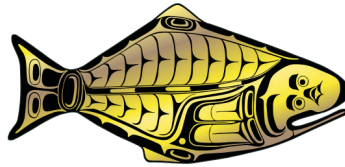


INTERNATIONAL PACIFIC



HALIBUT COMMISSION

NEWSLETTER

FALL 2023

Upcoming Meetings

[24th Session of the IPHC Research Advisory Board \(RAB024\)](#)

28 November 2023
Time: 9:00-17:00 PST

[99th Session of the IPHC Interim Meeting \(IM099\)](#)

30 November - 1 December 2023
Time: 9:00-17:00 PST

[100th Session of the IPHC Finance and Administration Committee \(FAC100\)](#)

22 January 2024
Time: 09:00-12:00 AKST

[100th Session of the IPHC Annual Meeting \(AM100\)](#)

22-26 January 2024
Time: 12:30-17:30 (22 January),
09:00-17:00 (23-26 January) AKST

Reserve your room at [Hotel Captain Cook](#) now for the best rates!

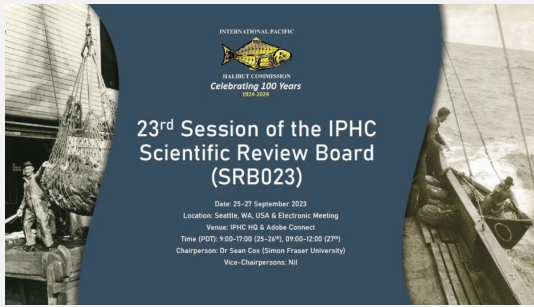
For more information about each meeting, click on the blue links above.



International Pacific Halibut Commission celebrating its 100th year!

The 100th year of the International Pacific Halibut Commission (IPHC) will begin 21 October 2023.

The original Convention was signed on 2 March 1923 by the U.S.A. and Canada. It was ratified by the U.S. Senate on 31 May 1924, then by the U.S. President on 4 June 1924. Great Britain (by the King of England and Emperor of India) ratified the Convention on 21 July 1924. The last step was to exchange ratifications which took place on 21 October 1924 and proclaimed on 22 October 1924 creating the International Fisheries Commission (later to become the International Pacific Halibut Commission).



SRB023 Recap

The 23rd Session of the Scientific Review Board (SRB023) took place at IPHC headquarters on 25-27 September 2023.

The SRB reviewed the stock assessment, considered biological research projects, and considered the impacts of genetic research taking place at IPHC.

SRB023 report



Commissioner Yamada visits a FISS vessel in June

In June, IPHC Commissioner Richard Yamada spent time at the dock talking with the captain and crew of the F/V Bold Pursuit while it was on charter for the IPHC FISS.

Commissioner Yamada is working on a video commemorating the 100th year of the IPHC.

The creation of the Commission enabled the two contracting parties to work together establishing seasons and other regulations in order to ensure a healthy Pacific halibut stock and fishery coastwide.

The IPHC Secretariat has included many pioneers in fisheries science in its 100 year history. The photograph below features a young F. Heward Bell (circa 1925) on board a fishing vessel in Cook Inlet, Alaska. Bell first worked as a biologist for the IPHC and later became its third Executive Director.



FISS completed for 2023

The first fishery-independent setline survey (FISS) hooks went into the water on 27 May and the last Pacific halibut were processed on 01 September. There were 894 total stations surveyed spanning 5 Regulatory Areas across Pacific halibut fishing grounds from the U.S.A. West Coast, north and west into British Columbia, Canada and Alaska.

Along with Pacific halibut processing additional information was collected at each station including: water column environmental data, co-occurring species, and seabird encounters.

The otoliths collected will be analyzed to determine age, and the remaining data will be compiled in time for integration into the 2023 stock assessment. The IPHC also deployed setline survey specialists (Field) on the NOAA trawl surveys for the Bering Sea, northern Bering Sea, and Gulf of Alaska surveys. This cooperative work provides an additional piece of fishery-independent data for the Pacific halibut stock assessment. In addition, the data provide a glimpse into year classes that will be entering the Pacific halibut commercial fishery within the next few years.



