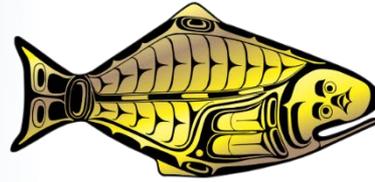


INTERNATIONAL PACIFIC



HALIBUT COMMISSION

Draft: Report of the IPHC Secretariat (2020)

Agenda Item 4

IPHC-2020-IM096-04

INTERNATIONAL PACIFIC



HALIBUT COMMISSION

RESEARCH

PURPOSE

To provide the Commission with an update on the activities of the IPHC Secretariat in 2020, not already contained within other papers before the Commission.



STAFFING IMPROVEMENTS: REGULAR FULL-TIME POSITIONS

	FT Arrivals	Type	Hire Date	Status	Position Title
	Ms Erin Salle	Regular full-time	23 March 2020	Active	Administrative Specialist
	Mr Robert Tynes	Regular full-time	1 April 2020	Active	Information Technology Specialist
	Mr Nicholas Wilson	Regular full-time	8 April 2020	Active	Accounting Specialist
	Ms Tara Coluccio	Regular full-time	26 June 2020	Active	Administrative Specialist
	Ms Taika Gebretsadik	Regular full-time	17 August 2020	Active	Senior Staff Accountant



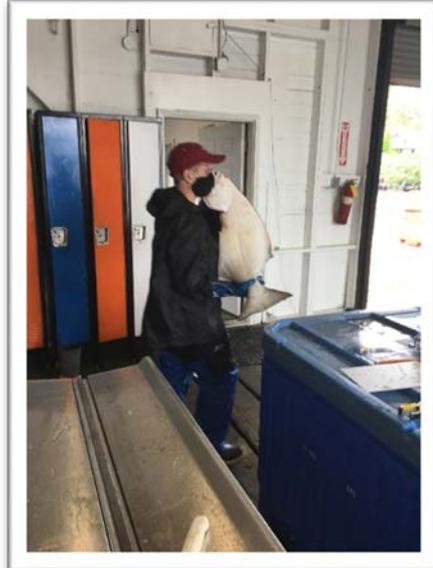
IPHC INTERNSHIP PROGRAM: 2020

Mr. Adam Ziegler

15 June – 11 August 2020

Stonehill College, MA, U.S.A.

Assisted the IPHC Biological Laboratory in determining the sex ratio in the commercial fishery: Fin clip collection, DNA purification from fin clips and laboratory genotyping assays. Initial tests on otolith DNA extraction and genotyping for sex.



IPHC MERIT SCHOLARSHIP FOR 2020

The IPHC funds several Merit Scholarships to support university, technical college, and other post-secondary education for students from Canada and the USA who are connected to the Pacific halibut fishery.

The 2020 awarded is **Mr Hahlen Behnken-Barkhau** who will attend Whitman College

Name	2018	2019	2020	2021	2022
Kaia Dahl (Petersburg, AK, USA)	\$4,000	\$4,000	\$4,000	\$4,000	-
Hahlen Behnken-Barkhau (Sitka, AK, USA)	-	-	\$4,000	\$4,000	\$4,000



IPHC FISHERY REGULATIONS (2020)

In 2020, the Commission adopted six (6) fishery regulations/amendments in accordance with Article III of the Convention, as follows:

- 1) Fishery Limits (Section 4)
- 2) Commercial fishing periods (Sect. 9)
- 3) Vessel Clearance in IPHC Regulatory Area 4 (Sect. 16)
- 4) Charter management measures in IPHC Regulatory Areas 2C and 3A
- 5) Revising definition of IPHC Regulatory Area 2A-1
- 6) IPHC Fishery Regulations: minor amendments



INTERACTIONS WITH CONTRACTING PARTIES

In 2020, the IPHC Secretariat has engaged agency representatives from both Contracting Parties regarding more comprehensive and timely reporting of all forms of Pacific halibut removals and directed commercial fishery revenue data. The IPHC Secretariat is working to identify and address data gaps in reporting.



INTERACTIONS WITH CONTRACTING PARTIES

CANADA

- The IPHC Secretariat continues to work with Fisheries and Oceans representatives to address gaps in coverage for the IPHC Fishery-Independent Setline Survey (FISS) in the IPHC Convention Area. An application was submitted again in 2020 to fish the FISS stations within the Marine Protected Areas in Canadian waters, which was denied.



