



IPHC Contracting Party Report: Canada

DATE: 23/DEC/2020

CONTRACTING PARTY: CANADA

AGENCY:

Fisheries and Oceans Canada

Adam Keizer, Regional Manager, Groundfish, Adam.Keizer@dfo-mpo.gc.ca

Maureen Finn, Halibut Coordinator, Maureen.Finn@dfo-mpo.gc.ca

Province of British Columbia, Minister of Agriculture

Mike Turner, Senior Manager, Intergovernmental Relations, Fisheries, and Aquaculture,

Michael.R.Turner@gov.bc.ca

Kevin Romanin, Senior Seafood Analyst, Kevin.Romanin@gov.bc.ca

FISHERY SECTOR/S

All

IPHC REGULATORY AREA/S

IPHC Regulatory Area 2B (Canada: British Columbia)

DISCUSSION

Each year Fisheries and Oceans Canada provides harvest opportunities to First Nations for food, social and ceremonial (FSC) purposes (or domestic purposes for First Nations with modern treaties), and the commercial and recreational fisheries. First Nations, recreational, and commercial fisheries on the Pacific coast of Canada have long harvested groundfish. Groundfish serve as a source of food, they provide jobs, income, and enjoyment for individuals, businesses, and coastal communities and they play key roles in natural ecosystems.

The B.C. Ministry of Agriculture is responsible for collection and reporting of data and statistics for the agri-food sector. An important part of that mandate is to analyze the impact of various sectors, including fisheries and seafood to the broader provincial economy. B.C. commercially harvests and reports on over 25 wild fisheries including Pacific halibut which is within B.C.'s top most valuable wild fishery commodities.

Indigenous fisheries

In the 1990 Sparrow decision, the Supreme Court of Canada found that where an Indigenous group has an Indigenous right to fish for food, social, and ceremonial (FSC) purposes, it takes priority, after conservation, over other uses of the resource. Fisheries are authorized via a Communal Licence issued by the Department under the Aboriginal Communal Fishing Licences Regulations.

Commercial fisheries

There are seven distinct commercial groundfish sectors: Groundfish trawl, Halibut, Sablefish, Inside Rockfish, Outside Rockfish, Lingcod, and Dogfish fisheries that are managed according to the measures set out in the Integrated Fisheries Management Plan (IFMP). The management of these sector groups is integrated, with all groups subject to 100% at-sea monitoring and 100% dockside monitoring, individual vessel accountability for all catch (both retained and released), individual transferable quotas (ITQ), and reallocation of these quotas between vessels and fisheries to cover catch of non-directed species. There are approximately 308 active commercial groundfish vessels. Information on licensed vessels is available online at the DFO website: <http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/index-eng.htm>.

The 2020 commercial fishery is described in appendix 1 of this report, “Fisheries and Oceans Canada 2019 IPHC Annual Report,” and appendix 3 of this report, “Halibut Compliance and Enforcement.”

Recreational fisheries

A recreational fishery may occur where authorized by a valid Tidal Waters Sport Fishing licence, which is required for the recreational harvest of all species of fish. Approximately 300,000 Tidal Waters Sport Fishing licences are sold each year. Tidal Waters Sport Fishing Licences can be purchased online by using the DFO website: <http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/licence-permis/application-eng.html>

The 2020 recreational fishery is described in appendix 2 of this report, “2020 Canadian Recreational Fishery Halibut Catch Report,” and appendix 3 of this report, “Halibut Compliance and Enforcement.”

RECOMMENDATIONS

That the Commission:

- 1) **NOTE** paper IPHC-2021-AM097-NR01 which provides the Commission with a summary from Fisheries and Oceans Canada of Pacific halibut fisheries in IPHC Regulatory Area 2B.

REFERENCES

Integrated Fisheries Management Plan for Groundfish, effective February 21, 2020. <https://waves-vagues.dfo-mpo.gc.ca/Library/4088529x.pdf>

APPENDICES

Appendix 1: Fisheries and Oceans Canada 2020 Fishery Overview Report
Appendix 2: Fisheries and Oceans Canada 2020 Recreational Fishery Report
Appendix 3: Fisheries and Oceans Canada 2020 Enforcement Report
Appendix 4: Province of British Columbia 2020 Annual Report

APPENDIX 1

Fisheries and Oceans Canada 2020 Fishery Overview ReportPREPARED BY: Fisheries and Oceans Canada (23 Dec 2020)

DATE: 23/Dec/2020**CONTRACTING PARTY:** CANADA**AGENCY:**

Fisheries and Oceans Canada

CONTACT:Maureen Finn, Halibut Coordinator, Maureen.Finn@dfo-mpo.gc.ca**FISHERY SECTOR/S:**

All

IPHC REGULATORY AREA:

IPHC Regulatory Area 2B (Canada: British Columbia)

Discussion**Catch Limits**

Fisheries and Oceans Canada follows an allocation policy that defines access to the Pacific Halibut Canadian Total Allowable Catch (CTAC) for Canadian commercial, recreational, and food, social, and ceremonial (FSC) fisheries. For 2020, the CTAC was 6,410,000 net pounds (fresh, head-off, dressed weight). The CTAC is composed of the catch limit for regulatory area 2B and an allocation for FSC. In addition to the CTAC, a carryover of quota from previous seasons is allocated to some licences.

Priority access is provided to the CTAC for FSC purposes, while commercial and recreational access is divided between the sectors 85% / 15% respectively. The 2020 Commercial and Recreational catch limit for allocation purposes was 6,185,000 net pounds. The net commercial carryover from 2019 to 2020 was 46,623 net pounds. The resulting TAC for commercial and recreational harvest in 2020 was 5,961,086 net pounds.

Fisheries and Oceans
CanadaPêches et Océans
Canada

Commercial and Recreational Fishery Summaries

For allocation purposes, the commercial / recreational total allowable catch (TAC) is equal to the Canadian catch limit, plus “O26” wastage mortality. The TAC is then allocated between the commercial and recreational sectors, and the “O26” wastage mortality is removed from the commercial and recreational TACs (Table 1). The combined commercial and recreational TAC, including carryover adjustments, for 2020 was 5,961,086 net pounds. As of December 20, 2020, the combined commercial and recreational halibut catch (including landed catch and mortality associated with all released fish in the commercial groundfish fisheries) was 5,243,860 net pounds.

Commercial Fishery Summary

The 2020 Canadian commercial Halibut TAC, including the catch limit allocation and carryover, was 5,083,336 net pounds. Halibut may be caught and retained by all commercial hook and line, and trap groundfish fisheries in Canada. This includes category L, K, ZN, and Schedule II licences.

