

PIFSC Report on the American Samoa Troll Fishery from 1 January to 31 December 2016 ¹

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The following table represents catch (kept) and discards from a creel census data summary of American Samoa troll data that was created with a data version obtained from DMWR in February 2017. Figures are provided for trolling effort and catch.

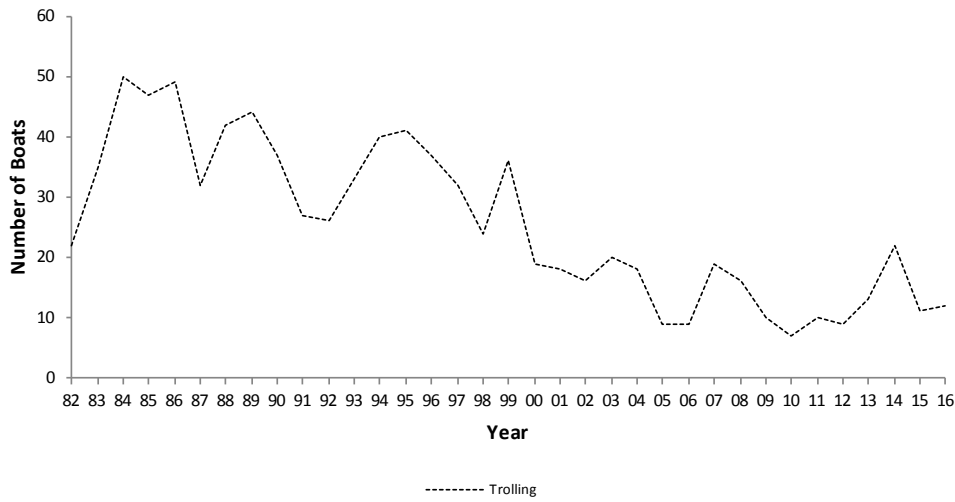
Table 1. American Samoa 2016 estimated total troll landings of pelagic species.

Species	Troll Pounds
Skipjack tuna	19,634
Albacore tuna	0
Yellowfin tuna	18,983
Kawakawa	234
Bigeye tuna	759
TUNAS SUBTOTALS	39,610
Mahimahi	2,144
Black marlin	0
Blue marlin	953
Wahoo	3,743
Oilfish	183
Pomfret	0
NON-TUNA PMUS SUBTOTALS	7,023
TOTAL PELAGICS	46,633

(Linked file: AMSPELTOTTAB.DOCX)

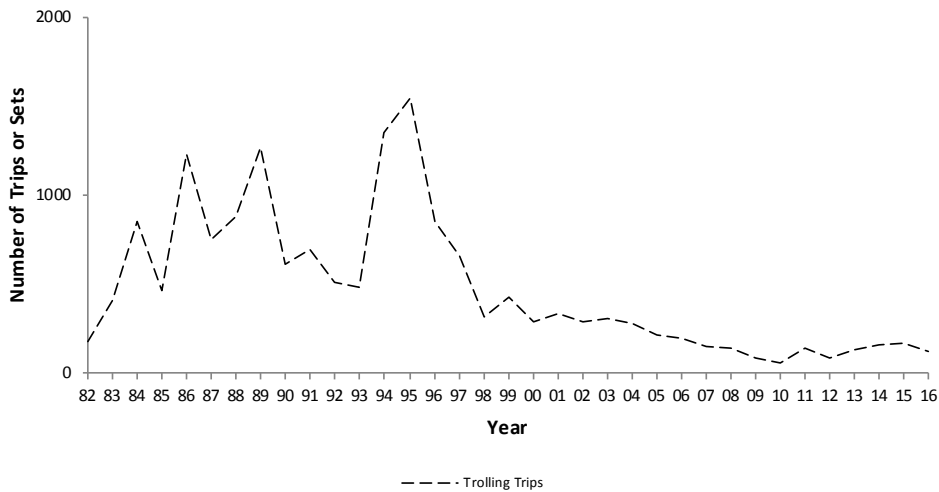
¹ PIFSC Data Report DR-17-011. Draft presented to the 125th SSC 8 March, 2017. Final Issued 7 April, 2017.

