

Final 2013 Sport Halibut Harvest Estimates

Alaska Department of Fish and Game

1. Area 2C Harvest:

Table 1.1. Area 2C sport halibut harvest estimates by sector and subarea, 2013.

Subarea	Charter			Non-Charter		
	Avg. Wt. (lb) ^a	No. Fish ^b	Yield (lb)	Avg. Wt. (lb) ^a	No. Fish ^b	Yield (lb)
Ketchikan	14.0	4,975	69,739	15.5	13,689	212,493
Prince of Wales Island	12.2	11,074	134,717	14.4	13,674	196,517
Petersburg/Wrangell	20.3	4,168	84,570	20.2	17,159	347,390
Sitka	12.6	17,669	221,981	13.5	5,285	71,498
Juneau/Haines/Skagway	12.5	6,821	85,158	12.5	16,308	204,367
Glacier Bay	20.9	7,968	166,202	27.5	11,963	328,592
Area 2C	14.5	52,675	762,369	17.4	78,078	1,360,857

^a-Average net weight (headed and gutted), rounded to the nearest 0.1 lb.

^b-Estimated number of fish harvested from the ADF&G Statewide Harvest Survey.

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

Sector	Estimate	Standard Error	Confidence Interval
Charter	0.762	0.037	0.690 - 0.835
Noncharter	1.361	0.085	1.195 - 1.527
Overall	2.123	0.092	1.942 - 2.305

^a-Standard errors; preliminary estimates.

Table 1.3. Comparison of November 2013 preliminary and final estimates (million pounds).

Sector	Preliminary	Final	Preliminary Error (M lb)	Preliminary Error (%)
Charter yield	0.723	0.762	-0.039	-5.1%
Charter release mortality	0.041	0.042	-0.001	-2.4%
Noncharter yield	0.904	1.361	-0.457	-33.6%
Noncharter release mortality	0.011	0.029	-0.018	-62.1%

Table 1.4. History of Area 2C charter regulations.

Year	Charter Regulations
1995-2005	Two-fish bag limit (no size restrictions), no limit on crew retention.
2006	Two-fish bag limit (no size limit), state EO prohibiting crew harvest 5/26-12/31.
2007	Two-fish bag limit (1 under 32" eff. 6/1), no crew retention 5/1-12/31 (State EO and Federal Rule).
2008	Two-fish bag limit (1 under 32"), except one-fish bag limit Jun 1-10 (halted by injunction).
2009	One fish (no size limit), no harvest by skipper & crew, line limit (effective June 5).
2010	One fish (no size limit), no harvest by skipper & crew, line limit.
2011	One fish with maximum size limit of 37", no harvest by skipper and crew, line limit.
2012-2013	U45"O68" reverse slot limit, no harvest by skipper and crew, line limit.

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

Year	Charter				Non-Charter			Total Sport Harvest		
	No. Fish	Avg. Wt. (lb)	Yield (M lb)	GHL (M lb)	No. Fish	Avg. Wt. (lb)	Yield (M lb)	No. Fish	Avg. Wt. (lb)	Yield (M lb)
1995	49,615	19.9	0.986	No GHL	39,707	19.3	0.765	89,322	19.6	1.751
1996	53,590	22.1	1.187		41,307	22.8	0.943	94,897	22.4	2.129
1997	51,181	20.2	1.034		53,205	21.4	1.139	104,386	20.8	2.172
1998	54,364	29.1	1.584		42,580	21.5	0.917	96,944	25.8	2.501
1999	52,735	17.8	0.939		44,301	20.4	0.904	97,036	19.0	1.843
2000	57,208	19.7	1.130		54,432	20.6	1.121	111,640	20.2	2.251
2001	66,435	18.1	1.202		43,519	16.6	0.721	109,954	17.5	1.923
2002	64,614	19.7	1.275		40,199	20.3	0.814	104,813	19.9	2.090
2003	73,784	19.1	1.412		1.432	45,697	18.5	0.846	119,481	18.9
2004	84,327	20.7	1.750	1.432	62,989	18.8	1.187	147,316	19.9	2.937
2005	102,206	19.1	1.952	1.432	60,364	14.0	0.845	162,570	17.2	2.798
2006	90,471	19.9	1.804	1.432	50,520	14.3	0.723	140,991	17.9	2.526
2007	109,835	17.5	1.918	1.432	68,498	16.5	1.131	178,333	17.1	3.049
2008	102,965	19.4	1.999	0.931	66,296	19.1	1.265	169,261	19.3	3.264
2009	53,602	23.3	1.249	0.788	65,549	17.3	1.133	119,151	20.0	2.383
2010	41,202	26.4	1.086	0.788	52,896	16.7	0.885	94,098	20.9	1.971
2011	36,545	9.4	0.344	0.788	42,202	16.2	0.685	78,747	13.1	1.029
2012	42,436	14.3	0.605	0.931	54,696	17.9	0.977	97,132	16.3	1.583
2013	52,675	14.5	0.762	0.788	78,078	17.4	1.361	130,753	16.2	2.123

