

The personal use harvest of Pacific halibut through 2011

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Abstract

Pacific halibut is taken throughout its eastern range as a personal use harvest by several fisheries. The primary harvests are taken in the treaty Indian ceremonial and subsistence fishery occurring in the waters off northwest Washington State, the First Nations food fish fishery in British Columbia, and the subsistence fishery off Alaska. Estimates of the coast-wide personal use harvest in 2010, the most recent year for which data for all areas are available, totaled 1.25 million pounds, down slightly from 2009. Data for 2011 were incomplete as of this writing and only available for Areas 2A and 2B, and for 4D/4E Community Development Quota operations. The 2010 personal use harvest in Alaska was down 8.5% relative to 2009, whereas the estimate for Area 2B was unchanged. The Alaskan subsistence fishery harvest has been declining since 2004.

Introduction

The removals of Pacific halibut which are accounted for in the IPHC stock assessment include commercial and sport catch, bycatch, wastage, and personal use. Personal use includes removals from several fisheries, including some for which there are little documented data. Personal use harvests are taken in (1) the federal subsistence fishery in Alaska, (2) the sanctioned First Nations Food, Social, and Ceremonial (FSC) fishery conducted in British Columbia, (3) ceremonial and subsistence removals in the Area 2A treaty Indian fishery, and (4) U32 halibut retained in Areas 4D and 4E under International Pacific Halibut Commission (IPHC) regulations. These removals are summarized here for 2010, the most recent year for which full information is available. In addition, incomplete data for 2011 are also provided.

Estimated harvests by area

The coast-wide personal use harvest was estimated by the IPHC at more than two million pounds in 1991, declined rapidly through 1995, and became relatively stable over the following two years (Table 1). Harvest estimation methods were revised in 1998, and the resulting estimates were subsequently somewhat higher and remained fairly stable through 2002. Harvests increased substantially again in 2003 (Table 2) following the implementation of new subsistence fishery regulations in Alaska and a more comprehensive harvest estimation survey. It is important to note that many of the changes seen in the harvest estimates prior to 2003 were due primarily to changes in estimation methods and may not necessarily have reflected actual changes in harvest levels. The majority of the coast-wide personal use harvest was taken from waters off Alaska.

Alaska

The IPHC began estimating the personal use harvest in Alaska in 1991. Documentation of estimation methods is not available but the available estimates indicated that personal use in Alaska totaled 1.95 million pounds that year (Table 3). The estimate for 1992 decreased by one half, to

1.00 million pounds. Estimates were subsequently made for each IPHC area independently, but not necessarily annually for all areas.

Trumble (1999) developed a methodology to estimate personal use using halibut catch information gathered by household interviews and postal surveys conducted by the Alaska Department of Fish and Game (ADF&G). The surveys did not distinguish between sport and personal use harvests, so Trumble made assumptions about the amount of sport and personal use in native and non-native households. The resulting estimates were used for Alaska from 1998-2002, with the only annual changes being the amount of sublegal poundage retained by the Area 4E Community Development Quota (CDQ) fishers.

In 2003, the subsistence fishery for halibut off Alaska was formally recognized by the North Pacific Fishery Management Council, and a separate set of fishery regulations was created, which varied according to IPHC regulatory area. One provision of the subsistence fishery management program was the establishment of an annual voluntary survey of fishers to determine the annual harvest. The survey of the 2010 fishery participants, the eighth since the surveys began in 2003, was conducted by the Subsistence Division of ADF&G under contract to the U.S. National Marine Fisheries Service. Retention in 2010 totaled 797,560 pounds (net weight) in Areas 2C through 4E (Fall et al. in press; Table 2). This represents a 7.4% decrease from 2009 for these fisheries.

The ADF&G survey indicated that 53% of the total 2010 subsistence harvest in Alaska was taken in Area 2C, with 39% harvested in Area 3A. The five subareas of Area 4 totaled 37,083 pounds, or 4.6% of the Alaskan subsistence harvest. The communities within Area 4E accounted for 27% of the subsistence harvest within Area 4, which was higher than in 2009 but remained low compared to previous years (Table 2).

In addition to the aforementioned personal use harvest reported by ADG&G, IPHC adds the amount of U32 halibut retained by the Area 4D/4E CDQ fishery to arrive at the total personal use harvest by all sources. The CDQ organizations are required to report to the IPHC the amounts of U32 halibut that they have retained (Williams 2012). The ADF&G subsistence survey reported by Fall et al. (in press) included all registered fishers and households in all areas. One exception occurred with fisheries in Areas 4D and 4E, where fishers participating in the commercial CDQ fisheries were instructed to exclude any retained U32 halibut. The fishers who retained U32 fish as part of their Area 4D/4E CDQ commercial harvest were not required to register for the subsistence fishery and therefore should not have participated in the survey. Therefore, in the present report (Table 2), the sublegal harvests described by Williams (2012) were added to the subsistence harvest estimates reported by Fall et al. (in press) to fully account for the total 2010 personal use harvest. Table 2 also separately provides the amount retained in 2011 by the three eligible CDQ organizations.

British Columbia

The primary source of personal use harvest in British Columbia was the First Nations FSC fishery. In past years, the IPHC has received some logbook and landing data for this harvest from the Canadian Department of Fisheries and Oceans (DFO) but those data have not been adequate for the IPHC to make an independent estimate of the FSC fishery harvest. Thus, the IPHC relies on DFO for an estimate. Through 2006, DFO had estimated this harvest to be 300,000 pounds annually, a figure that had remained unchanged for a decade. Since 2007, this harvest estimate has been fixed at 405,000 pounds (Table 3).