Figure 1. Number of American Samoa boats landing any pelagic species by trolling.



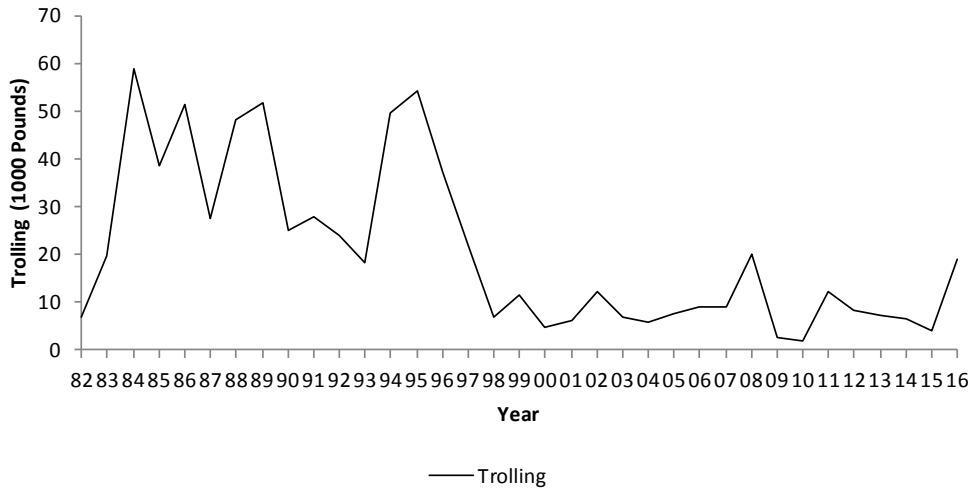
Supporting data shown in Table A-1 ([Linked file: AMSPELBOATMETHCHRT.xlsx](#)).

Figure 2. Number of American Samoa troll fishing trips that caught any pelagic species.



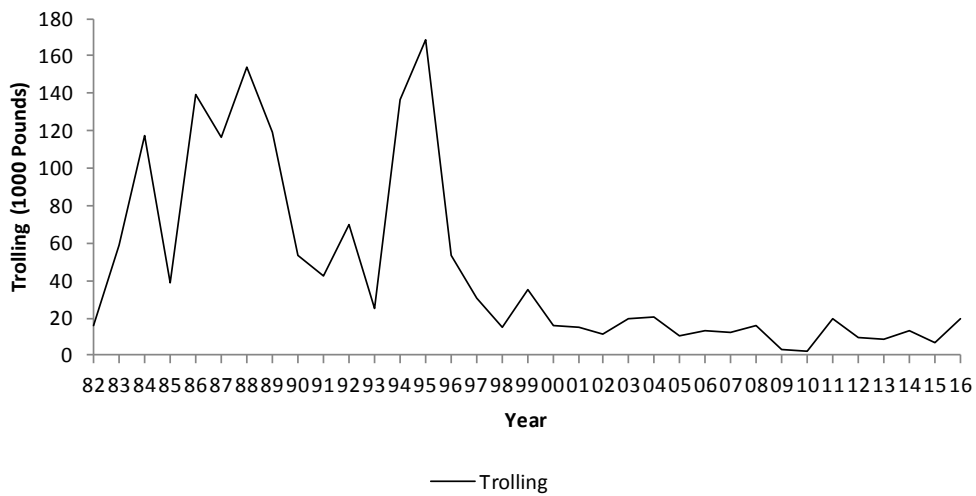
Supporting data shown in Table A-2 ([Linked files: AMSPELTRIPCHRT.xlsx](#)).

Figure 3. American Samoa estimated yellowfin tuna landings by trolling.