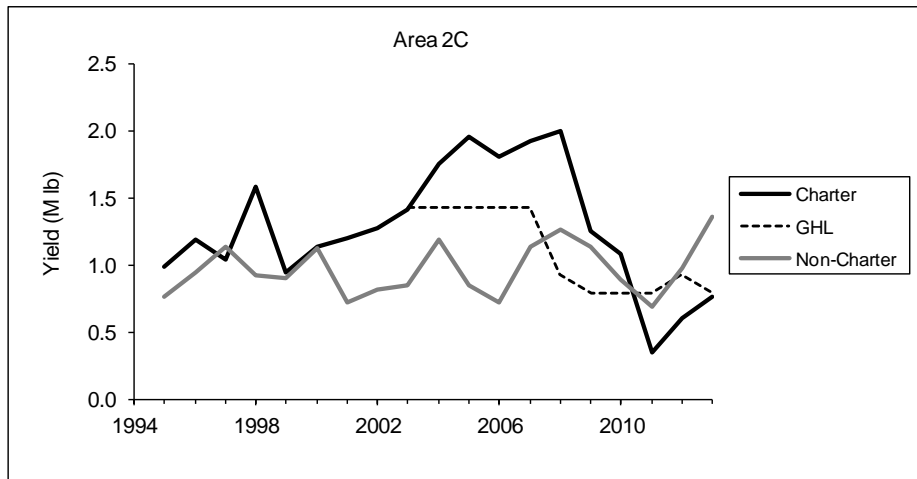


Figure 1.1. Charter and non-charter halibut yield (M lb) and charter Guideline Harvest Level (GHL) in Area 2C since 1995.

2. Area 3A Harvest:

Table 2.1. Area 3A sport halibut harvest estimates by sector and subarea, 2013.

Subarea	Charter			Non-Charter		
	Avg. Wt. (lb) ^a	No. Fish ^b	Yield (lb)	Avg. Wt. (lb) ^a	No. Fish ^b	Yield (lb)
Central Cook Inlet	12.6	51,617	650,502	11.0	32,665	357,936
Lower Cook Inlet	10.7	73,075	784,194	10.7	50,125	536,463
Kodiak	11.4	18,202	207,188	12.6	8,389	105,297
North Gulf Coast	12.3	39,594	485,625	15.1	13,403	202,846
Eastern PWS	20.6	5,510	113,475	14.9	5,767	85,683
Western PWS	16.3	5,121	83,722	12.9	10,236	132,300
Yakutat	28.0	4,845	135,456	32.0	983	31,410
Glacier Bay	42.3	1,284	54,254	--	--	--
Area 3A	12.6	199,248	2,514,417	11.9	121,568	1,451,934

^a-Average net weight (headed and gutted), rounded to the nearest 0.1 lb.

^b-Estimated number of fish harvested from the ADF&G Statewide Harvest Survey.