Bait calibration study

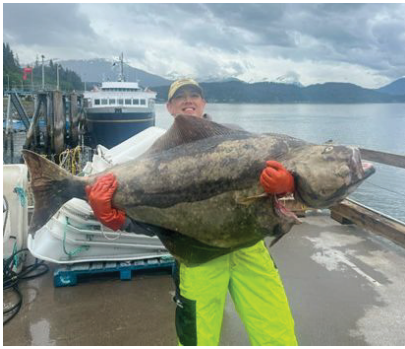
In an effort to maintain standardization of the FISS, while also attempting to lower costs of future operations, the IPHC chartered two vessels, the F/V Predator (USA) and F/V Pender Isle (CAN), to conduct a bait calibration study between Chum salmon and pink salmon in Southeast Alaska. The study is just wrapping up and results will be analyzed this Fall.

Port Operations

The IPHC currently staffs 9 ports throughout the IPHC Convention Area; 7 in Alaska and 2 in Canada. In addition, the IPHC Secretariat also collects logbooks and biological data from IPHC Regulatory Area 2A tribal and non-tribal directed commercial (DC) Pacific halibut landings. As of 01 October 2023, 1419 logs have been verified and 686 landings across the IPHC Convention Area during the 2023 Pacific halibut fishing period have been sampled. One source of data we collect out in the field are Pacific halibut otoliths, used for determining the age of individual fish. This year 9037 otoliths have been collected from the directed commercial Pacific halibut fishery.



IPHC Regulatory Area	Sampled Landings	Vessels sampled	Otoliths Collected	Logs Collected
2A	111	68	1305	94
2B	155	85	1360	192
2C	167	116	1250	402
3A	128	98	1697	525
3B	50	44	1527	112
4A	45	22	845	62
4B	12	6	394	12
4CD	18	11	659	22

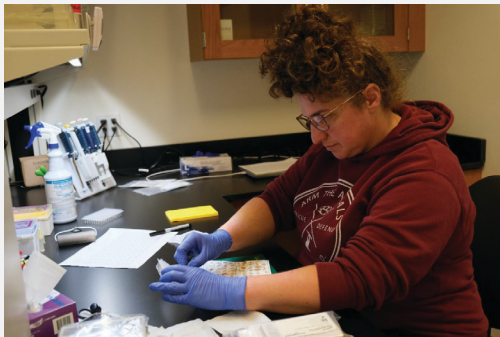


In the Capital city of Alaska, Juneau, landings started out with a bang with 82 for the months of March through May. Once summer came around things started to settle with still continuous landings, just not as frequent, until July when the delayed King Salmon fishery finally opened. Fishers out of Juneau are out there working their hearts away, the observation from those out there trying to get their quotas is that they are seeing a substantial decrease in catch per set or day. But these fishermen and women are out there preserving to catch their allocated quotas. At the end of August Juneau was lucky enough for Andrea Keikkala, IPHC Assistant Director, to visit Juneau for a port tour! IPHC Fisheries Data Specialist (field), Phoenix

(photographed holding Pacific halibut) introduced Andrea to captains and plant personnel, they even got to sample a landing.

The IPHC Fisheries Data Specialist (field), Carly Nienaber in Dutch Harbor, Alaska has been busy this year, sampling Pacific halibut deliveries from both the Bering Sea and Gulf of Alaska. Although it was a cold and stormy summer, fisherman braved the weather and continued to bring in fish consistently. Dutch Harbor tends to get some of the largest deliveries in Alaska and this year was no exception, with some boats delivering up to 60,000 lbs (27 tonnes) of Pacific halibut! Carly worked with the IPHC otolith aging team earlier this season and practiced aging otoliths under a microscope.

With only a few months left of the 2023 Pacific halibut season, and the weather getting progressively colder we hope everyone out on the water stays safe and ends with a productive season.