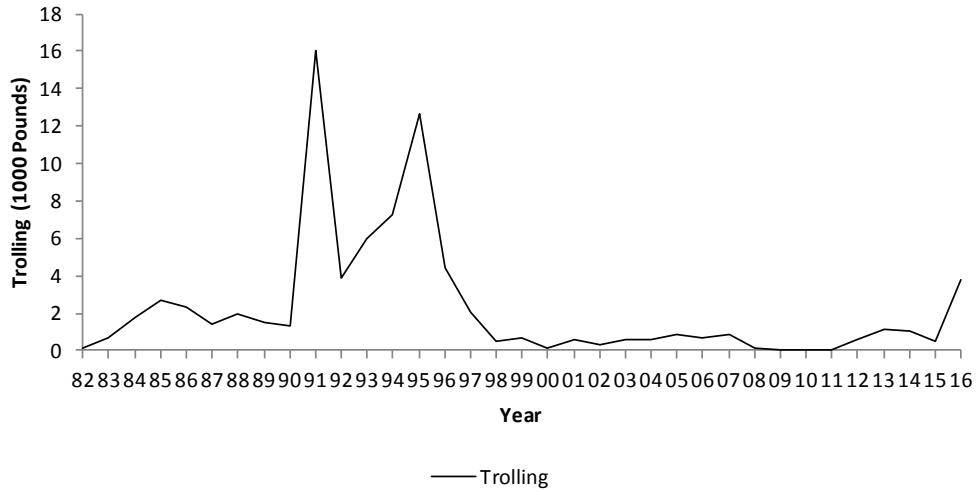
Supporting data shown in Table A-3 (*Linked file:AMSPELYELLANDCHRT.xlsx*).

Figure 4. American Samoa estimated skipjack tuna landings by trolling.



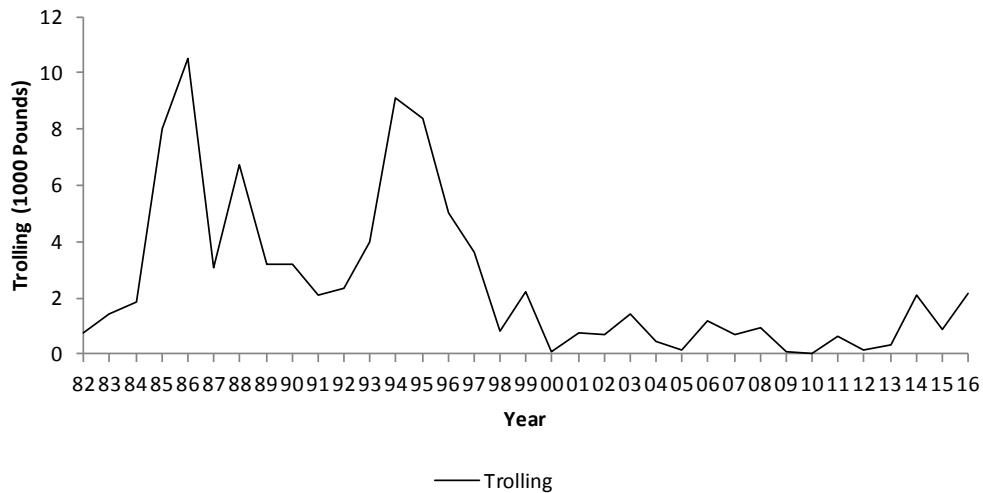
Supporting data shown in Table A-4 (*Linked Files: AMPELSKPLANDCHRT.xlsx*).

Figure 5. American Samoa estimated wahoo landings by trolling.