In 2020, the Canadian commercial Halibut catch totalled 4,727,509 net pounds (Table 2). This catch, reported by all hook and line/trap groundfish fisheries in area 2B, includes both landed and released at-sea mortality. Given that non-halibut groundfish fisheries continue throughout the Halibut winter closure, additional released at-sea mortality will continue to be attributed to the 2020 Halibut catch until February 20, 2020, after which released at-sea mortality will be attributed to the 2021 TAC. As such the 2020 commercial catch is current as of December 20, 2020.

Commercial Integrated Management Plan

First introduced as a pilot program in 2006, the Commercial Groundfish Integration Program (CGIP) was made permanent in January 2010 to manage groundfish fisheries, including Pacific Halibut, in British Columbia. The objectives of the CGIP are to improve and maintain groundfish harvest sustainability and management through improved catch monitoring and catch accountability. The CGIP implemented individual vessel accountability for all catch, both retained and released, via individual transferable quotas which may be reallocated between licences and fisheries to cover non-directed catch. In addition these management tools are supported by 100% at-sea monitoring and 100% dockside monitoring for all groundfish vessels.

Notable management changes for the 2020 season include:

- The ongoing rebuilding measures for Yelloweye Rockfish and Bocaccio Rockfish in all commercial groundfish fisheries
- Due to Departmental capacity issues resulting from the COVID-19 pandemic, the 2020 Experimental Recreational Halibut fishery (XRQ fishery) remained closed. Any 2019 licence holders who are subsequently licensed to participate in the 2021 fishery (if/when opened) will have access to their 2019 carryover quota.
- As a result of COVID-19 impacts to the Canadian Halibut fishery, the Canadian (2B) commercial Halibut fishing season was extended by three weeks, to close on December 7th,



2020. This regulatory change was discussed and approved at the 8th Special Session (SS08) of the IPHC held virtually on the 17th of September, 2020.

- A seasonal (Nov 1st, 2020 – April 30th, 2021) extension to the existing pilot bottom trawl closure was implemented at a fishing location in the Queen Charlotte Sound known as the Circle Tow by the groundfish trawl fleet and the 800 Line by the Halibut fleet. This expanded seasonal closure is an interim management measure that is intended to limit harvest of spawning aggregations of Arrowtooth Flounder and Halibut. The year-round pilot bottom trawl closure that was implemented in March 2019 continues to be in effect. This expanded seasonal closure is intended for the short term and will be re-evaluated during the 2021/2022 fishing season. DFO would like to thank all those involved for their cooperation in finalizing this agreement. More information can be found at: https://notices.dfo-mpo.gc.ca/fns-sap/index-eng.cfm?pg=view_notice&DOC_ID=239138&ID=all

The 2021/2022 commercial groundfish fishing season will commence February 21, 2021, at which time the renewed Groundfish Integrated Fisheries Management Plan (IFMP) will be available. All commercial groundfish management measures are detailed in the IFMP, which can be requested once available at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/ifmp-eng.html#Groundfish>

Recreational Fishery Summary

There are usually two opportunities for recreational halibut fishing in area 2B, the recreational fishery, and the Experimental Recreational Halibut fishery pilot program (XRQ fishery). The 2020 recreational Halibut TAC was 877,750 net pounds. However, the 2020 XRQ fishery was closed, due to COVID related Departmental capacity issues. The estimated 2020 Canadian recreational Halibut catch totalled 516,351 net pounds. The estimation methods of the recreational catch are outlined in *2020 Canadian Recreational Fishery Halibut Catch Report*. Management measures for the 2020 recreational fishery are summarised in the Area 2B Recreational Fishery Halibut Catch Report.

Halibut Experimental Recreational Fishery Program

The Experimental Recreational Halibut fishery pilot program allows individual anglers as well as guides, charters, lodges, marinas and other fishing experience providers to lease Halibut quota and subsequently retain Halibut that is in excess of the regular recreational fisheries daily and possession limits, and maximum size limits. When open, an XRQ licence holder is usually permitted to fish for and retain Halibut from April 1 – December 31, even if the traditional recreational fishery is closed prior to December 31. Participants in the XRQ fishery must complete logbooks and submit them electronically within seven days of retaining a Halibut.

The XRQ fishery has operated as a pilot program since 2011, but was closed for the entirety of the 2020 season due to COVID capacity issues within the Department. A regulatory process is underway to create a category of annual sport fishing licence in s.17 of the *British Columbia Sport Fishing Regulations, 1996*. Public consultations about the regulatory changes were held throughout 2012/2013, and a Regulatory Impact Assessment Statement that summarizes feedback



from the public meetings on the experimental licence and regulatory change has been presented to the Minister. A regulatory intent document will be presented for additional public comment prior to the proposed regulatory changes being posted in Canada Gazette 1.

Given the XRQ fishery was closed this year, no quota has been reallocated from commercial groundfish fisheries. The 2021 XRQ fishery (if/when opened) will carry over a maximum 7,299 net pounds of uncaught quota from the 2019 season – should eligible licenses be re-issued.

Additional details about the XRQ program are available online: <http://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/ground-fond/index-eng.html>

Canadian Aquaculture Research

There were no halibut aquaculture research or production activities in area 2B for 2020.



Food, Social and Ceremonial and Treaty Fishery

The estimated Food, Social, and Ceremonial (FSC) halibut catch in area 2B is 405,000 pounds. Since 2009, new conditions have been applied to commercial Halibut licences and many communal halibut permits, to improve catch reporting of FSC caught fish on commercial trips. Of the total FSC halibut caught in 2020, approximately 42,872 net pounds were caught in conjunction with commercial fishing trips and were subject to all commercial monitoring requirements, including 100% at-sea and 100% dockside monitoring. In addition, First Nations engaging in fishing only for FSC used tools such as catch calendars, some dockside monitoring and phone surveys to estimate their catch. Fisheries and Oceans Canada continues to work with First Nations to improve catch reporting within the FSC fisheries.

In April 2011 the Maa-nulth Final Agreement came into effect. The agreement allocates 26,000 pounds of FSC Halibut (part of the 405,000 pounds described above) plus 0.39% of the total CTAC to the Maa-nulth First Nations for FSC purposes (equivalent to 50,999 pounds in 2020). In 2011 DFO mitigated for the additional treaty allocation through acquisition of 0.47% of the commercial TAC which is set aside for the Maa-nulth First Nation on an annual basis (identified as part of the “net reallocations into/out of the commercial fishery” in Table 1).

RECOMMENDATIONS: NA

REFERENCES: See hyperlinks above



Appendices

Tables

Table 1. Halibut allocations in 2B as of December 20, 2020. All values in net pounds.

