



Report of the IPHC Secretariat (2019)

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1. PURPOSE

To provide the Commission with an update on the activities of the IPHC Secretariat in 2019, not already contained within other papers before the Commission.

2. STAFFING IMPROVEMENTS DURING 2019

2.1. REGULAR FULL-TIME POSITIONS

FT Arrivals	Type	Hire Date	Status	Position Title
Ms Katja Hyvarinen	Regular full-time	2 Dec 2019	Active	Administrative Specialist
Ms Kayla Ualesi	Regular full-time	2 Dec 2019	Active	Setline Survey Coordinator
Ms Monica Mocaer	Regular full-time	18 Nov 2019	Active	Setline Survey Specialist
Ms Kamala Carroll	Regular full-time	8 Aug 2019	Active	Fisheries Data Coordinator
Ms Kimberly Sawyer	Regular full-time	22 Jul 2019	Active	Fisheries Data Specialist
FT Change				
Nil	Nil	Nil	Nil	Nil
FT Departure				
Mr E. Soderlund	Regular full-time	17 Mar 2003	Departed 24 Oct 2019	Setline Survey Specialist
Ms A. Tesfatsion	Regular full-time	2 Aug 1999	Departed 7 Jul 2019	Fisheries Data Specialist
Ms T. Geernaert	Regular full-time	5 May 1986	Departed 14 Jun 2019	Setline Survey Advisor
Ms T. Briggie	Regular full-time	28 Nov 2011	Departed 13 Dec 2019	Administrative Specialist

2.2. TEMPORARY FULL-TIME POSITIONS

Temporary full-time positons				
Temp/contract	Type	Hire Date	Status	Position Title
Dr Barbara Hutniczak	Temporary full-time	1 Nov 2019	2-yr contract ending 31 October 2021	Fisheries Economist
Mr Andy Jasonowicz	Temporary full-time	26 Aug 2019	1-yr contract ending in Aug 2020	Research Biologist (Genetics)
Dr Piera Carpi	Temporary full-time	1 Apr 2019	2-yr contract ending in March 2021	MSE Researcher

Mr Colin Jones	Temporary full-time	14 Jan 2019	2-yr contract ending in January 2021	Setline Survey Specialist (Gear and Bait)
Ms Abby Carrigan	Temporary full-time 6-mo contract ending in Jan 2020	15 Jul 2019	Departed 14 Dec 2019	Data Entry Specialist

3. IPHC INTERNSHIP PROGRAM: 2019

The IPHC funds one full-time intern each summer. In 2019, Ms Kennedy Bolstad from the University of Victoria, BC, Canada joined the IPHC. Kennedy worked on two projects during her tenure:

- 1) Genotyping efforts to assist in determining the sex ratio in the commercial fishery: DNA purification from fin clips; and
- 2) Reproductive assessment project: Identification and characterisation of reproductive markers in female Pacific halibut.

4. IPHC MERIT SCHOLARSHIP FOR 2019

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. Generally, a single new scholarship valued at US\$4000 per year is awarded every two years. The scholarships are renewable annually for the normal four-year period of undergraduate education, subject to maintenance of satisfactory academic performance. A Scholarship Committee of industry and Commission representatives reviews applications and determines recipients based on academic qualifications, career goals, and relationship to the Pacific halibut industry.

No scholarships were awarded in 2019, as the next announcement will occur in early 2020.

The list of current recipients and their expected years of receipt are provided below. Note that in 2016 the IPHC Merit Scholarship shifted from an award of US\$,2000 per year for four years, with a new recipient selected each year, to an award of US\$4,000 per year for four years, with a new recipient selected every other year.