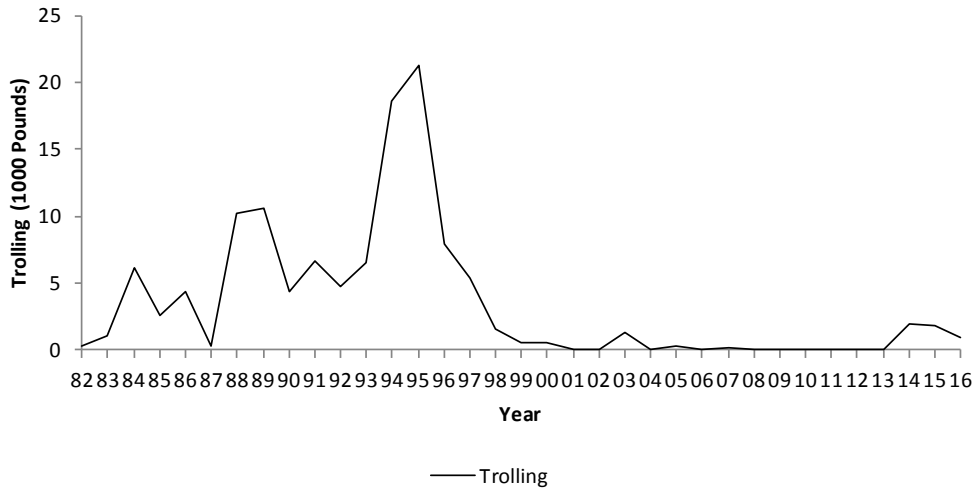
Supporting data shown in Table A-5 (*Linked files: AMSPELWAHLANDCHRT.xlsx*).

Figure 6. American Samoa estimated mahimahi landings by trolling.



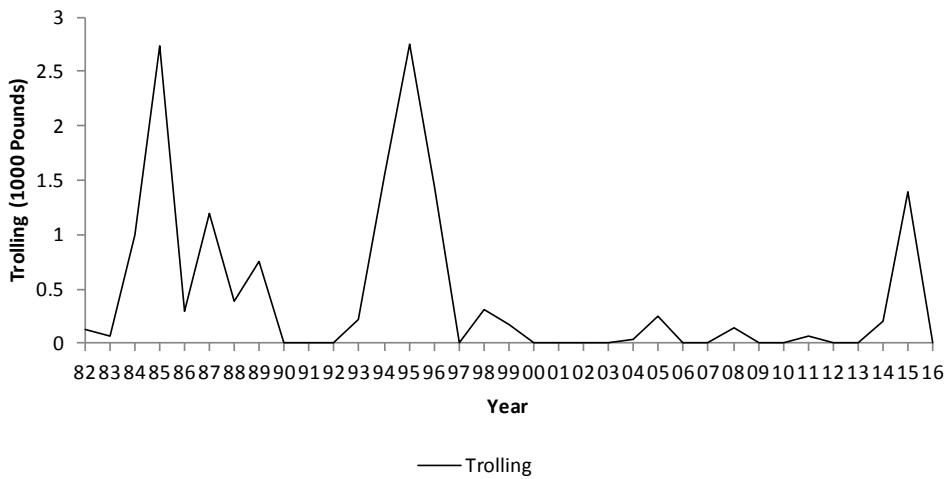
Supporting data shown in Table A-6 (*Linked file: AMSPELMAHLANDCHRT.xlsx*).

Figure 7. American Samoa estimated blue marlin landings by trolling.



