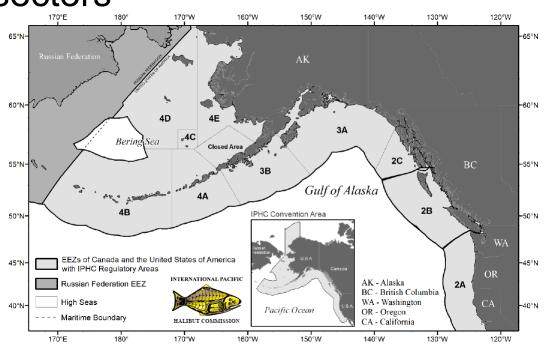


Overview

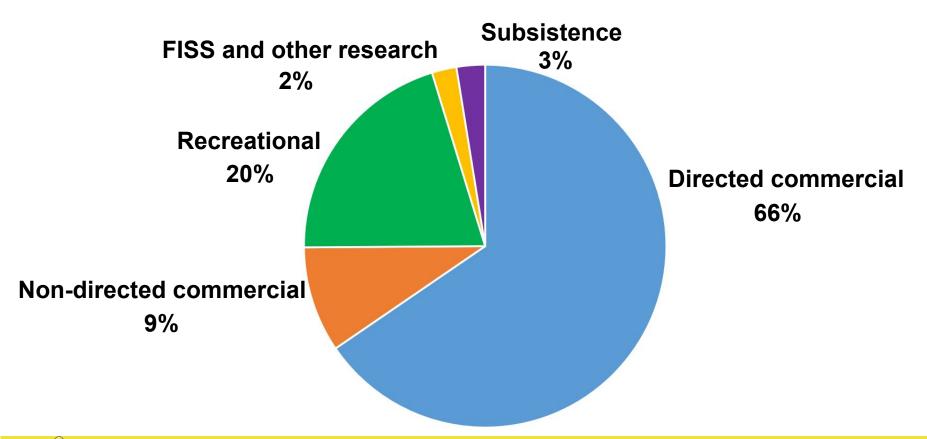
- Estimates for some sectors
- Net weight
- Full year projection

2021 TOTAL MORTALITY

17,104 tonnes 37.71 million pounds



Total Pacific Halibut Mortality



Total Pacific Halibut Removals

	2020			2021			
	tonnes	pounds	%	tonnes	pounds	%	
Directed commercial (landings and discard mortality)	10,115	22,299,598	65	11,219	24,734,535	66	
Recreational	2,432	5,361,154	16*	3,469	7,647,510	20*	
Subsistence	444	978,932	3	440	970,126	3	
Non-directed commercial discard mortality	2,079	4,584,000	13*	1,176	3,532,000	9*	
IPHC FISS and research	402	886,603	3	373	822,916	2	
Total	15,472	34,110,287	100	17,104	37,707,087	100	

^{*}Percentage of total (bottom row) for the given year – indicating shift of relative removals between the recreational and the non-directed commercial discard mortality fishery from 2020 to 2021



2021 Total Pacific Halibut Mortality

Contracting Party	Mortality limits		Mortality		Percent
	(net weight)		(net weight)		%
	Tonnes (t)	Pounds (lb)	Tonnes (t)	Pounds (lb)	
Canada - IPHC Regulatory Area 2B	3,175	7,000,000	3,018	6,653,325	95
United States of America	14,515	32,000,000	13,659	30,113,762	94
IPHC Regulatory Area 2A	748	1,650,000	651	1,435,845	87
IPHC Regulatory Area 2C	2,631	5,800,000	2,859	6,302,386	109
IPHC Regulatory Area 3A	6,350	14,000,000	6,314	13,920,562	99
IPHC Regulatory Area 3B	1,415	3,120,000	1,332	2,936,818	94
IPHC Regulatory Area 4A	930	2,050,000	747	1,646,075	80
IPHC Regulatory Area 4B	635	1,400,000	441	972,624	69
IPHC Regulatory Area 4CDE and Closed Area	1,805	3,980,000	1,315	2,899,452	73
Subtotal (TCEY)	17,690	39,000,000	16,677	36,767,087	94
Non-directed commercial discard mortality (U26)	none	none	426	940,000	n/a
Total	none	none	17,104	37,707,087	n/a

