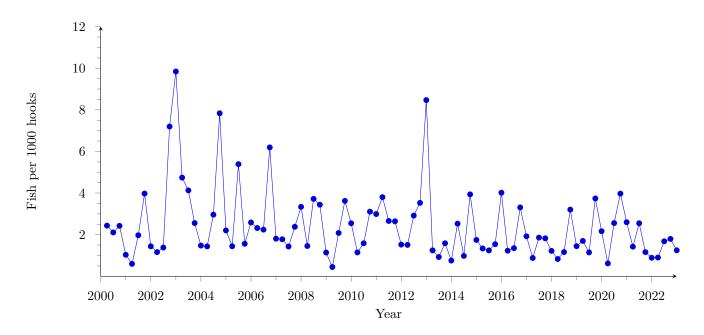


Figure 12: Quarterly catch per unit of effort (CPUE) of skipjack tuna (per 1000 hooks; including both kept and released) by longline vessels based in American Samoa from 2000-2022.

# Mahimahi Catch

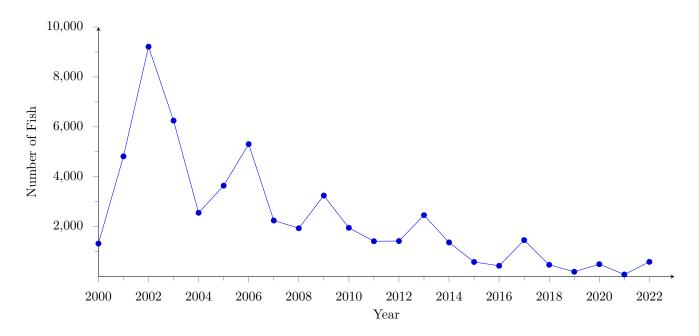


Figure 13: Annual catch (kept and released) of mahimahi by longline vessels based in American Samoa from 2000-2022.

## Mahimahi Catch per Unit Effort

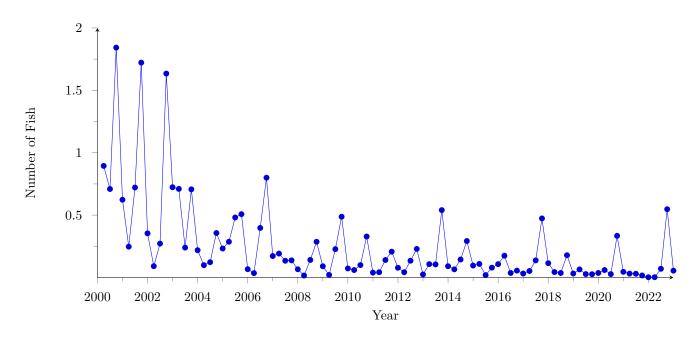


Figure 14: Quarterly catch per unit of effort (CPUE) of mahimahi (per 1000 hooks; including both kept and released) by longline vessels based in American Samoa from 2000-2022.

#### **Billfish Catch**

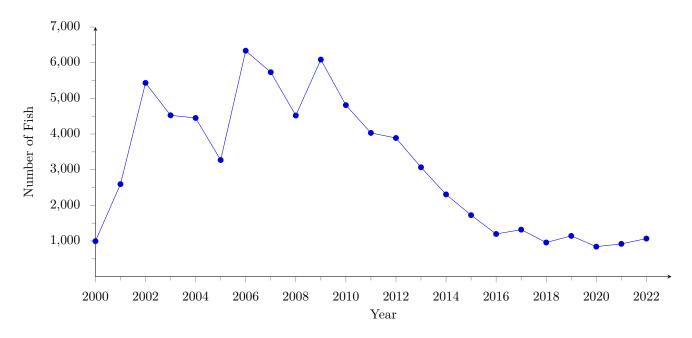
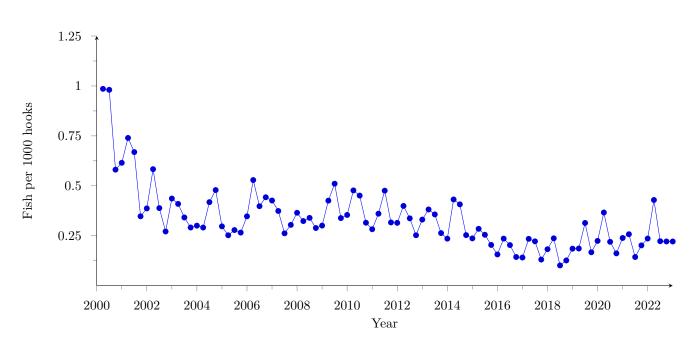


Figure 15: Annual catch (kept and released) of billfish by longline vessels based in American Samoa from 2000-2022.