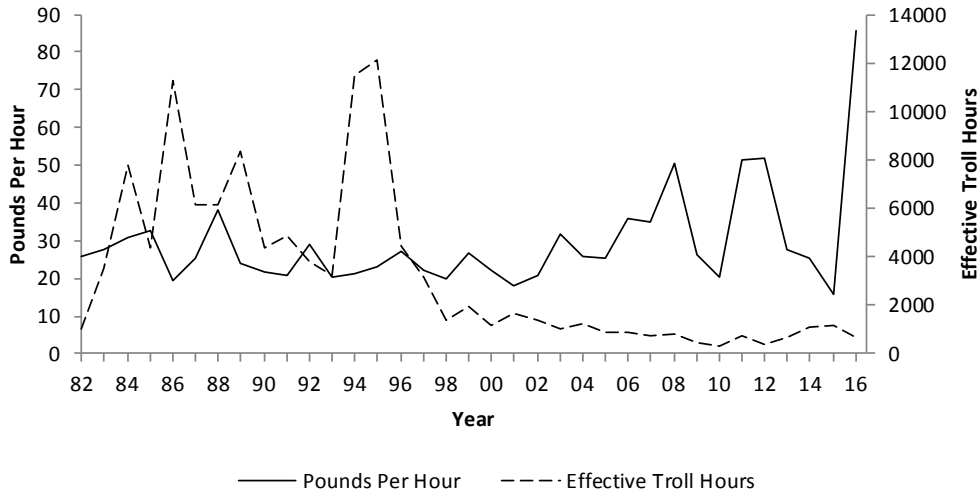
Supporting data shown in Table A-7 (*Linked files: AMSPELMARLANDCHRT.xlsx*).

Figure 8. American Samoa estimated sailfish landings by trolling.



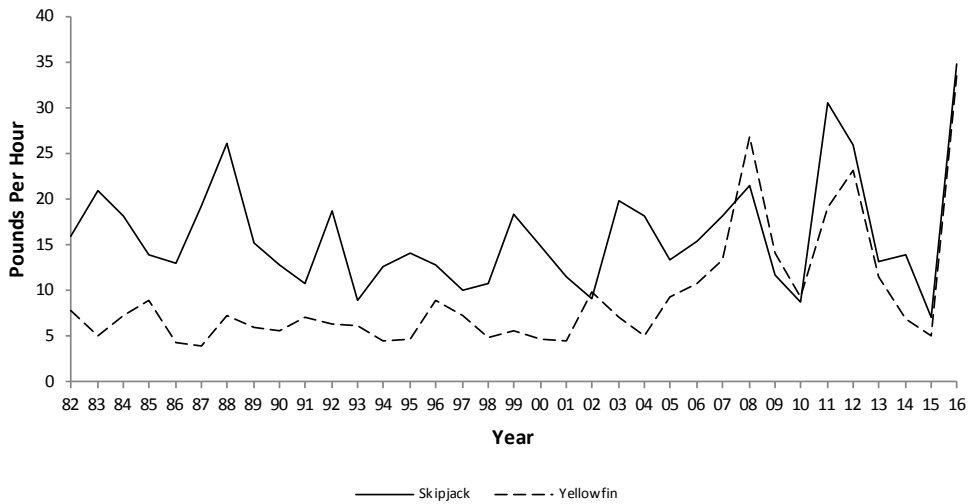
Supporting data shown in Table A-8 (*Linked files: AMSPELSALLANDCHRT.xlsx*).

Figure 9. American Samoa trolling catch per unit effort (CPUE in pounds per hour) for all pelagic species, and effective troll hours.



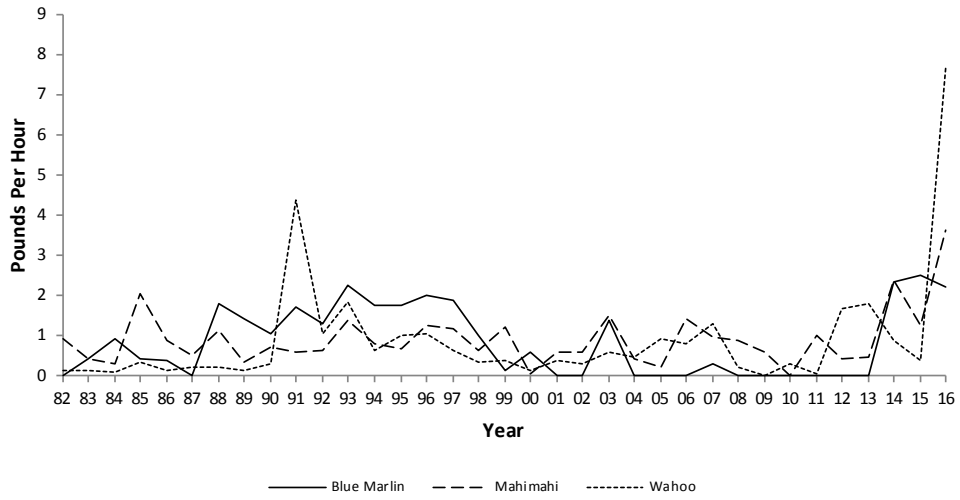
Supporting data shown in Table A-9 (*Linked file: AMSPELALLCPUECHRT.xlsx*).