2021 Directed Commercial – Canada (BC)

6 March to 7 December

Quota Share Fishery

2,191 tonnes landed (4.8 million pounds)4% under the fishery limit



Projections through 2021

2021 Directed Commercial – U.S.A. (WA/OR/CA)

Treaty Indian directed commercial

- Fishery limit = 225 tonnes (0.5 million pounds)
- · Openers by tribe
 - Unrestricted fisheries
 - 6 March to 16 May
 - 55 hours
 - 19 May to 20 June
 - 24 hours
 - Restricted fishery
 - 6 March to 16 May
 - 102 hours
 - 0.2 tonnes (500 pounds) per day & 5 fishing days (max)
- 2% below fishery limit (220 tonnes, 0.5 million pounds)

Directed commercial

- Fishery limit = 116 tonnes (0.3 million pounds)
- Three 58-hr fishing periods (22-24 June, 6-8 July, 20-22 July)
- 5% under fishery limit (110 tonnes, 0.2 million pounds)



Projections through 2021

2021 Directed Commercial – U.S.A. (WA/OR/CA)

Incidental commercial landings with salmon troll fishery

- Fishery limit = 21 tonnes (0.05 million pounds)
- Open 1 April to 7 December
- No in-season limit action
 - 1:2 plus 1, max 35
- 59% under fishery limit
 - (8 tonnes, 0.02 million pounds)

Incidental commercial landings with sablefish fishery

- Fishery limit = 32 tonnes (0.07 million pounds)
- Open 1 April to 7 December
- One in-season action
 - 250:1000 plus 2 ➤ 225:1000 plus 2 (1 June)
- 9% under fishery limit (29 tonnes, 0.06 million pounds)



Projections through 2021

2021 Directed Commercial – U.S.A. (AK)

6 March to 7 December

Quota Share Fishery

Fishery Limit = 8,890 tonnes (19.6 million pounds)

8% under the fishery limit

(8,184 tonnes, 18.0 million pounds)