#### Billfish Catch per Unit Effort

Figure 16: Quarterly catch per unit of effort (CPUE) of billfish (per 1000 hooks; including both kept and released) by longline vessels based in American Samoa from 2000-2022.

#### Shark Catch

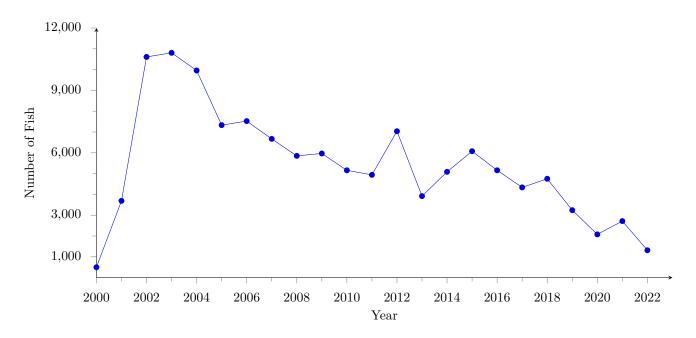
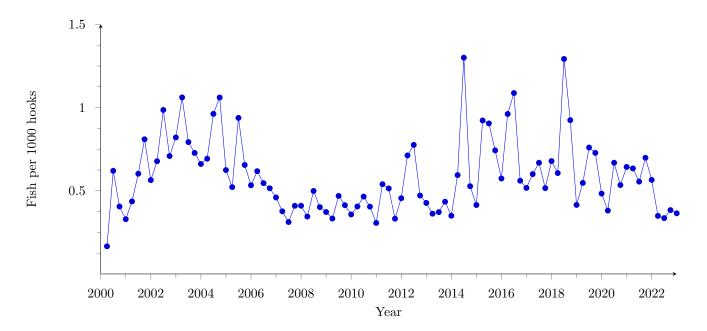


Figure 17: Annual catch (kept and released) of sharks (for those included as pelagic management unit species) by longline vessels based in American Samoa from 2000-2022.



Shark Catch per Unit Effort

Figure 18: Quarterly catch per unit of effort (CPUE) of sharks (per 1000 hooks; including both kept and released for those included as pelagic management unit species) by longline vessels based in American Samoa from 2000-2022.

# Wahoo Catch

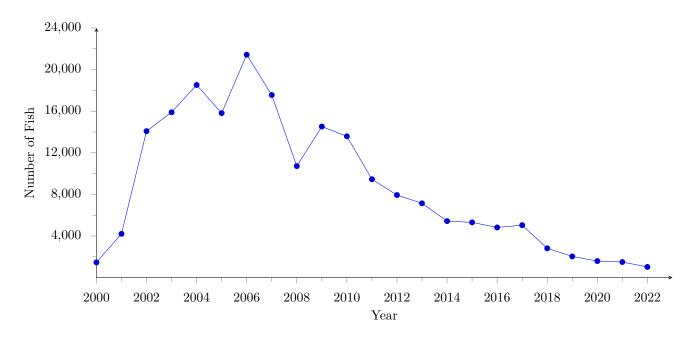
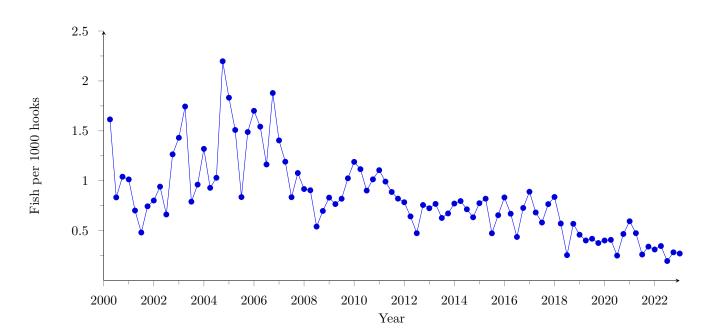


Figure 19: Annual catch (kept and released) of wahoo by longline vessels based in American Samoa from 2000-2022.



Wahoo Catch per Unit Effort

Figure 20: Quarterly catch per unit of effort (CPUE) of wahoo (per 1000 hooks; including both kept and released) by longline vessels based in American Samoa from 2000-2022.