Name	2016	2017	2018	2019	2020	2021	2022
Ysabel Echeverio (Stevensville, MT, USA)	\$4000	\$4000	\$4000	\$4000	-	-	-
Kaia Dahl (Petersburg, AK, USA)	-	-	\$4000	\$4000	\$4000	\$4000	-
TBD	-	-	-	-	\$4000	\$4000	\$4000

5. MEETINGS OF THE COMMISSION AND SUBSIDIARY BODIES DURING 2019

Meeting	No.	Date	Location
Finance and Administration Committee (FAC)	95 th	28 Jan	Victoria, Canada
Annual Meeting (AM)	95th	28 Jan-1 Feb	Victoria, Canada
Conference Board (CB)	89 th	29-30 Jan	Victoria, Canada

Processor Advisory Board (PAB)	24 th	29-30 Jan	Victoria, Canada
Research Advisory Board (RAB)	20 th	27 Feb	Seattle, USA
Management Strategy Advisory Board (MSAB)	13 th	6-9 May	Sitka, USA
	14 th	21-24 Oct	Seattle, USA
Scientific Review Board (SRB)	14 th	26-28 June	Seattle, USA
	15 th	24-26 Sept	Seattle, USA
Work Meeting (WM)	--	18-19 Sept	Bellingham, USA
Interim Meeting (IM)	95th	25-26 Nov	Seattle, USA

6. IPHC FISHERY REGULATIONS (2019)

6.1. FISHERY REGULATIONS ADOPTED IN 2019

In 2019, the Commission adopted **three (3)** fishery regulations in accordance with Article III of the Convention, as follows:

1) *IPHC Pacific halibut fishery regulations, Section 4. Fishery Limits*

IPHC-2019-AM095-R, para. 70: The Commission **ADOPTED** the mortality limits for each Contracting Party, by IPHC Regulatory Area, ([Table 5](#)) and sector, as provided in [Appendix IV](#).

Table 5. Adopted TCEY mortality limits for 2019

IPHC Regulatory Area	Mortality limit (TCEY) (mlbs)	Mortality limit (TCEY) (metric tonnes)
2A	1.65	748.42
2B	6.83	3,098.04
2C	6.34	2,875.78
3A	13.50	6,123.50
3B	2.90	1,315.42
4A	1.94	879.97
4B	1.45	657.71
4CDE	4.00	1,814.37
Total (IPHC Convention Area)	38.61	17,513.20

Appendix IV (of IPHC-2019-AM095-R)

Mortality table projected for the 2019 mortality limits by IPHC Regulatory Area
(All values reported in millions of net pounds)

Sector	IPHC Regulatory Area								
	2A	2B	2C	3A	3B	4A	4B	4CDE	Total
Commercial discard mortality	0.02	0.13	NA	NA	0.19	0.09	0.02	0.04	0.50
O26 Bycatch	0.13	0.27	0.03	1.28	0.36	0.18	0.22	1.87	4.33
Non-CSP Recreational (+ discards)	NA	0.08	1.38	1.74	0.00	0.01	0.00	0.00	3.21
Subsistence	NA	0.41	0.44	0.22	0.01	0.01	0.00	0.06	1.14
Total Non-FCEY	0.15	0.88	1.85	3.24	0.57	0.29	0.24	1.96	9.18
Commercial discard mortality	NA	NA	0.06	0.31	NA	NA	NA	NA	0.37
CSP Recreational (+ discards)	0.60	0.84	0.82	1.89	NA	NA	NA	NA	4.16

Subsistence	0.03	NA	NA	NA	NA	NA	NA	NA	0.03
Commercial Landings	0.86	5.10	3.61	8.06	2.33	1.65	1.21	2.04	24.88
Total FCEY	1.50	5.95	4.49	10.26	2.33	1.65	1.21	2.04	29.43
TCEY	1.65	6.83	6.34	13.50	2.90	1.94	1.45	4.00	38.61
U26 Bycatch	0.00	0.02	0.00	0.37	0.11	0.10	0.01	1.12	1.73
Total Mortality	1.65	6.85	6.34	13.87	3.01	2.04	1.46	5.12	40.34

2) *IPHC Pacific halibut fishery regulations, Section 9. Commercial fishing periods*

IPHC-2019-AM095-R, para. 80: The Commission **ADOPTED** fishing periods for 2019 as provided below, thereby superseding Section 9 of the IPHC Pacific halibut fishery regulations: ([para. 80](#))

- a) All commercial fishing for Pacific halibut in all IPHC Regulatory Areas may begin no earlier than 15 March and must cease on 14 November.
- b) IPHC Regulatory Area 2A (Non-Treaty Directed Commercial): Retain the 10-hour derby fishery for 2019, 26 June, 10 July, 24 July, 7 August, 21 August, 4 September, 18 September, with additional openings and fishing period limits (vessel quota) to be determined and communicated by the IPHC Secretariat.