Commercial / recreational TAC for allocation		6,185,000
Commercial allocation	x 85%	
O26 wastage	- 130,000	
2019 Underages ^A	+ 104,770	
2019 Overages ^B	- 58,315	
Net carryover	+ 46,455	
Net reallocations into/out of the commercial fishery ^C	+ 12,828	
Commercial TAC		5,083,336

Recreational allocation	x 15 %	
O26 wastage	- 50,000	
Recreational TAC		877,750

2B commercial and recreational TAC	5,961,086
2B commercial and recreational catch ^D	5,243,860

A Underage. Unfished quota equaling 10% or less of a commercial licence's individual transferable quota is carried over into the following year.

B Overage. All catch that exceeds the available quota on an individual commercial licence at the end of a given fishing season is deducted from the individual commercial licence the following season.

C Net reallocations include quota reallocated from the commercial halibut sector to Maa-nulth First Nations Treaty, the Pacific Integrated Commercial Fisheries Initiative (PICFI), and Allocation Transfer Program (ATP), as well as the Halibut Experimental Recreational Fishery pilot program.

D Catch includes all landed fish, as well as the mortality associated with legal-sized released fish in the commercial fishery.



Table 2. Halibut for 2B commercial groundfish fisheries as of December 20, 2020. All values in net pounds.

Commercial TAC	5,083,336
Total Commercial Catch	4,727,509

Table 3. Halibut for 2B recreational and the Halibut Experimental Recreational pilot program (XRQ) fisheries as of December 20, 2020. All values in net pounds.

Recreational TAC	877,750
Recreational catch ^E	516,351

^E Landed recreational catch to October 31, 2020.



APPENDIX 2

Fisheries and Oceans Canada 2020 Recreational Fishery Report

PREPARED BY: Fisheries and Oceans Canada (20 December 2020)

DATE: 20/DEC/2020

CONTRACTING PARTY: CANADA

AGENCY:

Fisheries and Oceans Canada

CONTACT:

Maureen Finn, Halibut - Hook & Line Coordinator, Maureen.Finn@dfo-mpo.gc.ca

Greg Hornby, A/Regional Recreational Manager, Greg.Hornby@dfo-mpo.gc.ca

FISHERY SECTOR/S:

Recreational

IPHC REGULATORY AREA:

IPHC Regulatory Area 2B (Canada: British Columbia)

DISCUSSION



Table of Contents

1. OVERVIEW 12

1.1. Harvest 12

 Table 1. Estimated Harvest in Pieces and Pounds by Regional Area 12

 Figure 1. Percentage of Halibut harvested by piece and weight by Regional Area 13

1.2. Biological Samples 13

 Table 2. Number of Halibut Biologically Sampled by Regional Area 13

 Figure 2. Percentage of Halibut size samples taken from each regional area..... 14

1.3. Fishery Logistics 14

2. MANAGEMENT, MONITORING AND POLICY DEVELOPMENT 15

2.1. 2020 Recreational Fishery Management Plan..... 15

2.2. Halibut Experimental Recreational Fishery Program 16

3. RECREATIONAL CATCH MONITORING AND REPORTING PROGRAMS..... 16

3.1. Background 16

3.2. Recreational Fishery Catch Monitoring 16

3.3. Haida Gwaii..... 17

3.4. North Coast Creel Survey 17

3.5. Central Coast..... 18

3.6. South Coast Creel Survey 18

 Table 3. South Coast surveys in inside waters (Johnstone and Georgia and Juan de Fuca Straits)
 Error! Bookmark not defined.

 Table 4. South Coast surveys in outside waters (West Coast of Vancouver Island) Error! Bookmark not defined.

3.7. Biological Sampling 19

4. APPENDICES 20



1. Overview

This report summarizes the 2020 harvest and biological data from the Canadian recreational Halibut fishery in the tidal waters of British Columbia (BC). The recreational total allowable catch for 2020 was 877,750 pounds¹ and the estimated harvest is 516,351 pounds (361,399 pound underage). The estimated harvest by pieces is 36,384 pieces.

The 2020 season opened on March 1 and closed on December 31. Traditional monitoring and reporting programs, such as logbooks, lodge manifests and recreational creel surveys, collected catch, effort and biological data during peak months and areas of the fishery. 2020 recreational catch is approximately 63% of last year – despite a similar recreational TAC and a carryover of the 2019 recreational management measures into the 2020 season. COVID related restrictions on travel and border closures led to many lodges and guided fishing operations shutting down either prior to or during the fishing season. This led to a significant reduction or complete loss of effort and catch from this component of the sector. Estimates of catch in months and areas not monitored by traditional programs were generated from data collected during DFO's internet-based recreational survey (iREC). Initiated in 2012, the iREC survey collects catch and effort information from recreational licence holders on a monthly basis throughout the recreational fishing year².

Final estimates are anticipated to be available by the spring of 2021. Estimated harvest in pieces and net weight by regional areas are noted below.

1.1. Harvest

Table 1. Estimated Harvest in Pieces and Pounds by Regional Area

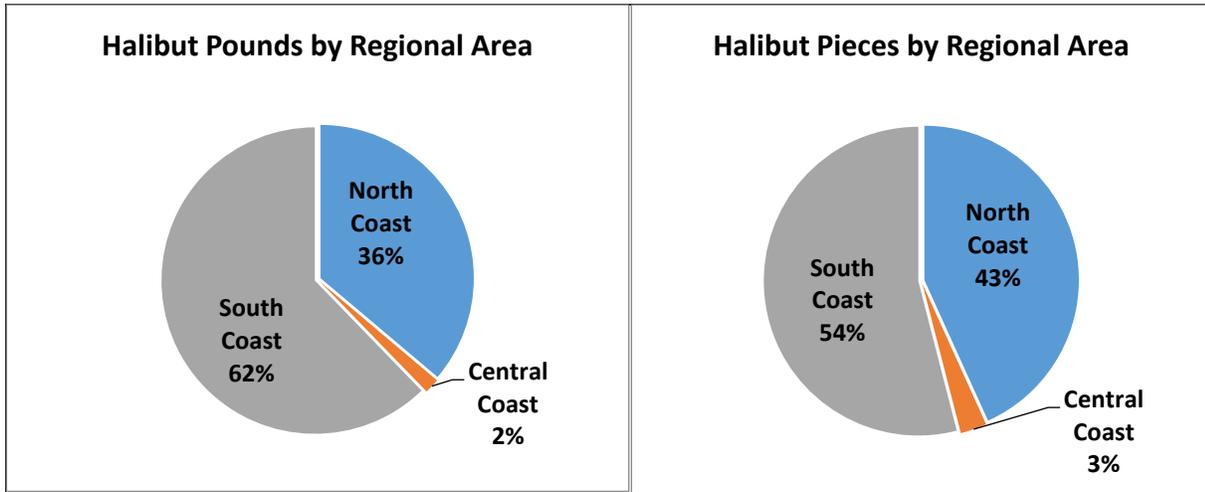
Area	Pieces	Pounds
North Coast	15,731	186,734
Central Coast	1,003	8,179
South Coast	19,650	321,438
Totals	36,384	516,351

¹ Pounds in this document refer to net weight (head off, dressed) pounds. See Biological Sampling section for the equations used to convert round weight (head on, undressed) and fork length to net weight.

