

INTERNATIONAL PACIFIC



HALIBUT COMMISSION

Fisheries data collection design and implementation in 2024 - Port Operations

Agenda item: 4.1.1
IPHC-2025-AM101-07 Rev_1
(M. Thom)



Primary Objective

Collect representative samples from Pacific halibut offloads across the geographical range of the commercial fishery and throughout the commercial fishing period

- To provide unbiased data for the annual IPHC stock assessment and in support of IPHC research goals

Provide a direct line of communication with the fishery

- Collect accurate logbook data directly from Captains
- Observe changes in the commercial Pacific halibut fishery (i.e., variations in hook spacing, hook sizes, and swivels)
- Effectively assist the fishery in using new technologies to improve efficiency, such as electronic logbooks
- Facilitate fishery stakeholders in addressing any concerns



S. Brennan



Sampling Design Background

- Pacific halibut biological data are collected from
 - IPHC's Fishery-Independent Setline Survey (FISS)
 - Commercial fishery landings in 10-12 major ports (out of around 90 total landing ports since 1995)
 - NOAA trawl surveys (IPHC/NOAA)
 - Recreational fishery (ADFG)
 - Fisheries Observer programs – lengths only (NOAA/DFO)

Annual sampling targets

- FISS: 10,000–12,000 fish – reduced in small footprint years
- Commercial fishery: 11,500 fish
- Recreational fishery: 1,500–2,000 fish
- NOAA surveys: 1,500–3,000 fish



Sampling Design Background

How do we set targets?

Maximise our effective sample size which reflects statistical power, prioritizes trip diversity (the number of trips and their geographic distribution) over the number of individual samples

We increase our effective sample size by increasing our access to catch directly affected by the numbers of ports staffed and duration of staffing those ports

Biological Region	Average number of trips sampled	Average number of ages	Effective sample size
Region 2	366	4,436	1,525
Region 3	169	2,552	905
Region 4	81	1,866	629
Region 4B	13	1,148	57

Summary of recent (2017-2021) commercial fishery fish ages by Biological Region and the effective sample size



Sampling Design Background

Seasonal variations and port-specific differences in landings influence demographic representation (e.g., age, sex, weight at age)

Data from each port has the potential to provide unique insights into the demographics of the stock

Year-Specific Variations:

- Strong 2002 year-class in Sitka (2017) not seen in Petersburg/Juneau

Seasonal Patterns:

- Fewer males in the summer fishery (4CDE)
- Older fish appear later in the season (2C)

Port-Specific Trends:

- Southeast Alaska ports (Juneau, Sitka) show fewer males (3A)
- Typically, there are more younger fish in Kodiak vs. other ports.
- Older females landed in Seward compared to Homer and Kodiak (3B)



Sampling Design 2024

Sampled 10 ports of about 43 where Pacific halibut were landed in 2024

Sampling rates are calculated to ensure that samples are evenly distributed over the landings from ports where sampling occurs, to reach our targets, and to manage the workload for IPHC Secretariat

IPHC Regulatory Area	IPHC Pre-season Sampling Target	Sampling Rate (%)
2A	1000	5-10
2B	1500	2
3A	1500	1-1.5
3B	1500	2.5
4A	1500	7.5
4B	1500	7.5
4CDE	1500	7.5