3) *Charter management measures in IPHC Regulatory Areas 2C and 3A*

IPHC-2019-AM095-R, para. 83: The Commission **NOTED** and **ADOPTED** regulatory proposal IPHC-2019-AM095-PropB1, which proposed IPHC Regulation changes for charter Pacific halibut fisheries in IPHC Regulatory Areas 2C and 3A, in order to achieve the charter Pacific halibut allocation under the North Pacific Fisheries Management Council's (NPFMC) Pacific halibut Catch Sharing Plan. ([para. 83](#))

6.2. DEFERRED REGULATORY PROPOSALS

At the 95th Session of the IPHC Annual Meeting (AM095), the Commission deferred action on a number of IPHC Secretariat and stakeholder regulatory proposals and tasked the IPHC Secretariat as follows:

Fishery Limits (Sect. 4)

Para. 63. The Commission **NOTED** regulatory proposal IPHC-2019-AM095-PropA1, which aimed to improve clarity and transparency of fishery limits in the IPHC Fishery Regulations, and to provide the framework for mortality limits adopted by the Commission.

Para 64. The Commission **DEFERRED** modifications to the fishery regulations at this time, due to administrative concerns raised by NOAA-Fisheries, and indication that they would be unable to make modifications to the IPHC's Fishery Regulations outside of absolutely essential edits.

IPHC Fishery Regulations: minor amendments

Para. 81. The Commission **NOTED** and **DEFERRED** regulatory proposal IPHC-2019-AM095-PropA3 Rev_1, which proposed amendments to ensure clarity and consistency in the IPHC Fishery Regulations.

IPHC Regulatory Area 2A Quota Proposal

Para. 87. The Commission **NOTED** and **DEFERRED** action on regulatory proposal IPHC-2019-AM095-PropC2, which proposed an individual quota system for IPHC Regulatory Area 2A (reference paragraphs 75-79).

Progress: Updated versions of IPHC-2019-AM095-PropA1 and IPHC-2019-AM095-PropA3 were published 7 October 2019 in order complete review before IM095. No further action on IPHC-2019-AM95-PropC2 is contemplated, given the ongoing discussion regarding management of the Pacific halibut fisheries in IPHC Regulatory Area 2A (see paragraph [6.3.2b](#) below).

7. INTERACTIONS WITH CONTRACTING PARTIES

7.1. CONTRACTING PARTY REPORTS

At AM095, the Commission agreed to pursue a modified format for annual Contracting Party reports to the IPHC:

IPHC-2019-AM095-R, para. 100: The Commission **NOTED** paper [IPHC-2019-AM095-INF02](#) which provided a revised draft template for use by Contracting Parties (and/or domestic agencies) in their annual reports to the Commission.

IPHC-2019-AM095-R, para. 101: **NOTING** that efficiencies are likely to be gained by modifying the format and content for Contracting Parties reports to the Commission, the Commission **AGREED** that the Contracting Parties, via Commissioners, would work with the IPHC Secretariat intersessionally to improve the process, including the possibility for reports from Contracting Party agencies to be aggregated and presented as a consolidated Contracting Party report to the Commission. The IPHC Secretariat will share this work with the governments of both Contracting Parties to facilitate this effort throughout 2019.

The IPHC Secretariat is discussing the new reporting format at the staff level with Contracting Party agencies and has provided them the new template for reports. The Commission may wish to provide further input to the Contracting Parties regarding aggregation of reports.

7.2. CANADA

7.2.1. Fisheries and Oceans Canada (DFO)

a) Areas of conservation concern

The IPHC Secretariat followed up with Fisheries and Oceans Canada on incursions into Marine Protected Areas (MPAs) by the 2018 IPHC fishery-independent setline survey (FISS). In response, the IPHC Secretariat improved its

FISS protocols, operations monitoring, and training. The two vessels involved also received letters of warning from Fisheries and Oceans Canada.