Secretariat Spotlight

Crystal Simchick – Biological Laboratory Technician

Q. Can you tell us a little about your background?

A. I'm originally from Wisconsin. I moved out here for a job and came to love it. I originally went to school for theatre, but after being out in the world awhile decided against the starving artist life, and decided to go back to school and got a BS in Biology. I've been working in a lab researching fish and invertebrates ever since. Their genes are fascinating!

Reproductive studies at IPHC

Recent sensitivity analyses have shown the importance of changes in spawning output due to changes in maturity schedules, fecundity and/or skip spawning for stock assessment. This line of research is designed to improve our understanding of factors influencing reproductive capacity and success of Pacific halibut.

There are two specific reproductive projects currently underway. The first is an update of the maturity schedules based on histological (microscopic) data. Until now, reproductive stage determination has entailed a visual (macroscopic) assessment in the field. During the 2022 FISS, a total of 1,016 ovarian samples were collected coastwide and this effort continued this past summer with the collection of additional samples in IPHC Biological Regions 2 and 3 during the 2023 FISS.

The second reproductive research focus is on establishing fecundity metrics (i.e. how productive or fertile a fish is) for Pacific halibut. This will allow us to

Q. How did you become interested in laboratory work?

A. I became fascinated by genetics in high school. I was one of those nerds who did Punnett squares in biology as extra credit work. When I got my first job working in a lab my last year of college, I loved the “hands-on” aspect of the work. It was my job to dig out the inner workings of the cell and take a close look at what was going on inside. I don’t think the genome will ever stop surprising and fascinating me.

Q. What are some of the highlights of the work you have done/are doing at the IPHC?

A. Genotyping over 10,000 samples every summer is definitely fun. Working with interns makes it even better. I also get to run qPCR which is one of the most interesting parts of my job. It gives one a picture of what is actually going on in the body.

Q. What do you like to do in your spare time?

A. I like weightlifting and boxing. I also really enjoy going to the theatre and hanging with friends.

estimate fecundity-at-size and -age and could be used to replace spawning biomass with egg output as the metric for reproductive capability in stock assessment and management reference points.

During the 2023 FISS, ovarian samples were collected for this project. Fecundity will be determined using the auto-diametric method.



Photo by Anita Kroska

Ask an IPHC Scientist

Q. Whales taking the fish right off the fishing gear is a big problem in some areas. What is the IPHC doing to address the problem and account for this in the stock assessment.

Whale depredation causes two problems for Pacific halibut management, direct loss of catch and increased uncertainty in stock assessment results due to the unknown magnitude of depredation mortality; we are tackling both of these challenges together. In 2023 we field-tested two methods for protecting longline catch against whale depredation, these were ‘branch-lines’ with sliding shrouds and an aluminum ‘shuttle’ that attaches to standard longline gear during hauling, slides down the groundline collecting and protecting the fish and then delivers the catch to the surface. Based on our successful trials, we plan to proceed with a full statistical comparison of catch rates with and without the shuttle in the presence of killer whales in 2024. Based on logbook reports of whale depredation and change in catch rates when whales are observed during FISS sampling, we now have estimates of the magnitude of whale depredation on the commercial fishery by IPHC Regulatory area. Preliminary results suggest that depredation is most frequently occurring on mixed target sets (generally sablefish and halibut), killer whales are depredating the largest proportion of the total catch (2-6%) in IPHC Regulatory Area 4A and sperm whales are most damaging in 2C and 3A (<2%). Under the guidance of our scientific review board (SRB) we will be exploring the effect on population status and yield projections of adding depredation estimates to the stock assessment.

Q. How does the sequencing of the Pacific halibut genome benefit harvesters?

Sequencing the Pacific halibut genome has provided us with the Rosetta stone for unlocking the relationships between population dynamics, individual biology, and genetics. We can now sample fish in the field and ask questions about how they are connected with the rest of the stock and how they adapt and respond to the environment and fishery conditions that would have been impossible just a few years ago. Better understanding the effects of the current and future fishery on the Pacific halibut population under changing ecosystem conditions will allow us to manage to a greater fishery yield for harvesters in the long-term.

If you would like your question answered in the next newsletter, please e-mail the link below and write "Ask a Scientist" in the subject line.

[Submit a question](#)