² For more information on the Internet Recreational Effort and Catch (iREC) Survey please visit the following internet site; http://www.dfo-mpo.gc.ca/csas-sccs/publications/sar-as/2015/2015_059-eng.html.



Figure 1. Percentage of Halibut harvested by piece and weight by Regional Area



1.2. Biological Samples

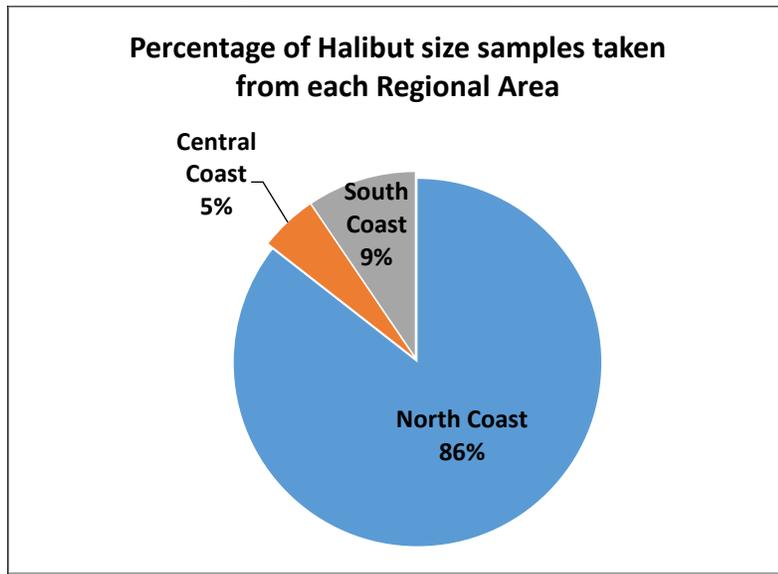
A coast wide total of 12,115 halibut were biologically sampled for either length or weight in 2020, representing 33% of the estimated harvest. The number of biological samples collected by regional areas is noted below.

Table 2. Number of Halibut Biologically Sampled by Regional Area

Area	Samples
North Coast	10,365
Central Coast	601
South Coast	1,149
Totals	12,115



Figure 2. Percentage of Halibut size samples taken from each regional area.



1.3. Fishery Logistics

Catch monitoring of the recreational fishery in BC is extremely challenging given the large geographic area (numerous remote areas), the diversity of fishing opportunities and the diversity of participants.

Starting in 2015, Tidal Waters Sport Fishing Licences included Conditions of Licence that make catch reporting mandatory. Specifically, the conditions state that “*The licence holder shall provide accurate information regarding their catch and fishing activities upon request of a Creel Surveyor or an on-line surveyor, authorities designated under s.61(5) of the Fisheries Act*”. Conditions of Licence also included regulations related to possession limits, size limits and an annual limit.

In response to the IPHC’s 2012 request for data collection programs on recreational discards, Fisheries and Oceans Canada reviewed its existing recreational halibut catch and release information and examined options for the estimation of release mortalities. DFO obtains information from anglers on the number of halibut releases through creel surveys, logbooks and internet surveys. In BC, anglers are not required to keep any records of released Halibut. Fishers are not required to record sizes of released Halibut in part because such a practice may increase release mortality and present challenges in terms of angler safety, and provide data of variable quality.. Size limits and angler preference are some reasons why released halibut may be a different average size compared to the average size of retained fish. Given these various limitations of the information available, DFO does not currently use recreational release data for the purposes of recreational halibut management or allocation decisions.

Starting this year, DFO began using IPHC’s estimate of Area 2B recreational release mortality. This resulted in a 2020 estimate of 50,000 lbs of release mortality. This discard mortality is accounted for before the 2B recreational catch limit is established and thus is not included in the calculation of catch relative to the recreational catch limit described elsewhere in this report.

DFO continues to work with the recreational fishery sector in BC to improve recreational fishery monitoring and catch reporting. While the focus remains on strengthening data collection and monitoring for retained catch in recreational fisheries, new reporting tools such as the iREC survey of recreational harvesters include questions about anglers’ releases. As the survey continues to be refined and improved, DFO will be exploring how the data gathered on releases may be used to inform management.



Fisheries and Oceans
Canada

Pêches et Océans
Canada

2. MANAGEMENT, MONITORING and POLICY DEVELOPMENT

2.1. 2020 Recreational Fishery Management Plan

The current domestic sharing arrangement between commercial and recreational fisheries is 85% of the resource allocated to the commercial sector and 15% to the recreational sector, after accounting for First Nations' Food, Social, and Ceremonial requirements. The 15% recreational share in 2020 equates to a total allowable catch of 877,750 pounds.

The recreational halibut fishery opened on March 1, 2020. The fishery operated under the 2019 recreational licence until March 31. On April 1, the 2020 licence and management measures entered into effect. The 2020 measures were the same as in 2019 and included:

- A maximum length of 126cm (approx. 49inches) head-on length
- A possession limit is either of:
 - one (1) Halibut measuring from 90-126cm head-on length, OR;
 - two (2) Halibut measuring under 90cm head on length
 - NOTE: if in possession of one (1) Halibut 90cm head-on length or longer, you shall not possess any other Halibut
- An annual limit of six (6) in aggregate, from April 1, 2020 to March 31, 2021
- All halibut retained must be recorded on the Tidal Waters Licence plus the date and area from which each halibut is caught and its length
- A mandatory Condition of Licence to report catch when surveyed.

The opening was for all Pacific Fishery Management Areas (PFMAs) with the exception of portions of Area 121. Anglers were not permitted to fish for nor retain halibut in Area 121 outside the twelve nautical mile limit and in the waters of Swiftsure Bank.

The DFO and Sport Fishing Advisory Board (SFAB) Halibut Committee meets monthly throughout the fishing season to review estimated catches. During the summer of 2020, DFO, in consultation with SFAB, proceeded with a change to the daily limit of Halibut measuring under 90cm in length – varying the daily limit from 1 daily to 2 daily. The change was implemented after catch estimates and season forecasts demonstrated that the recreational fishery was highly unlikely to catch their allocated TAC by the end of the year. By the end of October, it was determined that the estimated harvest to date plus the forecasted catch to December 31 would likely not exceed the 877,750 pound Total Allowable Catch. The fishery will remain open until December 31, 2020.