7.2.2. Halibut Advisory Board (HAB)

- a) The Executive Director participates as a HAB member, with other Secretariat staff in support. This relationship is expected to continue into the future given the HAB's contributions to the Canadian decision-making process.
- b) IPHC Secretariat attended HAB meetings on 25 September and 12 November 2019 via webinar, and will attend the 10 December 2019 meeting in person (Vancouver, Canada).

7.3. UNITED STATES OF AMERICA

7.3.1. NORTH Pacific Fishery Management Council (NPFMC)

a) 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 February 2019 meeting, the NPFMC received a report from the ABM Stakeholder Committee and revised alternatives for the forthcoming halibut ABM PSC limit analysis. The Council then agreed to a revised set of alternatives for analysis: [Council Motion D3](#).

At the April 2019 NPFMC meeting, the Scientific and Statistical Committee (SSC) reviewed the operating model and additional analytical considerations to be employed in the initial ABM review analysis.

The Commission provided comments to the NPFMC on the analysis to date in its [letter of 30 September 2019](#), and encouraged the NPFMC to address the Commission's concerns prior to making any final decisions on this issue.

At its October 2019 meeting, the NPFMC reviewed the current analysis and the preliminary draft environmental impact statement ([EIS](#)). The NPFMC requested particular revisions to the operating model and the preliminary draft EIS, as suggested by its SSC, and requested that the preliminary draft EIS should come back to the NPFMC for another initial review before publishing, likely in June 2020.

The Commission may wish to provide further input to the NPFMC regarding the process during 2020.

7.3.2. PACIFIC Fishery Management Council (PFMC)

a) 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 2019 will be presented during the IPHC Annual Meeting Agenda Item 5 on fishery statistics.

b) **IPHC Regulatory Area 2A non-tribal directed commercial fishery**

In 2017, the IPHC Secretariat initiated discussion with the PFMC, as well as with NOAA Fisheries and the relevant State agencies, regarding the management of the non-tribal directed commercial Pacific halibut fishery in IPHC Regulatory Area 2A, with the goal of moving away from its current derby-style management. The IPHC Secretariat noted concerns over safety and discards, as well as limitations on fishers' and processors' flexibility.

Discussion continued during 2018, focused on the IPHC's proposal to change the length of the fishing period for this fishery, presented in [IPHC-2019-AM095-PropA2](#). At AM095, the Commission continued the 10-hour fishing period for 2019, but indicated its desire to move away from the current derby format:

*IPHC-2019-AM095-R, para. 75: The Commission **AGREED** that for IPHC Regulatory Area 2A, fishing periods for the non-tribal directed commercial fishery should be longer than the current 10-hour derby fishing periods, primarily for safety reasons.*

*IPHC-2019-AM095-R, para. 79: **NOTING** the concerns expressed by Canada about the safety issues related to the current management of this derby fishery, the Commission **EXPRESSED** its hope that there will be a proposal for an alternative management approach that addresses safety concerns by the time the Commission reconvenes at next year's annual meeting. If no resolution is in hand by then, the IPHC expects to re-examine what steps it can take to address the issue, including moving to longer fishing periods.*

During 2019, in response to letters exchanged between the Commission and the PFMC, and the Commission's desires expressed at AM095, the discussion broadened to include shifting responsibility for management of Pacific halibut fisheries in IPHC Regulatory Area 2A from the IPHC to domestic agencies, as is the case in all other IPHC Regulatory Areas.

*IPHC-2019-AM095-R, para. 77: The Commission **NOTED** the suggestion from the PFMC and the NOAA Fisheries West Coast Region office for a workshop to consider future changes to the IPHC Regulatory Area 2A Pacific halibut fishery management structure in a more holistic way, to include all management partners and to take place as early as spring 2019.*

*IPHC-2019-AM095-R, para. 78: **NOTING** the indication made to the PFMC in a letter dated 25 January 2019, that the IPHC Secretariat would welcome the opportunity to further address the safety concerns in the fishery, and to examine other potential management options for the fishery such as an IFQ or limited entry, as well as its management responsibilities, the Commission **RECOMMENDED** that this workshop take place, given the desire for the IPHC to move full management of the fishery from the IPHC (an*

international fisheries management body) to the relevant domestic agencies.