Figure 10. American Samoa trolling catch rates for skipjack and yellowfin tuna.



Supporting data shown in Table A-10 (*Linked files: AMSPELSKPCPUECHRT.xlsx*).

Figure 11. American Samoa trolling catch rates for blue marlin, mahimahi, and wahoo.



Supporting data shown in Table A-11 (*Linked file: AMSPELMARCPUECHRT.xlsx*).

Table A-1. Supporting data for Figure 12. Number of American Samoa boats landing any pelagic species by trolling.

Year	Number of Boats Using Trolling
1982	22
1983	35
1984	50
1985	47
1986	49
1987	32
1988	42
1989	44
1990	37
1991	27
1992	26
1993	33
1994	40
1995	41
1996	37
1997	32
1998	24
1999	36
2000	19
2001	18
2002	16
2003	20
2004	18
2005	9
2006	9
2007	19
2008	16
2009	10
2010	7
2011	10
2012	9
2013	13
2014	22
2015	11
2016	12
Average	25
Std. Dev.	13

(Linked file: AMSPELBOATMETHTAB.DOCX)

Table A-2. Supporting Data for Figure 13. Number of American Samoa troll fishing trips that caught any pelagic species.

Year	Troll Trips
1982	177
1983	406
1984	853
1985	464
1986	1,234
1987	751
1988	875
1989	1,269
1990	615
1991	699
1992	513
1993	481
1994	1,355
1995	1,548
1996	847
1997	656
1998	316
1999	429
2000	292
2001	330
2002	288
2003	310
2004	276
2005	211
2006	193
2007	145
2008	143
2009	81
2010	53
2011	141
2012	84
2013	132
2014	157
2015	167
2016	126
Average	475
Std. Dev.	394

(Linked file AMSPELTRIP.TAB.DOCX)

Table A-3. Supporting Data for Figure 14. American Samoa estimated yellowfin tuna landings by trolling.

Year	Pounds Landed
	Trolling
1982	7,038
1983	19,789
1984	58,704
1985	38,586
1986	51,439
1987	27,451
1988	48,319
1989	51,873
1990	25,188
1991	28,046
1992	23,916
1993	18,180
1994	49,415
1995	54,139
1996	37,051
1997	21,679
1998	6,762
1999	11,566
2000	4,827
2001	6,116
2002	12,353
2003	6,953
2004	5,939
2005	7,501
2006	9,106
2007	9,023
2008	20,089
2009	2,785
2010	2,052
2011	12,379
2012	8,479
2013	7,137
2014	6,617
2015	3,981
2016	18,983
Average	20,670
Std. Dev.	17,067

(Linked file: AMSPELYELLANDTAB.DOCX)

Table A-4. Supporting Data for Figure 15. American Samoa estimated skipjack tuna landings by trolling.