Due to the Covid-19 pandemic, the issuance of B.C Tidal Waters Sports Fishing Licences (TWSFL) to Non-Residents was not permitted for the entirety of 2020 due to border closures. The fishery was only open to residents of Canada.

For 2021, the SFAB is considering various management options they may recommend to DFO in light of existing and continuing impacts from the Covid-19 pandemic. These options may include considering changes to:

- Minimum and Maximum size limits
- Individual annual limits
- Daily and total possession limits
- Season length
- Time and area closures



2.2. Halibut Experimental Recreational Fishery Program

In 2011, the Department piloted an experimental fishery program where interested recreational stakeholders, such as individual recreational harvesters, lodges, charters, guides or marinas, could request an experimental licence that would allow them to lease quota from commercial harvesters through a market based transfer mechanism. The experimental licence permits licence holders to fish halibut beyond the limits and times of the regular recreational licence.

In 2012, the Minister of Fisheries and Oceans Canada confirmed that the experimental licence would continue to be available and announced the Department was moving forward with a regulatory proposal to continue the experimental fishery for the long term.

Due to ongoing impacts of the Covid-19 pandemic, the 2020 experimental fishery did not occur.

3. RECREATIONAL CATCH MONITORING and REPORTING PROGRAMS

3.1. Background

Marine creel surveys in BC began in 1980. Originally developed to estimate the catch of chinook and coho salmon in the Strait of Georgia, the geographical scope expanded to include Barkley Sound and Alberni Inlet in 1984, the entire West Coast of Vancouver Island (WCVI) in 1991, Haida Gwaii and the rest of the North Coast in 1995, and most recently Johnstone Strait in 1998. The objectives of the creel survey have been expanded to include estimates for most recreationally caught finfish, including halibut. Lodges operating along the coast provide census data to the Department through the logbook program, manifest data or the electronic log (elog) pilot program. The Department also receives data from some independent guides and avid anglers via logbook programs. These data are combined with the creel survey data to produce estimates of catch for each PFMA by month where traditional monitoring and reporting programs exist.

To address monitoring gaps in the recreational fishery the Department has been using and enhancing an online survey since 2012. The Internet Recreational Effort and Catch (iREC) survey was peer reviewed by the Canadian Scientific Advisory Secretariat (CSAS) in 2015. The iREC survey was developed to provide catch and effort estimates for all areas, months, fishing methods, and species harvested by the recreational sector. To minimize the effect of potential biases in iREC survey estimates, a calibration procedure was developed to relate iREC survey estimates and creel survey estimates in areas and times not covered by a creel survey.

3.2. 2020 Recreational Fishery Catch Monitoring

DFO has been working with the Sport Fishing Advisory Board on an implementation plan to strengthen recreational fishery monitoring and catch reporting in the Pacific Region. For the 2020 recreational halibut fishery, DFO used estimates from three sources; the iREC survey, logbook and lodge manifest program, and creel surveys.

As in previous years, traditional monitoring and catch reporting programs such as logbook, lodge manifest and the creel survey were used during peak months and areas of the recreational fishery. In areas and months where traditional programs were not implemented in 2020, DFO used in-season iREC survey catch estimates.



In 2020, recreational catch monitoring programs were hampered early in the season due to the Covid-19 pandemic. Restrictions on travel and the non-issuance of Non-Resident TWSFL led to many lodges and guided fishing operations shutting down either prior to or during the fishing season. This led to a significant reduction or complete loss of effort and catch from this component of the sector and therefore led to a significant reduction in the quantity of associated catch monitoring data. Creel interviews that typically start in April or May were delayed till mid-June in some areas. Unspent funds from May and June were used to add in some additional surveys in September and October. Peak fishing times and areas in July and August were well covered with specific emphasis on halibut and chinook fishing activities. Areas not covered by early season creel estimates used calibrated iREC estimates.

3.3. Haida Gwaii

Haida Gwaii recreational monitoring and reporting programs include a lodge logbook program and a creel survey. Lodge logbook data accounts for approximately 85% of the estimated halibut catch in Areas 1 and 2. Due to Covid-19 pandemic restrictions on travel, most of the lodges in Haida Gwaii did not operate in 2020. One lodge briefly opened but was soon shut down when Provincial Health Orders for Covid-19 were strengthened. Effort in this area was significantly reduced this year leading to lower halibut catches than anticipated pre-season.

The Haida Gwaii Creel Survey (HGCS) typically estimates recreational catch from Areas 1 and 2 surrounding Haida Gwaii. Since 1995, the program has conducted creel surveys to estimate catch from recreational anglers in Masset Inlet, Naden Harbour, Langara Island, Skidegate Channel, Cartwright Sound and Rennell Sound. Fish caught in Haida Gwaii by recreational harvesters are also subject to random audits by the Haida Watchmen (Guardians) through the HGCS, which operates in the main fishing months in Area 1 and parts of Area 2.

Information collected from the creel survey is combined with data submitted through the lodge logbook program to generate total catch estimates for Areas 1 and 2. In 2020, 1,263 halibut were sampled for either length or weight.

3.4. North Coast Creel Survey

The North Coast Creel Survey program collects catch information from the recreational fishery surrounding Prince Rupert and Port Edward on the North Coast of B.C. It is focused in Areas 3 and 4, comprising the waters of Chatham Sound between the mouths of the Nass and Skeena Rivers. Chatham Sound is bordered by the Alaska/BC border to the north, Dundas and Stephens Island groups to the west and Porcher Island to the south, covering an area of approximately 4,200 km². This area has many lodges and guided fishing operations that were directly impacted by the Covid-19 pandemic with many lodges closing for the season.

The North Coast Creel Survey program has a hybrid design with four components: an access point angler interview survey, an aerial effort count survey, a trailer census and a fishing lodge logbook program. The study design is similar to the one used in the South Coast Creel Survey.

Access point angler interview surveys collect catch information, angling activity times and biological samples of selected species from anglers at the completion of the fishing trip. The data is used to calculate species specific Catch per Unit Effort (CPUE) values and create angler activity profiles. Aerial surveys are conducted to capture the 'instantaneous' counts of the number of boats fishing at the time of the flight and are expanded using the angler effort profiles generated from the ground surveys to produce an estimate of total daily effort. Lodges in the area submit logbooks to DFO post-season. Lodge data is treated as a complete census of catch, is summed and added to the creel estimates to get an estimate of total catch. To prevent bias in the effort estimates from lodge boats counted during the aerial surveys, a temporal-spatial analysis is conducted



of lodge logbook data for days when the overflight occurs and any boats that were fishing in the survey area during the time of the flight are removed from the final count of boats fishing in the area.

In 2020, 9,102 halibut were sampled for either length or weight.