At its June 2019 meeting, the PFMC affirmed its commitment to pursue domestic management of the Pacific halibut fisheries in IPHC Regulatory Area 2A. The workshop described in the paragraphs above has been postponed, as the current focus is to transfer management of the fishery before the 2021 fishing period. The PFMC may then later investigate other potential management options for the fishery. Further discussion of the way ahead is expected at the PFMC's November 2019 meeting.

The PFMC noted its commitment to the transition of management in its [letter to the IPHC of 6 September 2019](#). The Commission responded in its letter to the PFMC of October 2019, offering to support the transition process and expressing its desire to complete the transition as expeditiously as possible.

8. IPHC COMMUNICATIONS AND OUTREACH

8.1. IPHC Website

The IPHC Secretariat continues to develop different ways to publish data and statistics for our stakeholders, focusing particularly on the addition of timely and useful visual displays such as our interactive maps and our online fishery-independent setline survey (FISS) data query. New developments to be presented at the IM095, including commercial fishery data pages and catch tables.

8.2. Annual Report

The 2018 Annual Report is available for download from the IPHC website at the following link: <https://www.iphc.int/library/documents/annual-reports/iphc-2019-ar2018-iphc-annual-report-2018>. We are now using an accelerated production timeline for the IPHC Annual Report, thereby ensuring users of the report receive the summary information as close to the relevant year as possible. Continued feedback on the content, format and presentation of the Annual Report is welcome.

The 2019 Annual Report is on track for publication at the end of February 2020.

8.3. IPHC Circulars and Media Releases

[IPHC Circulars](#), introduced in late 2016, continue to 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.

[IPHC Media Releases](#), are now the primary informal communication with all stakeholders. In some cases these will duplicate the formal communications provided in IPHC Circulars. IPHC Media Releases replace IPHC News Releases and other informal communication formats used previously.

Effective 1 August 2019, the IPHC Secretariat moved to fully electronic information distribution, after a two (2) year transition period. IPHC Circulars, Media releases, and similar information are posted on the IPHC website and distributed via email links only.

Stakeholders are encouraged to request that their email addresses be added to IPHC distribution lists at the following link: <https://www.iphc.int/form/media-and-news>.

8.4. IPHC External engagement

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.

8.4.1. 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
- 2) *Canadian Science Advisory Secretariat Regional Peer Review Meeting for the Widow Rockfish Stock Assessment, 18-19 June 2019, Nanaimo, BC* - Dr. Allan Hicks

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. Lara Erikson and Ms. Huyen Tran
- 9) *Interagency electronic reporting system for commercial fishery landings in Alaska (eLandings) IT Steering Committee* – Mr. Afshin Taheri
- 10) *Western Groundfish Conference Committee* – Mr. Edward Henry, Mr. Claude Dykstra

8.4.2. Conferences and symposia (chronological order)

- 1) Science Talk '19, 4-5 April 2019, Portland, OR, USA – Ed Henry
- 2) 2019 Bevan Symposium, 16-18 April, Seattle, WA, USA – Ms. Lauri Sadorus
- 3) 2019 Wakefield Symposium, 7-10 May, Anchorage, AK, USA – Dr. Josep Planas
- 4) AFSC workshop on Integrating ecosystem and socioeconomic information into the groundfish/crab stock assessments Ecosystem and Socioeconomic Profiles, 29-31 May, Seattle, WA – Dr. Ian Stewart
- 5) 54th European Marine Biology Symposium, 25-29 August, Dublin, Ireland – Dr. Tim Loher
- 6) 149th AFS Annual Meeting 29 Sept- 3 Oct, Reno, NV, U.S.A – Mr. Edward Henry
- 7) **2019 PICES Annual Meeting and Pacific halibut Workshop**, 18-24 October, Victoria, B.C., Canada - Dr. David Wilson, Dr. Ian Stewart, Dr. Allan Hicks, Dr. Josep

Planas, Dr. Tim Loher, Ms. Lauri Sadorus, Ms. Joan Forsberg, Ms. Anna Simeon, Mr. Andy Jasonowicz, Ms. Dana Rudy, Mr. Claude Dykstra