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

Sector	Estimate	StdErr	Confidence Interval
Charter	2.514	0.093	2.332 - 2.697
Non-Charter	1.452	0.085	1.285 - 1.619
Overall	3.966	0.126	3.719 - 4.214

Table 2.3. Comparison of November 2013 yield projections to final estimates (million pounds).

Sector	Preliminary	Final	Preliminary Error (M lb)	Preliminary Error (%)
Charter yield	2.271	2.514	-0.243	-9.7%
Charter release mortality	0.036	0.049	-0.013	-26.5%
Noncharter yield	1.444	1.452	-0.008	-0.5%
Noncharter release mortality	0.038	0.029	0.009	31.0%

Table 2.4. History of Area 3A charter regulations.

Year	Charter Regulations
1995-2006	Two-fish bag limit (no size limit), no limit on crew retention
2007	Two-fish bag limit (no limit), state EO prohibiting crew harvest 5/1-12/31.
2008	Two-fish bag limit (no limit), state EO prohibiting crew harvest 5/24-9/1.
2009	Two-fish bag limit (no size limit), state EO prohibiting crew harvest 5/23-9/1.
2010-2013	Two-fish bag limit (no size limit), no limit on crew retention

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

Year	Charter				Non-Charter			Total Sport Harvest		
	No. Fish	Avg. Wt. (lb)	Yield (M lb)	GHL (M lb)	No. Fish	Avg. Wt. (lb)	Yield (M lb)	No. Fish	Avg. Wt. (lb)	Yield (M lb)
1995	137,843	20.6	2.845	No GHL	95,206	17.5	1.666	233,049	19.4	4.511
1996	142,957	19.7	2.822		108,812	17.6	1.918	251,769	18.8	4.740
1997	152,856	22.3	3.413		119,510	17.6	2.100	272,366	20.2	5.514
1998	143,368	20.8	2.985		105,876	16.2	1.717	249,244	18.9	4.702
1999	131,726	19.2	2.533		99,498	17.0	1.695	231,224	18.3	4.228
2000	159,609	19.7	3.140		128,427	16.9	2.165	288,036	18.4	5.305
2001	163,349	19.2	3.132		90,249	17.1	1.543	253,598	18.4	4.675
2002	149,608	18.2	2.724		93,240	15.9	1.478	242,848	17.3	4.202
2003	163,629	20.7	3.382	3.650	118,004	17.3	2.046	281,633	19.3	5.427
2004	197,208	18.6	3.668	3.650	134,960	14.4	1.937	332,168	16.9	5.606
2005	206,902	17.8	3.689	3.650	127,086	15.6	1.984	333,988	17.0	5.672
2006	204,115	17.9	3.664	3.650	114,887	14.6	1.674	319,002	16.7	5.337
2007	236,133	16.9	4.002	3.650	166,338	13.7	2.281	402,471	15.6	6.283
2008	198,108	17.0	3.378	3.650	145,286	13.4	1.942	343,394	15.5	5.320
2009	167,599	16.3	2.734	3.650	150,205	13.5	2.023	317,804	15.0	4.758
2010	177,460	15.2	2.698	3.650	124,088	12.8	1.587	301,548	14.2	4.285
2011	184,293	15.2	2.793	3.650	128,464	12.6	1.615	312,757	14.1	4.408
2012	173,582	13.2	2.284	3.103	113,359	11.8	1.341	286,941	12.6	3.626
2013	199,248	12.6	2.514	2.734	121,568	11.9	1.452	320,816	12.4	3.966