3.5. Central Coast

Catch information in Areas 7, 8 and 9 on the Central Coast is primarily collected from lodges and some charter operators operating in these areas, primarily through the logbook program. As with most areas of the coast, the Central Coast was also significantly impacted by the Covid-19 pandemic with many lodges and guided fishing operations shut down. Most lodges that were still in operation participated in the logbook program and collected catch, effort and biological data that were submitted to the Department on a monthly basis. There is no creel program to estimate the number of halibut caught by independent anglers or guides in these areas due to challenges with implementing a survey in this remote and geographically dispersed fishery.

In 2020, 601 biological samples were reported.

3.6. South Coast Creel Survey

As mentioned above, creel surveys in the southern waters of BC were hampered early in the season by the Covid-19 pandemic but were fully operational by peak recreational fishing periods in mid-June to Sept. Creel interviews that typically start in April or May were delayed till mid-June. Creel surveys continue to be the main tool to estimate catch of halibut in this area. Surveys are conducted in select fishery strata based on: the highest catch of halibut and chinook, the highest effort, in-season management requirements, and potential impact on stocks of concern. Creel surveys consist of effort surveys and estimation of catch per boat trip based on fishery observers at selected ramps and marinas.

Data collected during angler interviews are recorded in the South Coast Marine Creel Survey form and provide average catch per unit effort by species and fishing times, while aerial counts from chartered aircraft capture 'instantaneous' counts of the number of recreational boats fishing on randomly selected dates. Fishing times obtained from angler interviews are used to generate daily fishing activity profiles which are used to expand the 'instantaneous' aerial counts to estimate the number of boats fishing each day. The estimate of boats fishing is multiplied by the average catch to estimate the total number of halibut caught each day. Estimates are generated monthly, or occasionally for two week periods where samples rates are high. The estimates are stratified by weekend and holidays vs. weekday dates. In addition, logbook catch data submitted by remote fishing lodges, independent guides and expert anglers are incorporated into creel estimates post season. The survey in Kyuquot Sound (PFMA's 26, 126) is entirely logbook-based, as fishing from lodges represents essentially all recreational effort in this remote area; in 2018 estimates were improved through use of iREC survey information on the proportion of guided to unguided trips.

Catch and effort is estimated by creel sub-area and rolled up to DFO PFMA's by month. South Coast waters include PFMA's 11 through 29. The Port Hardy survey also collects information from recreational fishing trips in Area 10. Creel surveys are active during the peak season of recreational angling and vary in duration depending on location. The spatial and temporal coverage of the survey program can vary year to year in response to budget and fishery priorities.

For further details on the methodology and results of the South Coast Creel survey, including catch and effort estimates with level of uncertainty, please visit:

<http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/salmon/sc%20stad/bulletins.htm>

In 2020, 1,149 halibut were sampled for length or weights during the South Coast Creel survey interviews.



Fisheries and Oceans
Canada

Pêches et Océans
Canada

3.7. Biological Sampling

A total of 12,115 halibut were sampled for lengths or weights, representing 33% of the total estimated coastwide harvest. Samples were collected from lodges, guides and independent anglers interviewed at access points and converted to net weight, head off and dressed, using the following formulas developed by the IPHC:

$$\text{Round Weight} = \text{Fork Length (cm)}^{3.24} \times (6.921 \times 10^{-6})$$

$$\text{Net Weight} = \text{Round Weight} \times 0.75$$

Average net weights were calculated for each Area on a monthly basis to generate estimates of total net weight by month and area caught in the fishery.



4. APPENDICES

The following tables provide detailed catch and biological information collected during the 2020 recreational halibut fishery in BC. Note: these figures are preliminary and subject to change.

Table 5. Summary of the 2020 Recreational Halibut Catch by Pacific Fishery Management Area (PFMA)

Regional Area	PFMA	Est. Piece Count	Est. Total Net Wt. (lbs)
North Coast	1	1,578	15,033
	2	387	5,365
	3	3,576	52,861
	4	8,416	93,800
	5/6	1,774	19,675
Central Coast	7/8/9	1,003	8,179
South Coast	10/11	798	10,535
	12	1,578	15,173
	13/14	82	1,204
	15-18/28/29	960	11,699
	19	1,097	21,388
	20	856	15,441
	21/121	4,404	81,593
	23/123	5,088	82,437
	24/124	1,049	23,610
	25/125	966	15,010
	26/126	1,145	17,196
	27/127	1,625	26,153
Total Landed in Canada		36,384	516,351
Recreational TAC			877,750
Estimated Balance - END OF OCTOBER			361,399



Table 6. Recreational Halibut Monthly Catch Estimates (net wt. lbs) for 2018, 2019 and 2020

	Net Weight (lbs)			Cumulative Net Weight (lbs)		
	2018	2019	2020	2018	2019	2020
Feb	0	0	0	0	0	0
March	16,029	8,172	3,814	16,029	8,172	3,814
April	15,715	10,259	7,111	31,744	18,432	10,926
May	58,494	40,988	26,356	90,239	59,420	37,282
June	176,370	152,282	74,348	266,608	211,702	111,630
July	296,745	336,520	182,655	563,354	548,221	294,284
Aug	237,880	207,866	148,413	801,234	756,088	442,697
Sept	25,484	53,956	69,419	826,718	810,044	512,116
Oct	14,053	834	4,236	840,771	810,878	516,351
Nov	3,866	0	0	844,638	810,878	516,351
Dec	3,406	5,761	0	848,044	816,639	516,351
Total	848,044	816,639	516,351	848,044	816,639	516,351
Recreational TAC						877,750
Estimated Total Catch						516,351
Estimated Balance - END OF OCTOBER						361,399



Table 7. Estimated 2020 Halibut Catch in Pieces by Area and Month

2020 i-Rec data	Fishery Closed	Summary of 2020 In-season Recreational Halibut Catch												Estimated Total Pieces by Area	% of Total Pieces by Area
		Estimated Halibut Pieces Retained by Area and Month													
Data Pending	2020 Catch Monitoring Program ('creel') Data	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec			
PFMA	1	0	0	0	54	78	1317	51	78	0			1,578	4%	
	2	0	0	20	17	220	108	17	5	0			387	1%	
	3	0	0	16	207	749	1373	906	325	0			3,576	10%	
	4	0	10	38	660	1595	2825	2537	743	8			8,416	23%	
	5/6	0	0	40	108	196	622	643	145	20			1,774	5%	
	7	0	0	0	5	11	13	21	9	35			94	0%	
	8	0	0	10	47	19	60	165	52	0			352	1%	
	9	0	0	0	0	54	212	258	33	0			557	2%	
	10/11	0	0	0	52	210	373	160	3	0			798	2%	
	12	0	86	56	64	65	321	793	177	17			1,578	4%	
	13/14	0	0	0	12	18	25	23	5	0			82	0%	
	15-18/28/29	0	0	0	31	89	75	444	322	0			960	3%	
	19	0	43	98	299	19	290	134	209	5			1,097	3%	
	20	0	86	30	46	185	167	177	150	16			856	2%	
	21/121	0	0	0	6	793	1854	1436	187	129			4,404	12%	
	23/123	0	0	40	82	495	1236	2268	964	3			5,088	14%	
	24/124	0	20	60	11	143	174	276	340	25			1,049	3%	
25/125	0	0	20	64	60	494	105	223	0			966	3%		
26/126	0	0	0	0	65	623	424	33	0			1,145	3%		
27/127	0	0	20	50	151	400	476	528	0			1,625	4%		
2020 Totals	Monthly	0	244	446	1,816	5,215	12,561	11,313	4,531	257	0	0	36,384		
	Cum.	0	244	691	2,506	7,722	20,283	31,596	36,127	36,384	36,384	36,384			