INTERACTIONS WITH CONTRACTING PARTIES

UNITED STATES OF AMERICA

1) Areas of conservation concern

- The IPHC Secretariat worked with USA agency staff to address gaps in coverage for the Fishery-Independent Setline Survey (FISS) in IPHC Convention Waters. An application was submitted to fish the FISS stations within the Glacier Bay National Park, which was approved, allowing these stations to be fished.



INTERACTIONS WITH CONTRACTING PARTIES

UNITED STATES OF AMERICA - *Abundance-Based Management of Pacific halibut bycatch (ABM)*

The NPFMC's Abundance-Based Management Working Group (ABMWG) continued its work, with participation of the IPHC Secretariat. The Commission has supported the development of ABM due to its potential effect on the directed Pacific halibut fisheries.

At its January/February 2020 meeting, the NPFMC revised the ABM motion ([Council D4 Motion AM80](#)) for the forthcoming Pacific halibut ABM PSC limit analysis and added a second motion ([Council D4 Motion PSC Limits](#)) containing additional options to consider in a discussion paper.



INTERACTIONS WITH CONTRACTING PARTIES

UNITED STATES OF AMERICA - *Abundance-Based Management of Pacific halibut bycatch (ABM) (cont.)*

ABM was a priority agenda at the NPFMC October 2020 meeting. The Scientific and Statistical Committee (SSC) discussed the operating model and results from the simulation analysis. However, a misspecification of directed commercial mortality in the model for the year 2019 was found which likely had an important effect because results for the directed commercial fisheries were presented relative to the 2019 mortality. With little time to review the updated results before the end of the SSC meeting, the SSC unanimously decided to not review the results at that time.



INTERACTIONS WITH CONTRACTING PARTIES

UNITED STATES OF AMERICA - *Abundance-Based Management of Pacific halibut bycatch (ABM) (cont.)*

The Council discussed the outcomes extensively and moved to a new approach in [Council C6 Motion](#) as well as updating the purpose and need. The motion specifies four alternatives for analysis with one being status quo and the other three variations of a lookup table incorporating the two indices calculated from the FISS data and the EBS trawl survey data. Four options were specified that would reduce variability in the annual PSC limits and introduce performance standards that may increase or decrease the PSC limit depending on percent usage of the limit.

The Council's three-meeting outlook notes an initial review of Pacific halibut ABM analysis in April 2021, with an option for a final final action in October 2021.



INTERACTIONS WITH CONTRACTING PARTIES

UNITED STATES OF AMERICA - PACIFIC Fishery Management Council (PFMC)

IPHC Regulatory Area 2A Catch Sharing Plans and in-season management

The IPHC Secretariat collaborated with NOAA Fisheries and State agencies to conduct in-season management of the various fisheries identified in the IPHC Regulatory Area 2A Catch Sharing Plan. Date and possession restrictions were adjusted in season among the various fisheries to meet identified fishery needs while attaining and remaining within the applicable catch limits. Estimates of removals for 2020 will be presented during Agenda Item 5 on fishery statistics.

The IPHC Secretariat noted that the recreational fishery sub-area – California remained open for four additional days when it was determined the fishery limit had been exceeded and against the Secretariat recommendation. This resulted in an over-catch of **~66%**.



INTERACTIONS WITH CONTRACTING PARTIES

UNITED STATES OF AMERICA - PACIFIC Fishery Management Council (PFMC)

IPHC Regulatory Area 2A non-tribal directed commercial fishery

At its September 2020 meeting, the Council further considered the transition of IPHC Regulatory Area 2A Fishery Management, with the intention of adopting preliminary preferred alternatives. Reference Council paper and presentation provided in paper IPHC-2020-IM096-INF02. At the September PFMC meeting, the final motion on the matter was as follows:



INTERACTIONS WITH CONTRACTING PARTIES

UNITED STATES OF AMERICA - PACIFIC Fishery Management Council (PFMC)

IPHC Regulatory Area 2A non-tribal directed commercial fishery

Transition of Area 2A Fishery Management The Council adopted for public review the following as preliminary preferred alternatives:

- 1. 4.1.2 - Alternative 2: Consider the directed fishery framework during the CSP process in September and November, including any guidance for vessel limits and inseason changes for NMFS implementation.*
- 2. 4.2.1 Alternative 2: Issue permits for all Area 2A halibut non-Indian fisheries (commercial directed, incidental salmon troll, incidental sablefish, and recreational charter).*



