



Updates to Catch Estimates from the U.S.A. Recreational Fishery from 2014 to 2017

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Abstract

Pacific Bluefin tuna (PBF) catches from the U.S.A. sport fishery are obtained from multiple sources. The predominant sport catch of PBF is from California Commercial Passenger Vessels. Catch estimates from private vessels that target PBF are obtained from the California Department of Fish and Wildlife (CDFW) and the Recreational Fisheries Network (RecFIN). Recent changes in data sources, along with analysis of previous years' estimates, have prompted a change in business rules that define the extent of previous years' catch estimates that should be updated each year.

Introduction

The U.S.A. recreational fishery for Pacific Bluefin tuna (PBF) has been the most important U.S.A. fishery for PBF in recent years since the decline of the U.S.A. commercial purse-seine fishery after the 1970s.

Sport catch estimates for PBF and other tunas caught in California waters were previously obtained from the Recreational Fisheries Information Network ([RecFIN](#)) but since 2017, they are obtained from CDFW. Sport catch estimates for PBF and other tunas caught in Washington and Oregon waters are still obtained from RecFIN. The sport fishery is divided into two fleets: Commercial Passenger Fishing Vessels (CPFVs) and private vessels. California CPFV estimates are taken from logbooks that captains are required to complete and submit to CDFW. California Private Vessel estimates are obtained from the California Recreational Fisheries Survey program (CRFS). Numbers of fish from both fleets are summarized by month and multiplied by monthly average weights to convert the catches to metric tons (Teo, et. al. 2015 ISC PBF WG-1/3). CPFV and private fleet PBF catch estimates from Washington and Oregon are obtained from RecFIN and expressed in metric tons.

Materials and Methods

When preparing for generating HMS summary reports to the three Pacific Regional Fisheries Management Organizations (WCPFC, IATTC, and ISC), the Southwest Fisheries Science Center requests sport catch data from CDFW (usually in March) and creates snapshots of summarized data from RecFIN. PBF catch estimates from the California private vessel fleet were not available from CDFW in 2017 or 2018 in time for annual submissions to the ISC. Catch

estimates from the private vessel fleets in Washington and Oregon were not available from RecFIN in 2018, so catches from the private vessel fleet were not included in the annual catch estimates generated for years 2016 and 2017.

Each year, preliminary PBF catch estimates for the most recent year are summarized for each fleet and estimates for the previous year were updated. Therefore, in 2017, preliminary PBF catch estimates were summarized for 2016 and the previous year's estimate for 2015 was updated. However, recent analysis of previous years' data requests from CDFW have shown that updates have occurred to estimates older than two years (see comparison of monthly summaries received from CDFW for the last 3 years). Also, since NOAA Fisheries Pacific Islands Fisheries Science Center (PIFSC) provides the most recent five years of estimates for the annual data submission to the Western and Central Pacific Fisheries Commission, since 2016 the SWFSC has been trying to provide the most recent five years of submission data to be consistent in U.S.A. reporting methods.

Results and Discussion

In 2019, both CPFV and private fleet PBF catch estimates were requested and received from CDFW for years 2013 through 2018. New PBF catch estimates for 2018 were generated using the same methodology described previously that include catches from the private sport fleet. A comparison of monthly California CPFV catch estimates of PBF received in 2017, 2018, and 2019 indicated several differences in the monthly estimates that were provided in each year. This prompted the updating of PBF catch estimates for years 2014 to 2017 using the same methodology previously described.

References

Teo S., et. al. 2015. Revision of estimates of catch in weight from the U.S.A. recreational fishery from 1993 to 2014. Working paper submitted to the ISC Pacific Bluefin Tuna Working Group, 20-24 April 2015, Shimizu, Shizuoka, Japan. ISC/15/PBFWG-1/03.

Tables

Table 1. Comparison of California CPFV retained PBF catch estimates (number of fish) received from CDFW between 2017 and 2019.

Catch Years	Catch Months	Species	Reporting Years			Difference	Percent Difference
			2017	2018	2019		
2015	1	PBF	420		420	0	0%
2015	2	PBF	268		268	0	0%
2015	3	PBF	20		20	0	0%
2015	4	PBF	11		11	0	0%
2015	5	PBF	716		716	0	0%
2015	6	PBF	866		866	0	0%
2015	7	PBF	4415		4436	21	0.5%
2015	8	PBF	9066		9539	473	5%
2015	9	PBF	5475		5730	255	5%
2015	10	PBF	90		96	6	7%
2015	11	PBF	37		37	0	0%
2015	12	PBF	2		2	0	0%
2016	3	PBF	22	22		-22	-100%
2016	4	PBF	617	617	663	46	7%
2016	5	PBF	286	286	296	10	3%
2016	6	PBF	428	436	473	37	8%
2016	7	PBF	475	515	546	31	6%
2016	8	PBF	3121	3248	3391	143	4%
2016	9	PBF	2798	2900	3183	283	10%
2016	10	PBF	414	468	469	1	0%
2016	11	PBF	849	1195	1195	0	0%
2016	12	PBF	163	176	176	0	0%
2017	2	PBF		1	1	0	0%
2017	3	PBF		52	52	0	0%
2017	4	PBF		466	472	6	1%
2017	5	PBF		748	762	14	2%
2017	6	PBF		339	339	0	0%
2017	7	PBF		438	462	24	5%
2017	8	PBF		4403	4815	412	9%
2017	9	PBF		3053	3396	343	11%
2017	10	PBF		1381	1616	235	17%

Catch Years	Catch Months	Species	Reporting Years			Difference	Percent Difference
			2017	2018	2019		
2017	11	PBF		1614	1970	356	22%
2017	12	PBF		938	1371	433	46%
2018	1	PBF			326		
2018	2	PBF			25		
2018	3	PBF			86		
2018	4	PBF			225		
2018	5	PBF			224		
2018	6	PBF			1285		
2018	7	PBF			1537		
2018	8	PBF			2414		
2018	9	PBF			1370		
2018	10	PBF			782		
2018	11	PBF			1429		
2018	12	PBF			31		