Table 8: Average 2020 Net Weight Estimates of Retained Halibut by Area and Month

PFMA	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec
1	9	9	9	9	8	9	10	13	11	11	11
2	14	14	14	14	14	14	14	14	14	14	14
3	14	14	14	14	11	18	13	15	15	15	15
4	12	12	12	14	11	12	10	11	11	11	11
5/6	11	11	11	11	11	11	12	11	11	11	11
7	11	11	11	11	12	9	8	9	9	9	9
8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	8	9	10	7	8	7	8	8	8
10/11	12	12	12	12	12	13	17	15	15	15	15
12	10	10	10	10	10	11	9	10	10	10	10
13/14	18	18	15	19	11	16	14	15	15	15	15
15-18/28/29	13	13	13	13	13	12	12	12	12	12	12
19	19	19	19	19	18	21	19	18	18	18	18
20	18	18	18	18	18	18	18	18	18	18	18
21/121	19	19	19	19	22	16	19	19	19	19	19
23/123	17	17	17	17	17	21	12	18	15	15	15
24/124	23	23	23	23	23	22	24	21	22	22	22
25/125	15	15	15	15	13	16	15	15	15	15	15
26/126	15	15	15	15	15	15	16	15	15	15	15
27/127	15	15	15	15	17	13	19	16	16	16	16



Table 9. Estimated 2020 Halibut Catch in Net Weight (lbs) by Area and Month

PFMA	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Total	
1	0	0	0	470	617	12,465	497	984	0	0	0	15,033	
2	0	0	275	242	3,018	1,523	236	70	0	0	0	5,365	
3	0	0	226	2,991	8,314	24,439	11,869	5,022	0	0	0	52,861	
4	0	119	470	9,108	17,705	34,183	24,102	8,029	85	0	0	93,800	
5/6	0	0	431	1,170	2,114	6,719	7,462	1,565	214	0	0	19,675	
7/8/9	0	0	82	440	771	2,135	3,684	763	304	0	0	8,179	
10/11	0	0	0	633	2,435	4,753	2,670	43	0	0	0	10,535	
12	0	844	546	625	638	3,374	7,242	1,736	168	0	0	15,173	
13/14	0	0	0	221	193	402	313	75	0	0	0	1,204	
15-18/28/29	0	0	0	407	1,160	933	5,280	3,919	0	0	0	11,699	
19	0	831	1,897	5,785	335	6,102	2,480	3,862	96	0	0	21,388	
20	0	1,558	543	835	3,356	3,030	3,211	2,630	278	0	0	15,441	
21/121	0	0	0	106	17,738	29,988	27,674	3,604	2,482	0	0	81,593	
23/123	0	0	672	1,386	8,346	26,486	27,799	17,706	42	0	0	82,437	
24/124	0	463	1,381	254	3,307	3,905	6,548	7,185	566	0	0	23,610	
25/125	0	0	297	957	804	8,075	1,562	3,316	0	0	0	15,010	
26/126	0	0	0	0	985	9,083	6,634	494	0	0	0	17,196	
27/127	0	0	292	725	2,513	5,059	9,149	8,416	0	0	0	26,153	
2020 Totals	Monthly	0	3,814	7,111	26,356	74,348	182,655	148,413	69,419	4,236	0	0	516,351
	Cum.	0	3,814	10,926	37,282	111,630	294,284	442,697	512,116	516,351	516,351	516,351	



APPENDIX 3

Fisheries and Oceans Canada 2020 Enforcement Report

PREPARED BY: Fisheries and Oceans Canada (21December2020)

DATE: 21/DEC/2020

CONTRACTING PARTY: CANADA

AGENCY:

Fisheries and Oceans Canada

CONTACT:

Ann Bussell, Groundfish Enforcement Coordinator, Ann.Bussell@dfo-mpo.gc.ca

FISHERY SECTOR/S:

All

IPHC REGULATORY AREA:

IPHC Regulatory Area 2B (Canada: British Columbia)



DISCUSSION

Halibut Compliance and Enforcement – Commercial Halibut Summary 2020

2020 Commercial Halibut Fishery

The 2020 commercial halibut fishery opened at 12:00 hours local time on March 15, 2020 and closed at 12:00 hours local time on December 7, 2020. A three week extension was approved by the Minister due to impact of COVID-19. A total of **146** vessels and **565** fishing trips were recorded during the 2020 commercial halibut fishing season. **Ten (10)** vessels completed **ten (10)** fishing trips during the three week extension.

Compliance and Enforcement Priorities – 2020

Groundfish, including commercial Halibut, enforcement priorities for 2020 were identified in the Groundfish Integrated Fisheries Management Plan and by the Groundfish Enforcement Coordinator as follows:

- **Fishing in closed areas** such as Rockfish Conservation Areas (RCAs), Glass Sponge Reef Marine Protected Areas and in season closures;
- **Dockside Observer Treatment Issues** – not providing all reasonable assistance to the DFO designated observers;
- **Non-compliance with the Dockside Monitoring Program (DMP) including hails;**
- **Retention of groundfish caught, retained, or possessed without authority of a licence.** Priority will be placed on occurrences where retention for the purpose of sale is indicated;
- **Unauthorized dual fishing.** Dual fishing is defined as ‘fishing for and retaining groundfish under the authority of a Commercial Groundfish Licence and a Communal Groundfish Licence during the same fishing trip;
- **Non-compliance with electronic monitoring (EM) conditions of licence,** especially time gap occurrences;
- **False and misleading information** provided to dockside observers.
- **Non-deployment of seabird avoidance gear** as required by conditions of licence.

Links to Pacific Region Groundfish Integrated Fisheries Management Plan – 2020/2021:

Full Text: <https://waves-vagues.dfo-mpo.gc.ca/Library/4088529x.pdf>



Occurrences

Occurrences are reported or observed incidents which are potential violations of any Act or Regulation which falls under the mandate of a Canadian fishery officer.