INTERACTIONS WITH CONTRACTING PARTIES

UNITED STATES OF AMERICA - PACIFIC Fishery Management Council (PFMC)

IPHC Regulatory Area 2A non-tribal directed commercial fishery

3. *4.2.2 Alternative 2: Allow NMFS to determine the appropriate application deadlines for all commercial halibut applications, set to coincide with Council meetings and NMFS processing time.*
4. *4.2.5 Alternative 1: Status quo (revised). Require proof of permit to be onboard fishing vessel and made readily available upon request, regardless of the type of permit (e.g. paper or electronic). NMFS to provide access to permit in a printable format or send paper copy directly to the participant.*

The PFMC will further consider the above alternatives during its November Council meeting (13 and 16 November 2020).



IPHC COMMUNICATIONS AND OUTREACH

IPHC Website

- Significant enhancement of data availability and visualization

Annual Report

- The 2019 Annual Report (1 January to 31 December 2019) was published on 2 March 2020 and is available for download from the IPHC website at the following link:
<https://www.iphc.int/uploads/pdf/ar/iphc-2020-ar2019-r.pdf>
- Annual Report 2020 on track for publication in the first week of March 2021.



IPHC COMMUNICATIONS AND OUTREACH

IPHC Circulars and Media Releases

- Fully electronic information distribution
- **IPHC Media Releases** are the primary informal communication with all stakeholders. In some cases. <https://www.iphc.int/library/documents/category/media-releases>
- **IPHC Circulars** serve as the formal inter-sessional communication mechanism for the Commission. Circulars are used to announce meetings of the Commission and its subsidiary bodies, as well as inter-sessional decisions made by the Commission. <https://www.iphc.int/library/documents/category/circulars>



IPHC COMMUNICATIONS AND OUTREACH

There is a considerable amount of effort put into public outreach, attending conferences and meetings that enhance knowledge, contributing expertise to the broader scientific community through participation on boards and committees, and seeking further education and training. In 2020 this activity was substantially reduced due to the COVID-19 pandemic.



IPHC COMMUNICATIONS AND OUTREACH

Committees and external organisation appointments

North America:

- 1) *Technical Subcommittee (TSC) of the Canada-United States Groundfish Committee* - Dr. Josep Planas & Ms. Lara Erikson

Canada:

- 1) *Halibut Advisory Board (Canada)* - Dr. David Wilson



IPHC COMMUNICATIONS AND OUTREACH

Committees and external organisation appointments

United States of America:

- 1) *Bering Sea/Aleutian Islands Plan Team - Dr. Allan Hicks*
- 2) *Bering Sea Fishery Ecosystem Plan Team - Dr. Ian Stewart*
- 3) *North Pacific Fishery Management Council (NPFMC) Abundance-based Management Working Group – Dr. Allan Hicks*
- 4) *NPFMC Scientific and Statistical Committee - Dr. Ian Stewart*
- 5) *NPFMC Trawl Electronic Monitoring Committee – Ms. Huyen Tran*
- 6) *North Pacific Research Board Science Panel - Dr. Josep Planas*
- 7) *Observer Science Committee (NOAA-Alaska) – Dr. Ray Webster*
- 8) *Interagency electronic reporting system for commercial fishery landings in Alaska (eLandings) Steering Committee – Ms. Kamala Carroll and Ms. Huyen Tran*
- 9) *Interagency electronic reporting system for commercial fishery landings in Alaska (eLandings) IT Steering Committee – Ms. Huyen Tran and Mr. Afshin Taheri*
- 10) *Interagency electronic reporting system for commercial fishery landings in Alaska (eLandings) Interagency Coordination Committee (ICC) – Ms. Lara Erikson and Ms. Huyen Tran*



IPHC COMMUNICATIONS AND OUTREACH

Conferences and symposia (chronological order)

