

Final 2014 Sport Halibut Harvest Estimates for Areas 2C and 3A Alaska Department of Fish and Game

1. Area 2C:

Table 1.1. Area 2C sport halibut harvest estimates by sector and subarea, 2014.

Subarea	Charter			Non-charter (unguided)		
	No. Fish ^a	Avg. Wt. ^b	Yield (Mlb)	No. Fish ^a	Avg. Wt. ^b	Yield (Mlb)
Ketchikan	7,138	12.84	0.092	9,357	16.29	0.152
POW Island	17,214	9.42	0.162	11,350	11.48	0.130
PBG/WRG	2,071	18.03	0.037	12,872	20.00	0.257
Sitka	21,798	11.61	0.253	6,387	16.88	0.108
Jun/Haines/Skag	7,034	11.25	0.079	17,226	12.26	0.211
Glacier Bay	9,781	16.36	0.160	11,868	26.23	0.311
Area 2C	65,036	12.04	0.783	69,060	16.95	1.170

^a-Number of fish harvested in charter fishery is from logbook data, estimate for non-charter fishery is from the ADF&G Statewide Harvest Survey.

^b-Average net weight (headed and gutted).

Table 1.2. Approximate 95% confidence intervals for yield estimates (million pounds).

User	Estimate	StdErr	Lower 95%	Upper 95%
Charter	0.783	0.014	0.757	0.810
Non-Charter	1.170	0.069	1.035	1.306
Overall Sport	1.954	0.070	1.816	2.092

Table 1.3. Comparison of November 2014 preliminary and final estimates (million pounds).

Sector	Removal	Preliminary	Final	Difference (M lb)	Projection Error (%)
Charter	Harvest	0.825	0.783	0.042	5.3%
	Rel mort (waste)	0.048	0.045	0.003	6.7%
	Total	0.873	0.828	0.045	5.4%
Non-charter	Harvest	1.114	1.170	-0.056	-4.8%
	Rel mort (waste)	0.024	0.017	0.007	41.2%
	Total	1.138	1.187	-0.049	-4.2%

Table 1.4. Performance of Area 2C charter management measures recommended annually by the North Pacific Fishery Management Council, 2012-2014.

Year	Measures	Management Type	Allocation (Mlb)	Harvest ^a (Mlb)	Overage (Mlb)	% Overage
2012	One fish, U45-O68 size limit	GHL	0.931	0.605	-0.326	-35.0%
2013	One fish, U45-O68 size limit	GHL	0.788	0.762	-0.026	-3.3%
2014	One fish, U44-O76 size limit	CSP	0.761	0.827	0.066	8.7%

^a-Harvest includes O26 release mortality.

Table 1.5. Area 2C sport halibut harvest history by sector.

Year	Charter			Non-Charter			Total Sport Harvest		
	No. Fish	Avg. Wt. (lb net)	Yield (M lb)	No. Fish	Avg. Wt. (lb net)	Yield (M lb)	No. Fish	Avg. Wt. (lb net)	Yield (M lb)
1995	49,615	19.88	0.986	39,707	19.27	0.765	89,322	19.61	1.751
1996	53,590	22.15	1.187	41,307	22.82	0.943	94,897	22.44	2.129
1997	51,181	20.19	1.034	53,205	21.40	1.139	104,386	20.81	2.172
1998	54,364	29.14	1.584	42,580	21.53	0.917	96,944	25.80	2.501
1999	52,735	17.80	0.939	44,301	20.41	0.904	97,036	18.99	1.843
2000	57,208	19.75	1.130	54,432	20.59	1.121	111,640	20.16	2.251
2001	66,435	18.10	1.202	43,519	16.56	0.721	109,954	17.49	1.923
2002	64,614	19.74	1.275	40,199	20.25	0.814	104,813	19.94	2.090
2003	73,784	19.13	1.412	45,697	18.52	0.846	119,481	18.90	2.258
2004	84,327	20.75	1.750	62,989	18.84	1.187	147,316	19.93	2.937
2005	102,206	19.10	1.952	60,364	14.01	0.845	162,570	17.21	2.798
2006	90,471	19.94	1.804	50,520	14.30	0.723	140,991	17.92	2.526
2007	109,835	17.46	1.918	68,498	16.51	1.131	178,333	17.10	3.049
2008	102,965	19.42	1.999	66,296	19.08	1.265	169,261	19.28	3.264
2009	53,602	23.31	1.249	65,549	17.29	1.133	119,151	20.00	2.383
2010	41,202	26.36	1.086	52,896	16.72	0.885	94,098	20.94	1.971
2011	36,545	9.40	0.344	42,202	16.24	0.685	78,747	13.07	1.029
2012	42,436	14.27	0.605	54,696	17.87	0.977	97,132	16.30	1.583
2013	52,675	14.47	0.762	78,078	17.43	1.361	130,753	16.24	2.123
2014	65,036	12.04	0.783	69,060	16.95	1.170	134,096	14.57	1.954