Year	Pounds Landed	
	Trolling	
1982	15,877	
1983	58,997	
1984	117,693	
1985	38,902	
1986	139,421	
1987	116,436	
1988	153,903	
1989	118,948	
1990	53,423	
1991	42,137	
1992	69,901	
1993	25,356	
1994	136,762	
1995	168,389	
1996	53,149	
1997	30,430	
1998	14,822	
1999	35,171	
2000	16,211	
2001	15,086	
2002	11,376	
2003	19,464	
2004	20,728	
2005	10,845	
2006	13,040	
2007	12,255	
2008	16,294	
2009	2,775	
2010	2,043	
2011	19,862	
2012	9,703	
2013	8,459	
2014	12,941	
2015	6,925	
2016	19,634	
Average	45,925	
Std. Dev.	48,356	

(Linked file: AMSPELSKPLANDTAB.DOCX)

Table A-5. Supporting Data for Figure 16. American Samoa estimated wahoo landings by trolling.

Year	Pounds Landed	
	Trolling	
1982		114
1983		632
1984		1,777
1985		2,678
1986		2,282
1987		1,395
1988		1,962
1989		1,476
1990		1,333
1991		16,081
1992		3,904
1993		5,977
1994		7,261
1995		12,625
1996		4,399
1997		2,074
1998		487
1999		685
2000		140
2001		587
2002		351
2003		612
2004		537
2005		828
2006		696
2007		889
2008		165
2009		0
2010		64
2011		55
2012		597
2013		1,109
2014		1,072
2015		496
2016		3,743
Average		2,260
Std. Dev.		3,436

(Linked file: *AMSPELWAHLANDTAB.DOCX*)

Table A-6. Supporting Data for Figure 17. American Samoa estimated mahimahi landings by trolling.

Year	Pounds Landed	
	Trolling	
1982		777
1983		1,443
1984		1,844
1985		8,011
1986		10,542
1987		3,049
1988		6,736
1989		3,170
1990		3,169
1991		2,090
1992		2,325
1993		4,000
1994		9,086
1995		8,393
1996		5,022
1997		3,623
1998		843
1999		2,193
2000		66
2001		782
2002		720
2003		1,434
2004		469
2005		161
2006		1,164
2007		684
2008		931
2009		113
2010		0
2011		611
2012		157
2013		300
2014		2,077
2015		893
2016		2,144
Average		2,543
Std. Dev.		2,771

(Linked file: *AMSPELMAHLANDTAB.docx*)

Table A-7. Supporting Data for Figure 18. American Samoa estimated blue marlin landings by trolling.

Year	Pounds Landed	
	Trolling	
1982		315
1983		1,083
1984		6,097
1985		2,574
1986		4,327
1987		265
1988		10,217
1989		10,590
1990		4,339
1991		6,669
1992		4,807
1993		6,545
1994		18,661
1995		21,272
1996		7,867
1997		5,379
1998		1,592
1999		590
2000		623
2001		0
2002		0
2003		1,344
2004		0
2005		300
2006		0
2007		204
2008		0
2009		0
2010		0
2011		0
2012		0
2013		0
2014		2,007
2015		1,765
2016		953
Average		3,440
Std. Dev.		5,072

(Linked file: *AMSPELMARLANDTAB.DOCX*)

Table A-8. Supporting Data for Figure 19. American Samoa estimated sailfish landings by trolling.

Year	Pounds Landed	
	Trolling	
1982		127
1983		74
1984		989
1985		2,744
1986		294
1987		1,187
1988		394
1989		757
1990		0
1991		0
1992		0
1993		218
1994		1,561
1995		2,751
1996		1,444
1997		0
1998		314
1999		184
2000		0
2001		0
2002		0
2003		0
2004		32
2005		248
2006		0
2007		0
2008		148
2009		0
2010		0
2011		73
2012		0
2013		0
2014		195
2015		1,391
2016		0
Average		432
Std. Dev.		728

(Linked file: *AMSPELSALLANDTAB.DOCX*)

Table A-9. Supporting Data for American Samoa trolling catch per unit effort (CPUE in pounds per hour) for all pelagic species, and effective troll hours.