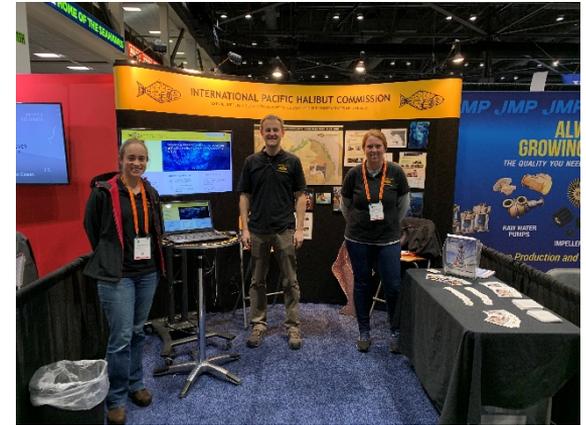
- 1) *2020 Alaska Marine Science Symposium, 27-31 January, Anchorage, AK, USA – Dr. Josep Planas, Ms. Dana Rudy, Mr. Andy Jasonowicz*
- 2) *2020 Ocean Sciences Meeting, 16 - 21 February, San Diego, CA, U.S.A – Mrs. Lauri Sadorus*
- 3) *AFSC 2nd Workshop on Integrating ecosystem and socioeconomic information into the groundfish/crab stock assessments Ecosystem and Socioeconomic Profiles, 10-12 March, Seattle, WA – Dr. Ian Stewart*



IPHC COMMUNICATIONS AND OUTREACH

Outreach

- 1) **Booth at the Pacific Northwest Sportsman's Show, 5-9 February, Portland, OR, USA** – Caroline Robinson, Kimberly Sawyer, Robert Tobin and Andy Jasonowicz



IPHC COMMUNICATIONS AND OUTREACH

Academic affiliations

Affiliate Faculty:

- 1) Dr. Allan Hicks - University of Washington School of Aquatic and Fishery Sciences, Seattle, WA, USA
- 2) Dr. Ian Stewart - University of Washington School of Aquatic and Fishery Sciences, Seattle, WA, USA
- 3) Dr. Josep Planas - Alaska Pacific University, Anchorage, AK, USA

Graduate student committee member:

- 1) *Dr. Allan Hicks - University of Massachusetts School for Marine Science & Technology, Dartmouth, MA, USA*
- 2) *Dr. Allan Hicks - University of Washington School of Aquatic & Fishery Sciences, Seattle, WA, USA*
- 3) *Dr. Ian Stewart - Alaska Pacific University, Anchorage, AK, USA*
- 4) *Dr. Ian Stewart - University of Washington School of Aquatic & Fishery Sciences, Seattle, WA, USA*
- 5) *Dr. Josep Planas - Alaska Pacific University, Anchorage, AK, USA*



IPHC PUBLICATIONS IN 2020

Published peer-reviewed journal articles x 10 (4 primary authored)

- **Hutniczak B, Meere F** (2020) International Co-operation as a Key Tool to Prevent IUU Fishing and Disputes over It. *International Community Law Review* 22:439–448.
- **Webster RA, Soderlund E, Dykstra CL and Stewart IJ** (2020) Monitoring change in a dynamic environment: spatio-temporal modelling of calibrated data from different types of fisheries surveys of Pacific halibut. *Can J Fish Aquat Sci* 77(8):1421-1432.
- **Sadorus LL, Goldstein E, Webster RA, Stockhausen WT, Planas JV, Duffy-Anderson J** (*In press*). Multiple life-stage connectivity of Pacific halibut (*Hippoglossus stenolepis*) across the Bering Sea and Gulf of Alaska. *Fisheries Oceanography*. <https://onlinelibrary.wiley.com/doi/abs/10.1111/fog.12512>
- **Stewart IJ, Hicks AC and Carpi P** (*In press*) Fully subscribed: evaluating yield trade-offs among fishery sectors utilizing the Pacific halibut resource. *Fisheries Research*.



IPHC PUBLICATIONS IN 2020

Published peer-reviewed journal articles x 10 (6 co-authored)