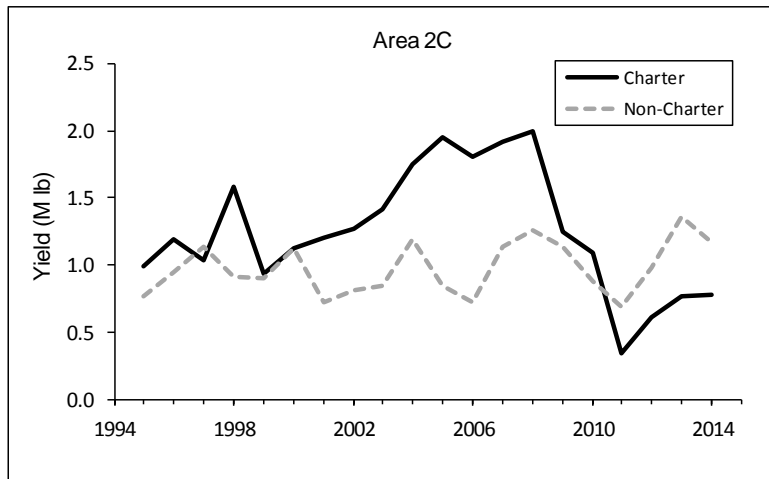


Figure 1.1. Charter and non-charter halibut harvest, average weight, and yield (M lb) in Area 2C since 1995.

2. Area 3A Harvest:

Table 2.1. Area 3A sport halibut harvest estimates by sector and subarea, 2014.

Subarea	Charter			Non-charter (unguided)		
	No. Fish ^a	Avg. Wt. ^b	Yield (Mlb)	No. Fish ^a	Avg. Wt. ^b	Yield (Mlb)
Central Cook Inlet	38,507	11.42	0.440	35,026	10.63	0.372
Lower Cook Inlet	67,701	9.19	0.622	47,982	10.09	0.484
Kodiak	12,358	14.16	0.175	10,061	15.36	0.155
North Gulf Coast	42,337	10.81	0.458	14,090	11.06	0.156
Eastern PWS	4,379	23.09	0.101	7,775	17.57	0.137
Western PWS	4,514	19.05	0.086	10,378	16.67	0.173
Yakutat	3,429	29.33	0.101	1,813	31.29	0.057
Glacier Bay	1,126	44.03	0.050	--	--	--
Area 3A	174,351	11.65	2.032	127,125	12.06	1.533

^a-Number of fish harvested in charter fishery is from logbook data, estimate for non-charter fishery is from the ADF&G Statewide Harvest Survey.

^b-Average net weight (headed and gutted).

Table 2.2. Approximate 95% confidence intervals for yield estimates (million pounds).

User	Estimate	StdErr	Lower 95%	Upper 95%
Charter	2.032	0.050	1.934	2.130
Non-Charter	1.533	0.077	1.382	1.684
Overall Sport	3.565	0.126	3.317	3.812

Table 2.3. Comparison of November 2014 yield projections to final estimates (million pounds).