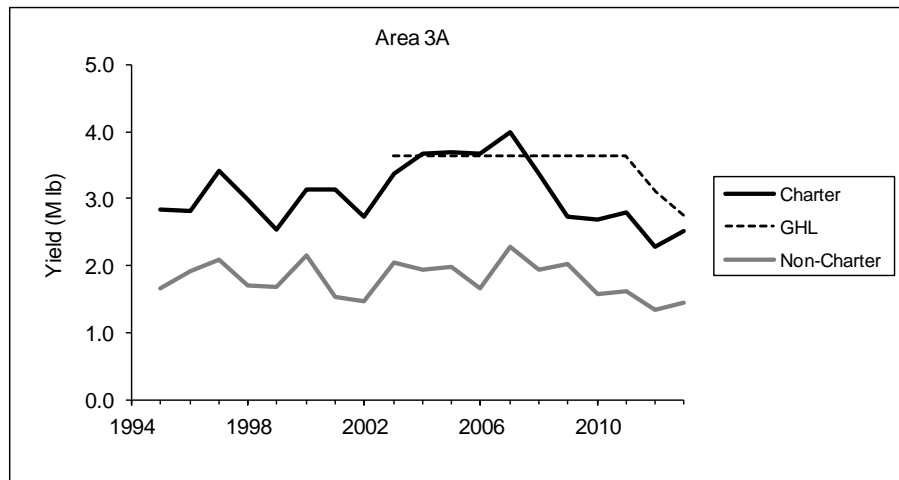


Figure 2.1. Charter and non-charter halibut yield (M lb) and charter Guideline Harvest Level (GHL) in Area 3A since 1995.

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), 2006-2013. Logbook numbers include harvest by clients, comps, and crew.

Area	Year	Logbook		Statewide Harvest Survey	
		Yield (M lb)	StdErr	Yield (M 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
3A	2006	4.689	0.072	3.664	0.108
	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

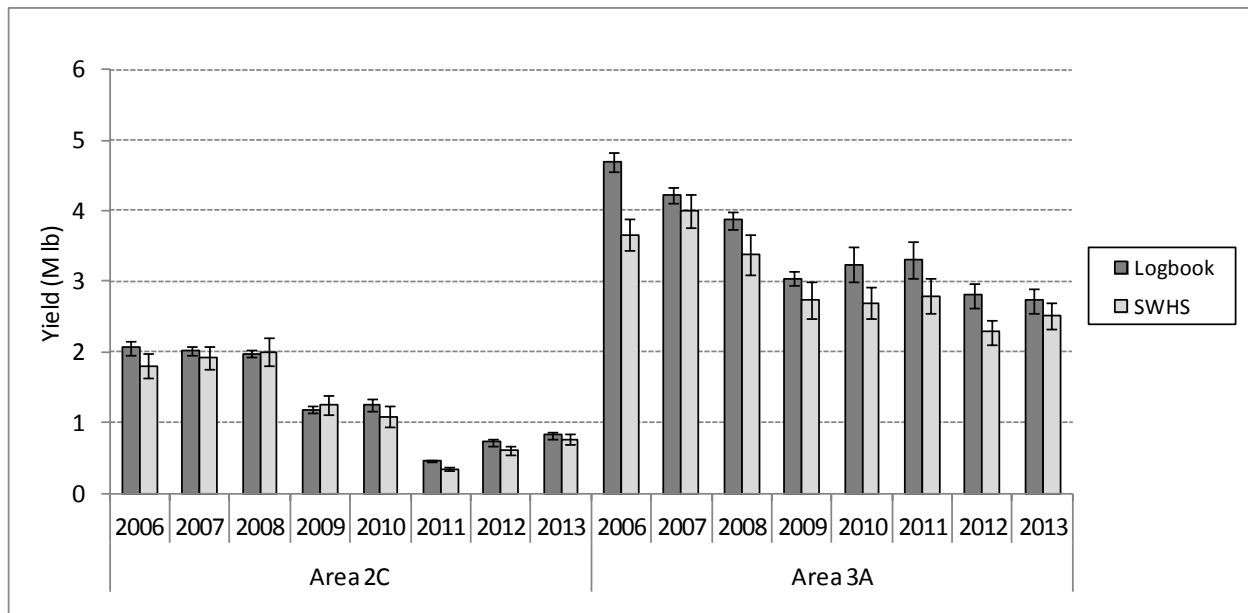


Figure 3.1. Comparison of logbook- and SWHS-based estimates of charter halibut yield in Areas 2C and 3A (with approx 95% confidence intervals).