- 8) CAPAM Next Generation Stock Assessment Models, 4-8 November 2019, Wellington, NZ – Dr. Allan Hicks, Dr. Piera Carpi

8.4.3. *Outreach*

- 1) **Booth at the Pacific Northwest Sportsman's Show, 5-10 February, Portland, OR, USA** – Stephen Keith, Edward Henry, Lauri Sadorus, Ian Stewart, Caroline Robinson, Lara Erikson, Collin Winkowski
- 2) **Booth at ComFish Alaska, 29-30 March, Kodiak, AK** – Dr. Ian Stewart, Ms. Lara Erikson
- 3) **Booth at the Pacific Marine Expo, 21-23 November, Seattle, WA, USA** – Edward Henry, Tom Kong, Abby Carrigan, Kimberly Sawyer, Colin Jones, Stephen Keith, Kamala Carroll, Collin Winkowski, Anna Simeon, Claude Dykstra, Josep Planas, Caroline Robinson
- 4) **Booths (x2) at the Fisherman's Fall Festival, 21 September, Seattle, WA, USA** – David Wilson, Caroline Robinson, Piera Carpi, Jay Walker, Tamara Briggie, Dana Rudy, Huyen Tran, Edward Henry, Kimberly Sawyer, Abby Carrigan, Chris Johnson, Kamala Carroll, Josep Planas, Lara Erikson, Collin Winkowski, Keith Jernigan, Lauri Sadorus

8.4.4. *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
- 6) Dr. Tim Loher - University of Alaska Fairbanks, Juneau, AK, USA

9. IPHC PUBLICATIONS IN 2019

9.1. *Published peer-reviewed journal papers*

Kuriyama PT, Branch TA, **Hicks AC**, Harms JH & Hamel OS (2019) Investigating three sources of bias in hook-and-line surveys: survey design, gear saturation, and multispecies interactions. *Can. J. Fish. Aquat. Sci.* 76: 192–207 (2019)

Monnahan, CC, Branch, TA, Thorson, JT, **Stewart, IJ**, and Szuwalski, C. (2019). Overcoming long Bayesian run times in integrated fisheries stock assessments. *ICES J. Mar. Sci.* 76(6): 1477-1488.

Nielsen JK, Mueter FJ, Adkinson MD, **Loher T**, McDermott SF & Seitz AC (2019) Effect of study area bathymetric heterogeneity on parameterization and performance of a depth-based geolocation model for demersal fish. *Ecological Modelling* 402:1-34.

Rose CS, Nielsen JK, Gauvin J, **Loher T**, Sethi S, Seitz AC, Courtney MB & Drobny P (2019) Pacific halibut (*Hippoglossus stenolepis*) survivals after release from trawl catches through expedited sorting: deploying advanced tags in quantity (160) reveals patterns in survival outcomes. *Can. J. Fish. Aquat. Sci.* 76(12): 2215-2224.

9.2. *In press peer-reviewed journal papers*

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. (in press). Electronic monitoring in fisheries: Lessons from global experiences and future opportunities. *Fish & Fisheries* 2019; 00:1–28. <https://doi.org/10.1111/faf.12425>.

9.3. *Submitted peer-review journal papers – In revision*

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 (In review). When are model-based stock assessments rejected for use in management and what happens then? *Fisheries Research*.

Webster, R. A., Soderlund, E., Dykstra, C. L. and Stewart, I. J. (in review) 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.*

9.4. *In preparation peer-reviewed journal articles x 9 (for 2020)*

Forrest RE, **Stewart IJ**, Monnahan CC, Bannar-Martin KH, Lacko LC (In preparation). Evidence for rapid avoidance of rockfish habitat under reduced quota and comprehensive at-sea monitoring in the British Columbia Pacific Halibut fishery.

Hicks A, Carpi P, Stewart IJ (In preparation). An analysis of dynamic reference points for Pacific halibut given changes in productivity.

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10. RECOMMENDATION

That the Commission:

- 1) **NOTE** paper IPHC-2020-AM096-04 which provides the Commission with a draft update on activities of the IPHC Secretariat in 2019 not detailed in other papers before the Commission.

APPENDICES

Nil.