Sector	Removal	Preliminary	Final	Difference (M lb)	Projection Error (%)
Charter	Harvest	2.139	2.032	0.107	5.3%
	Rel mort (waste)	0.044	0.044	<0.001	0.2%
	Total	2.183	2.075	0.108	5.2%
Non-charter	Harvest	1.452	1.533	-0.081	-5.3%
	Rel mort (waste)	0.038	0.026	0.012	47.9%
	Total	1.490	1.559	-0.069	-4.4%

Table 2.4. Performance of Area 3A charter management measures recommended annually by the North Pacific Fishery Management Council, 2012-2014.

Year	Measures	Management Type	Allocation (Mlb)	Harvest ^a (Mlb)	Overage (Mlb)	% Overage
2012	Two fish, no size limit, crew harvest allowed.	GHL	3.103	2.284	-0.819	-26.4%
2013	Two fish, no size limit, crew harvest allowed.	GHL	2.734	2.514	-0.220	-8.0%
2014	Two fish, one < 29", one trip per vessel per day, CSP provisions.	CSP	1.782	2.066	0.284	15.9%

^a-Harvest includes O26 release mortality.

Table 2.5. Area 3A sport halibut harvest history by sector.

Year	Charter			Non-Charter			Total Sport Harvest		
	No. Fish	Avg. Wt. (lb net)	Yield (M lb)	No. Fish	Avg. Wt. (lb net)	Yield (M lb)	No. Fish	Avg. Wt. (lb net)	Yield (M lb)
1995	137,843	20.64	2.845	95,206	17.50	1.666	233,049	19.36	4.511
1996	142,957	19.74	2.822	108,812	17.63	1.918	251,769	18.83	4.740
1997	152,856	22.33	3.413	119,510	17.58	2.100	272,366	20.24	5.514
1998	143,368	20.82	2.985	105,876	16.22	1.717	249,244	18.86	4.702
1999	131,726	19.23	2.533	99,498	17.03	1.695	231,224	18.29	4.228
2000	159,609	19.67	3.140	128,427	16.86	2.165	288,036	18.42	5.305
2001	163,349	19.18	3.132	90,249	17.09	1.543	253,598	18.43	4.675
2002	149,608	18.20	2.724	93,240	15.86	1.478	242,848	17.30	4.202
2003	163,629	20.67	3.382	118,004	17.34	2.046	281,633	19.27	5.427
2004	197,208	18.60	3.668	134,960	14.35	1.937	332,168	16.88	5.606
2005	206,902	17.83	3.689	127,086	15.61	1.984	333,988	16.98	5.672
2006	204,115	17.95	3.664	114,887	14.57	1.674	319,002	16.73	5.337
2007	236,133	16.95	4.002	166,338	13.71	2.281	402,471	15.61	6.283
2008	198,108	17.05	3.378	145,286	13.37	1.942	343,394	15.49	5.320
2009	167,599	16.31	2.734	150,205	13.47	2.023	317,804	14.97	4.758
2010	177,460	15.20	2.698	124,088	12.79	1.587	301,548	14.21	4.285
2011	184,293	15.16	2.793	128,464	12.57	1.615	312,757	14.09	4.408
2012	173,582	13.16	2.284	113,359	11.83	1.341	286,941	12.64	3.626
2013	199,248	12.62	2.514	121,568	11.94	1.452	320,816	12.36	3.966
2014	174,351	11.65	2.032	127,125	12.06	1.533	301,476	11.82	3.565