- Fish T, Wolf N, Harris BP, **Planas JV** (*In press*) A comprehensive description of oocyte developmental stages in Pacific halibut, *Hippoglossus stenolepis*. J Fish Biol. <https://doi.org/10.1111/jfb.14551>
- Forrest RE, **Stewart IJ**, Monnahan CC, Bannar-Martin KH and Lacko LC (2020) Evidence for rapid avoidance of rockfish habitat under reduced quota and comprehensive at-sea monitoring in the British Columbia Pacific Halibut fishery. Can J Fish Aquat Sci 77:1409-1420.
- Lomeli MJM, Wakefield WW, Herrmann B, **Dykstra CL**, **Simeon A**, **Rudy DM**, **Planas JV** (*In press*) Use of Artificial Illumination to Reduce Pacific Halibut Bycatch in a U.S. West Coast Groundfish Bottom Trawl. *Fisheries Research*. <https://doi.org/10.1016/j.fishres.2020.105737>
- Nielsen JK, Mueter FJ, Adkison MD, **Loher T**, McDermott SF, Seitz AC (2020) Potential utility of geomagnetic data for geolocation of demersal fishes in the North Pacific Ocean. Animal Biotelemetry. 8:17. <https://doi.org/10.1186/s40317-020-00204-0>
- Punt, AE, Tuck G, Day J, Canales M, Cope JM, de Moor C, De Oliveira JAA, Dickey-Collas M, Elvarsson B, Haltuch MA, Hamel OS, **Hicks AC**, Legault CM, Lynch PD, Wilberg MJ (2020). When are model-based stock assessments rejected for use in management and what happens then? Fisheries Research 224: <https://doi.org/10.1016/j.fishres.2019.105465>
- van Helmond ATM, Mortensen LO, Plet-Hansen KS, Ulrich C, Needle CL, Oesterwind D, Kindt-Larsen L, Catchpole T, Mangi S, Zimmermann C, Olesen HK, Bailey N, Bergsson H, Dalskov J, Elson J, Hosken M, Peterson L, McElderry H, Ruiz J, Pierre JP, **Dykstra C**, Poos JJ. (2020). Electronic monitoring in fisheries: Lessons from global experiences and future opportunities. Fish & Fisheries 21:162–189.



IPHC PUBLICATIONS IN 2020

Submitted peer-review journal articles – In revision x 2

- Kroska AC, Wolf N, **Planas JV**, Baker MR, Smeltz TS, Harris BP (*In review*) Controlled experiments to explore the use of a multi-tissue approach to characterizing stress in wild-caught Pacific halibut (*Hippoglossus stenolepis*). *Conservation Physiology*.
- **Stewart IJ**, Scordino JJ, Petersen JR, Wise AW, Svec CI, Buttram RH, Monette JL, Gonzales MR, Svec R, Scordino J, Butterfield K, Parker W and Buzzell LA (*In review*) Out with the new and in with the old: reviving a historical technology to meet modern challenges. *Fisheries*.



2021 IPHC PUBLICATIONS

In preparation peer-reviewed journal articles (x 4 for submission late 2020/early 2021)

- **Planas JV, Simeon A, Jasonowicz A, Rudy D**, Timmins-Schiffman E, Nunn BL, Kroska A, Wolf N, Hurst TP (*In preparation*). Physiological signatures of temperature-induced growth manipulations in white skeletal muscle of juvenile Pacific halibut (*Hippoglossus stenolepis*). *Physiological Genomics*.
- **Sadorus L, Webster R** and Sullivan M (*In preparation*) Environmental conditions on the Pacific halibut (*Hippoglossus stenolepis*) fishing grounds obtained from a decade of coastwide oceanographic monitoring, and practical applications of the data in a spatio-temporal assessment model. *Fisheries Research*.
- **Simeon A, Stewart IJ, Loher T, Erikson L**, McCarty O, **Dykstra C**, Drinan DP, Hauser L, **Planas JV** (*In preparation*). Sex marking at sea by the directed Pacific halibut fleet. *Fisheries Research*.
- Taylor IG, Doering KL, Johnson KF, Wetzel CR and **Stewart IJ** (*In preparation*) Beyond visualizing catch-at-age models: lessons learned from the r4ss package about software to support stock assessments. *Fisheries Research*.

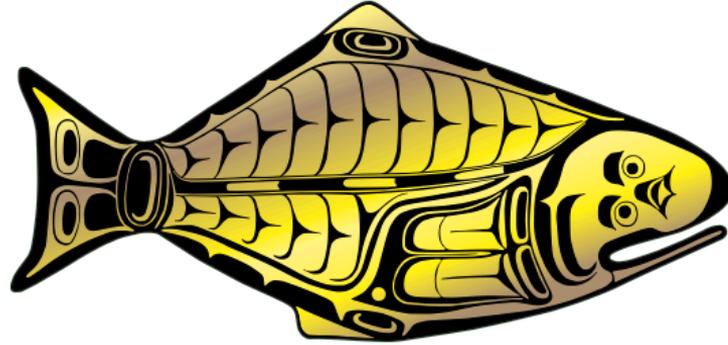


ACTION

That the Commission **NOTE** paper IPHC-2020-IM096-04 which provides the Commission with a draft update on activities of the IPHC Secretariat in 2020, not detailed in other papers before the Commission.



INTERNATIONAL PACIFIC



HALIBUT COMMISSION