Year	CPUE	Hours
1982	25.91	1,019
1983	27.41	3,513
1984	30.97	7,785
1985	32.59	4,394
1986	19.36	11,294
1987	25.34	6,179
1988	38.01	6,125
1989	23.79	8,370
1990	21.86	4,362
1991	20.64	4,884
1992	28.97	3,809
1993	20.09	3,216
1994	21.23	11,448
1995	22.94	12,143
1996	27.38	4,442
1997	22.31	3,144
1998	19.93	1,405
1999	26.81	1,981
2000	22.01	1,149
2001	18.09	1,655
2002	20.62	1,362
2003	31.78	1,044
2004	25.70	1,204
2005	25.44	862
2006	36.02	883
2007	35.15	723
2008	50.44	808
2009	26.38	424
2010	20.32	308
2011	51.56	711
2012	52.03	389
2013	27.40	673
2014	25.31	1,063
2015	15.80	1,143
2016	85.69	654
Average	29.29	3,273
Std. Dev.	13.11	3,333

(Linked file: AMSPELALLCPUETAB.DOCX)

Table A-10. Supporting Data for Figure 20. American Samoa trolling catch rates for skipjack and yellowfin tuna.

Year	Pounds Caught Per Trolling Hour	
	Skipjack	Yellowfin
1982	15.90	7.80
1983	21.00	5.04
1984	18.10	7.20
1985	13.80	8.90
1986	12.90	4.31
1987	19.30	3.88
1988	26.00	7.30
1989	15.20	5.90
1990	12.80	5.51
1991	10.70	7.06
1992	18.70	6.40
1993	8.89	6.06
1994	12.60	4.49
1995	14.10	4.57
1996	12.70	8.98
1997	10.10	7.19
1998	10.80	4.89
1999	18.40	5.62
2000	14.90	4.61
2001	11.40	4.44
2002	9.03	9.83
2003	19.80	7.10
2004	18.20	5.10
2005	13.30	9.25
2006	15.40	10.80
2007	18.20	13.40
2008	21.50	26.90
2009	11.70	14.00
2010	8.78	9.23
2011	30.50	19.10
2012	25.90	23.20
2013	13.10	11.40
2014	13.90	6.95
2015	7.00	5.03
2016	34.70	33.40
Average	15.98	9.28
Std. Dev.	6.10	6.62

(Linked file: *AMSPELSKPCPUETAB.DOCX*)

Table A-11. Supporting Data for Figure 21. American Samoa trolling catch rates for blue marlin, mahimahi, and wahoo.

Year	Pounds Caught Per Trolling Hour		
	Blue Marlin	Mahimahi	Wahoo
1982	0.00	0.92	0.14
1983	0.43	0.43	0.15
1984	0.91	0.28	0.09
1985	0.41	2.06	0.36
1986	0.39	0.90	0.15
1987	0.00	0.52	0.23
1988	1.79	1.13	0.22
1989	1.40	0.36	0.15
1990	1.05	0.70	0.30
1991	1.70	0.57	4.39
1992	1.29	0.62	1.04
1993	2.25	1.38	1.84
1994	1.74	0.80	0.64
1995	1.74	0.69	1.00
1996	1.99	1.27	1.05
1997	1.86	1.18	0.63
1998	0.99	0.65	0.35
1999	0.13	1.21	0.37
2000	0.60	0.06	0.14
2001	0.00	0.60	0.37
2002	0.00	0.59	0.28
2003	1.39	1.49	0.59
2004	0.00	0.43	0.48
2005	0.00	0.21	0.94
2006	0.00	1.40	0.79
2007	0.31	0.98	1.29
2008	0.00	0.90	0.22
2009	0.00	0.58	0.00
2010	0.00	0.00	0.29
2011	0.00	1.02	0.04
2012	0.00	0.44	1.67
2013	0.00	0.46	1.78
2014	2.34	2.37	0.86
2015	2.49	1.26	0.38
2016	2.19	3.61	7.66
Average	0.84	0.92	0.88
Std. Dev.	0.86	0.69	1.41

(Linked file: AMSPELMARCPUETAB.DOCX)