In the commercial fishery, take-home fish was considered personal use harvest prior to the implementation of the Individual Vessel Quota (IVQ) program. Currently, in the IVQ program all halibut landed by a vessel is weighed by the port monitors at the time of the offload and any take-home fish is taken from this quantity; thus, non-FSC personal use is included as part of the vessel's commercial catch.

Washington, Oregon, and California

In Area 2A (Washington, Oregon, and California), the Pacific Fishery Management Council allocates the catch limit to directed and incidental commercial fisheries, sport fisheries, and treaty Indian fisheries operating off northwest Washington. The Treaty tribes further subdivide a portion of their allocation to their own ceremonial and subsistence (C&S) fishery. For 2011, the C&S allocation to the treaty tribes was 25,300 pounds (Table 3).

State regulations require that personal use fish from the commercial hook-and-line halibut fisheries be recorded on the fish tickets. This reporting requirement results in the personal use catch being included in the commercial catch, which is consistent with the procedure used in the quota share fisheries in other regulatory areas, and therefore is not reported here.

References

- Fall, J. A. and D. Koster. *In press*. Subsistence harvests of Pacific halibut in Alaska, 2009. AK Dept. Fish and Game, Tech. Paper. 367. 209 p.
- Trumble, R. J. 1999. 1998 estimates of personal use. Int. Pac. Halibut Comm. Report of Assessment and Research Activities 1998:61-64.
- Williams, G. H. 2012. Retention of U32 halibut in the 2011 Area 4D/4E CDQ fishery. Int. Pac. Halibut Comm. Report of Assessment and Research Activities 2010: 67-70.

Table 1. Estimates of the personal use harvest (thousands of pounds, net weight) of Pacific halibut by IPHC regulatory area from 1991-2002.

Year	Regulatory Area						Total
	2A	2B	2C	3A	3B	4	
1991	10.0	50	720	-----1,000-----		230	2,010
1992	14.2	100	-----1,000-----				1,114
1993	15.8	300	108	328	59	121	932
1994	10.9	300	108	328	59	121	927
1995	14.2	300	n/a	97	37	94	542
1996	15.0	300	n/a	97	37	94	543
1997	14.8	300	n/a	97	37	94	543
1998	10.5	300	170	74	20	166	741
1999	10.5	300	170	74	20	170	745
2000	17.5	300	170	74	20	175	757
2001	16.0	300	170	74	20	192	772
2002	16.0	300	170	74	20	180	760

Table 2. Estimates of the personal use harvest (thousands of pounds, net weight) of Pacific halibut by IPHC regulatory area since 2003. Estimates for most recent year are preliminary.

Year	2A	2B	2C	3A	3B	4A	4B	4C	4D	4E	4D/4E CDQ	Total
2003	27.0	300.0	628.0	279.6	27.6	20.7	2.5	23.8	4.4	54.5	14.3	1,382.4
2004	19.4	300.0	677.1	403.6	33.5	28.9	0.9	9.7	10.9	28.5	16.2	1,528.7
2005	36.0	300.0	598.1	429.3	46.2	35.6	1.4	7.7	5.8	54.0	23.2	1,537.3
2006	33.0	300.0	580.1	381.9	48.6	27.0	2.8	8.5	8.3	70.7	19.7	1,480.6
2007	33.0	405.0	524.9	372.2	47.7	14.9	2.0	15.0	3.2	52.1	19.0	1,489.0
2008	30.0	405.0	458.4	337.4	42.2	19.6	4.7	5.7	3.1	15.9	21.8	1,343.8
2009	29.0	405.0	457.0	328.5	25.5	33.5	1.2	6.3	0.6	8.7	10.3	1,305.6
2010	30.4	405.0	424.8	312.7	23.0	14.5	0.5	10.9	1.2	10.1	9.5	1,242.6
2011	25.3	405.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	16.9	n/a

Table 3. Summary of personal use harvest of Pacific halibut by region. Estimates for the most recent year are preliminary. Estimates are in thousands of pounds, net weight.

Year	West Coast	B.C.	Alaska	Total	Year	West Coast	B.C.	Alaska	Total
1991	10.0	50.0	1,950.0	2,010.0	2003	27.0	300.0	1,055.4	1,382.4
1992	14.2	100.0	1,000.0	1,114.2	2004	19.4	300.0	1,209.3	1,528.7
1993	15.8	300.0	616.0	931.8	2005	36.0	300.0	1,201.3	1,537.3
1994	10.9	300.0	616.0	926.9	2006	33.0	300.0	1,147.6	1,480.6
1995	14.2	300.0	228.0	542.2	2007	33.0	405.0	1,051.0	1,489.0
1996	15.0	300.0	228.0	543.0	2008	30.0	405.0	908.8	1,343.8
1997	14.8	300.0	228.0	542.8	2009	29.0	405.0	871.6	1,305.6
1998	10.5	300.0	430.0	740.5	2010	30.4	405.0	807.2	1,242.6
1999	10.5	300.0	434.0	744.5	2011	25.3	405.0	n/a	n/a
2000	17.5	300.0	439.0	756.5					
2001	16.0	300.0	456.0	772.0					
2002	16.0	300.0	444.0	760.0					