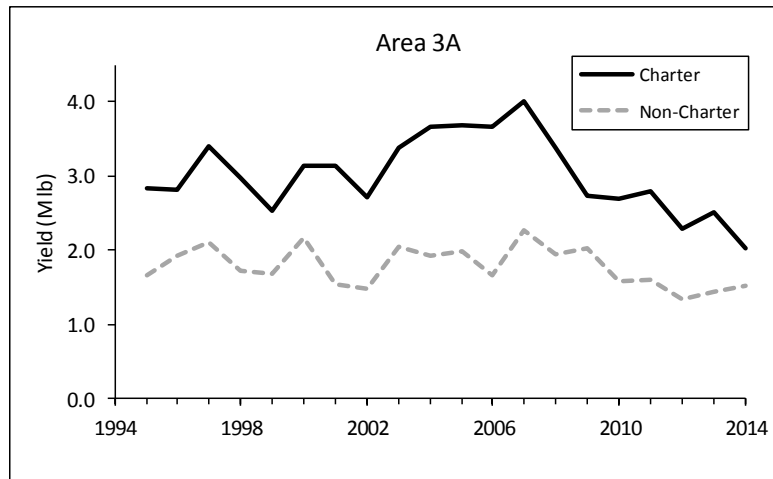


Figure 2.1. Charter and non-charter halibut harvest, average weight, and yield (M lb) in Area 3A since 1995.

3. Comparison of Logbook and Statewide Harvest Survey Estimates

Table 3.1. Comparison of estimates of charter halibut harvest biomass (yield) based on numbers of fish from logbooks and estimated via the ADF&G Statewide Harvest Survey (SWHS), 2006-2014. Logbook numbers include all reported harvest by clients, comps, and crew.

Area	Year	Logbook		SWHS	
		Yield (lb)	StdErr	Yield (lb)	StdErr
2C	2006	2.063	0.052	1.804	0.089
	2007	2.015	0.028	1.918	0.085
	2008	1.974	0.025	1.999	0.099
	2009	1.187	0.022	1.249	0.071
	2010	1.249	0.040	1.086	0.077
	2011	0.452	0.005	0.344	0.015
	2012	0.728	0.025	0.605	0.034
	2013	0.825	0.026	0.762	0.037
	2014	0.783	0.014	0.677	0.027
	3A	2006	4.689	0.072	3.664
2007		4.229	0.059	4.002	0.120
2008		3.865	0.063	3.378	0.142
2009		3.044	0.055	2.734	0.133
2010		3.238	0.123	2.698	0.116
2011		3.308	0.133	2.793	0.129
2012		2.802	0.087	2.284	0.087
2013		2.724	0.085	2.514	0.093
2014		2.032	0.069	1.858	0.076

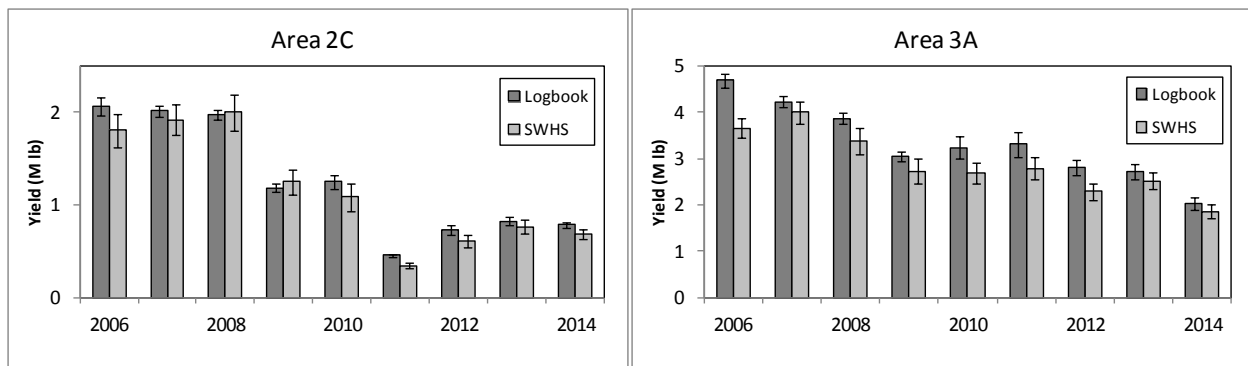


Figure 3.1. Comparison of logbook- and SWHS-based estimates of charter halibut yield in Areas 2C and 3A (with approx 95% confidence intervals).