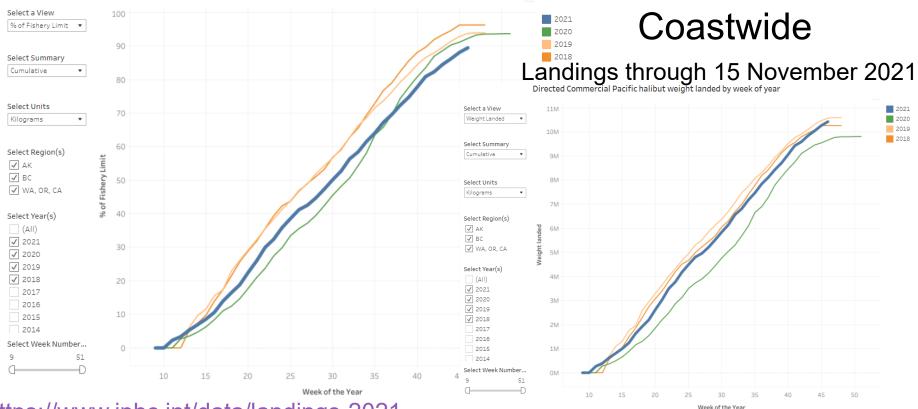


Projections through 2021

Annette Island Reserve Fishery

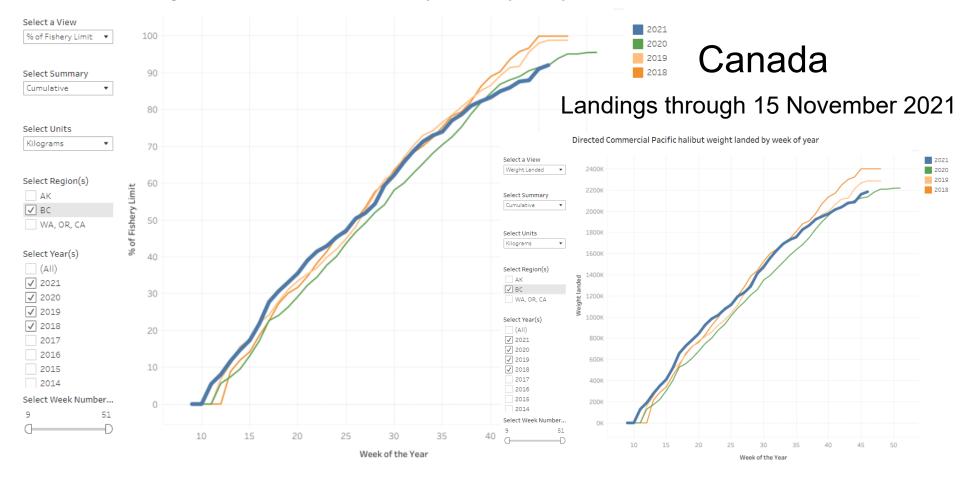
IPHC REGULATORY AREA 2C

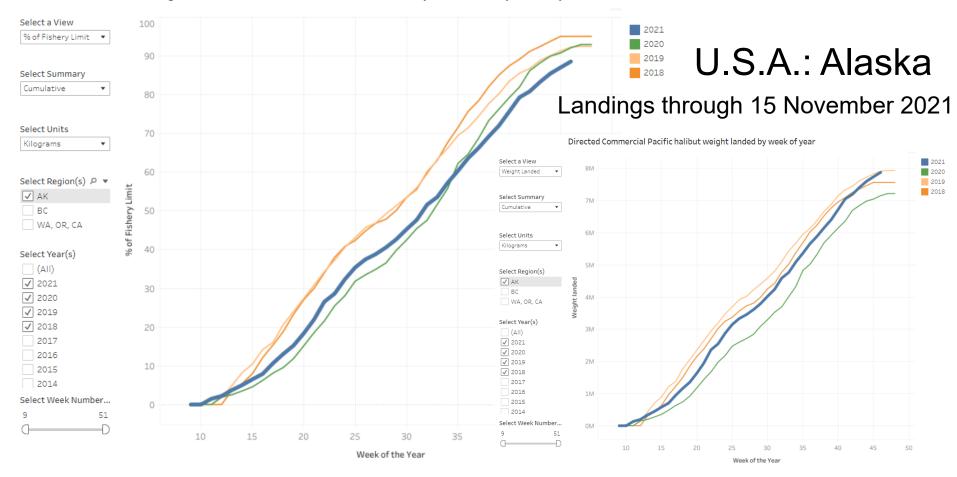
- no fishery limit
- 12 tonnes (0.03 million pounds) landed
- 14 two-day openings between 12 March and 26 September



https://www.iphc.int/data/landings-2021

https://www.iphc.int/data/year-to-date-directed-commercial-landing-patterns-ak-and-bc





Pacific Halibut Mortality in Excess – Canada

Fishery	Mortality projection		2021 Mortality			
	tonnes	pounds	tonnes	pounds	Percent	
		None				

Mortality projections are not part of the Fishery Constant Exploitation Yield and therefore, not considered here.

Pacific Halibut Mortality in Excess – U.S.A.

Fishery	IPHC Regulatory Area	Mortality limit or projection		2021 Mortality		
		tonnes	pounds	tonnes	Pounds	percent
Directed commercial discard mortality	2C	32	70,000	61	135,000	193
	3A	109	240,000	176	387,000	161
Recreational	2C – Guided	367	810,000	508	1,119,116	142
	3A – Guided	885	1,950,000	1,105	2,436,437	126

Mortality projections are not part of the Fishery Constant Exploitation Yield and therefore, not considered here.

Mortality Estimates with Greatest Uncertainty

Directed Commercial Discard Mortality – U.S.A.

- Alaska
 - No observer coverage for vessels less than 40 feet

Recreational – Canada and U.S.A.

Self reporting of lodges in BC and AK

Subsistence - Canada

- Estimates not updated
 - since 2007

Non-directed commercial discard mortality – Canada and U.S.A.

- Monitoring in some hook-and-line, pot, and catcher vessel trawl fisheries is lower than fisheries managed under catch shares
- No fork length measurements in Canada since April 2020



INTERNATIONAL PACIFIC