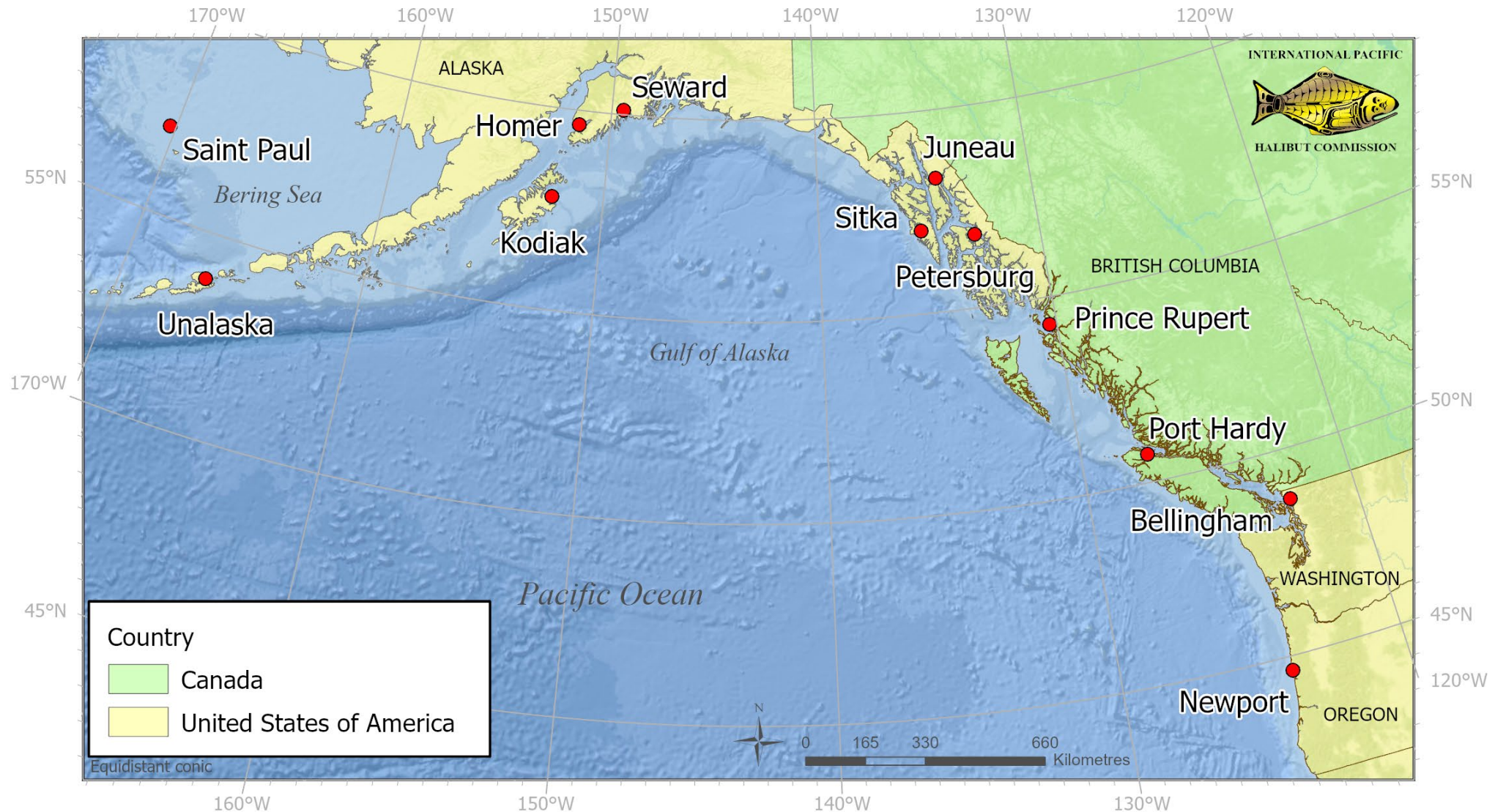


Data Collection Entities in 2024

- Fisheries Data Specialist (Field) in 2 Canadian Ports and 8 Alaskan Ports
- IPHC Secretariat
 - Newport, Oregon - IPHC Regulatory Area 2A directed commercial openers
 - Bellingham, Washington - IPHC Regulatory Area 3A and 2A commercial landings
- IPHC Regulatory Area 2A Tribal Directed Commercial Data collected by Treaty Tribes of Washington State
 - 9 Washington Treaty Tribes participated
 - IPHC Secretariat also assisted in Neah Bay, WA
- Washington Department of Fish and Wildlife, Oregon Department of Fish and Wildlife, California Department of Fish and Wildlife,
 - Collected and mailed-in logbook data



IPHC Fishery-Dependent Data Collection Ports in 2024



Biological Data Collected in 2024

IPHC Regulatory Area	Biological Samples	Percent of Target	Percent Landed
2A	776	78%	94%
2B	1774	118%	94%
2C	1759	117%	88%
3A	1481	99%	91%
3B	1713	114%	88%
4A	1185	79%	55%
4B	826	55%	26%
4CDE	930	62%	39%
TOTAL	10444		

Note: Data collections ended on 08 December 2024

Data collected from randomly selected fish: Left (blind side) sagittal otolith for aging, fork length, weight and fin clip for sex determination

Reaching targets:

The purpose of the targets and the sampling rates are to ensure that samples are evenly distributed and to maximize the number of valuable samples we collect

Variability in reaching these targets is considered normal



Data Collected and Costs in 2024

Port	Logbooks	Biological samples	Total Cost (USD)	Total Cost/Month (USD)
Dutch Harbor	94	2110	\$ 90,500	\$ 11,700
Homer	246	1811	\$ 72,700	\$ 7,800
Juneau	84	334	\$ 68,200	\$ 7,400
Kodiak	207	873	\$ 78,900	\$ 8,500
Petersburg	289	1101	\$ 72,800	\$ 8,100
Seward	296	687	\$ 81,900	\$ 9,100
Sitka	204	568	\$ 72,800	\$ 7,900
St. Paul	125	396	\$ 31,100	\$ 12,100
Prince Rupert	169	786	\$ 57,200	\$ 6,400
Port Hardy	203	988	\$ 49,400	\$ 5,300
2A Tribal*	91	664	\$ 1,100	N/A
Bellingham*	N/A	42	\$ 6,800	N/A
Newport*	N/A	84	\$ 3,900	N/A
TOTAL			\$ 687,300	

Note: Indirect costs as well as headquarters staffing costs are not included

*Salaries and benefits are not included for these ports



Results

- Data processed prior to 30 October of 2024 were used in 2024 the Pacific halibut stock assessment
- Data processed after 30 October of 2024 will be used in the following year's stock assessment
- Commercial biological and catch data interactives can be found at this link
<https://www.iphc.int/data/>



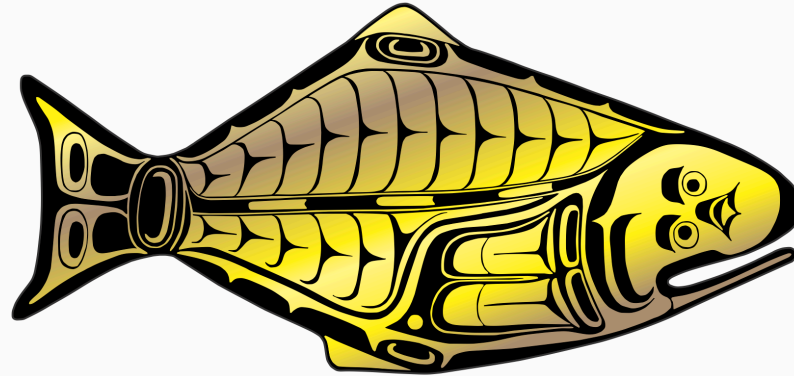
Recommendations

That the Commission:

- **NOTE** paper IPHC-2025-AM101-07 Rev_1 that provides the Commission with a summary of the IPHC fishery-dependent data collection design and implementation in 2024.



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