Halibut Compliance and Enforcement – Recreational Halibut Summary - 2020

2020 Recreational Halibut Fishery

The 2020 recreational halibut fishery opened coast-wide at 00:01 hours on March 1, 2020 until 23:59 hours on December 31, 2020. Between January 1, 2020 and December 18, 2020 a total of 271,962 recreational licences were issued.

Halibut Compliance and Enforcement – Halibut Experimental Recreational Program – 2020

2020 Halibut Experimental Recreational Fishery

The halibut experimental recreational fishery (XRQ) did not open in 2020 due to COVID-19 and DFO Groundfish Management Unit staff working remotely.

Additional details about the XRQ program are available online:

<https://www.pac.dfo-mpo.gc.ca/fm-gp/commercial/ground-fond/halibut-fletan/presentation-eng.html>

Halibut Compliance and Enforcement – Commercial, Food, Social and Ceremonial (FSC) and Treaty Fisheries – 2020

For all dual fishing (commercial and FSC) halibut trips the vessel master is responsible for following the conditions of licence specific to dual fishing. All of the fish require 100% monitoring at-sea and 100% monitoring at the dock. In 2020 **forty-eight (48)** commercial halibut vessels hailed out for **142** dual fishing trips.

FSC halibut fishing does not have the same monitoring requirements as commercial and dual halibut fishing. DFO is working with indigenous nations to improve catch monitoring and reporting.



RECOMMENDATIONS: N/A

REFERENCES: See hyperlinks above and below.

APPENDICES	Pages
Appendix 1: Tables – Occurrences	5-6
Appendix 2: Tables – Fishery Officer Enforcement Effort Summary	7
Appendix 3: Tables – Aerial Surveillance Patrol Summary	8
Appendix 4: Tables – Violation Summary and Significant Convictions and 2020 Investigations	9-10
Appendix 5: Background Information	11-14



Appendix 1: Tables 1-3: Occurrences**Table 1: Commercial Halibut Fishery Occurrences - January 1, 2020 to December 7, 2020³**

Occurrence Type (not all are found to be violations)	Number of Occurrences
Observer Treatment	2
Area/Time (closed area)	7
Dual Fishing Issues	169*
EM System Issues	1
Illegal Buy/Sell/Possess	1
Sea Birds Caught	4
Gear Illegal/Used Illegally	7
Piece Count Issues	7
Registration / Licence	3
Hails	1
Release Rockfish	28**
Reported Overages	2
Species/Size Limit	8
Hold Check Not Completed	414***
Undersize Halibut	8
Prohibited Species	3
Total	251

Source: DFO Departmental Violations System (DVS) and Archipelago Marine Research Ltd. Portal for Clients

* Most of the Dual Fishing occurrences are of an administrative nature.

** Five rockfish release occurrences will be investigated further.

*** During Covid no hold checks were required. Not included in total occurrences.



Table 2: Recreational Halibut Fishery Occurrences - January 1, 2020 to December 7, 2020⁴

Occurrence Type	Number of Occurrences
Reporting	2
Quota/Bag Limits	4
Species/Size Limit	1
Registration/Licence	4
Illegal Buy/Sell/Possess	8
Illegal Transportation	3
Other Legislation	1
Total	23

²Source: DFO Departmental Violations System (DVS)

Table 3: Aboriginal Halibut Fishery Occurrences - January 1, 2020 to December 7, 2020⁵

Occurrence Type	Number Of Occurrences
Illegal Buy/Sell/Possess	11
Registration/Licence	1
Area/Time	2
Registration/Licence	2
Gear	1
Inspection	1
Total	18

³Source: DFO Departmental Violations System (DVS)



Appendix 2: Table 4 – Fishery Officer Enforcement Effort Summary**Table 4:** 2018, 2019 & 2020 C&P Fishery Officer Groundfish enforcement hours for aboriginal, commercial, and recreational Halibut fisheries and recreational hours comparing halibut to finfish and salmon in tidal waters⁶

ENFORCEMENT ACTIVITY – Comparison of years 2018, 2019 and 2020 (January 1 to November 30 each year)						
HALIBUT DEDICATED HOURS and % of TOTAL ENFORCEMENT EFFORT FOR PACIFIC REGION						
	2018	2018	2019	2019	2020	2020
FISHERY TYPE	HOURS	% TOTAL ENF. EFFORT	HOURS	% TOTAL ENF. EFFORT	HOURS	% TOTAL ENF. EFFORT
ABORIGINAL HALIBUT	220.75	0.3%	392	0.5%	176.5	0,22%
COMMERCIAL HALIBUT	318.75	0.5%	666.5	0.85%	776.25	0.97%
RECREATIONAL HALIBUT	520.75	0.8%	693.75	0.89%	356.5	0.45%
TOTAL	1060.25	1.6%	1,752.25	2.24%	1309.25	1.64
RECREATIONAL HOURS and % of TOTAL ENFORCEMENT EFFORT FOR PACIFIC REGION						
RECREATIONAL HALIBUT	520.75	0.8%	729.75	0.94%	37.25	0.047%
RECREATIONAL FINFISH – TIDAL WATERS	2057.25	3.1%	2,502.5	3.2%	626.5	0.78%
RECREATIONAL SALMON – TIDAL WATERS	6280.75	9.4%	4667.0	6.02%	1599.75	2.0%
TOTAL	8858.75	13.3%	7,899.25	10.16%	2,263.5	2.83%

Note: The recreational patrols are typically conducted on a “multi species” or “multi fishery” basis with the predominant effort in recreational tidal directed toward salmon and other finfish. Halibut checks are conducted on these patrols so they are included as part of enforcement effort directed towards recreational halibut fishing.

⁴ Source: DFO Fisheries Enforcement Activity Tracking System (FEATS)



Appendix 3: Table 5 – Aerial Surveillance Patrol Summary**Table 5:** 2019, 2018, 2017, & 2016 C&P Aerial Surveillance Patrols – number of missions, total hours spent flying, and number of halibut vessels viewed during missions⁷

AERIAL SURVEILLANCE PROGRAM (ASP) ACTIVITY			
<u>Air Patrols</u>	<u>Missions</u>	<u>Hours</u>	<u>Total Halibut Vessels Recorded Per Year</u>
January 1, 2020 – November 30, 2020	184	1107.3	259 (245 L, 14 FL)
January 1, 2019 – November 30, 2019	185	1036.59	146 (130 L, 16 FL)
January 1, 2018 – November 30, 2018	178	1057	294 (263 L, 31 FL)
January 1, 2017 – December 15, 2017	166	879.49	500 (461 L, 39 FL)

L = commercial halibut licence

FL= communal commercial halibut licence

⁵Source: Provincial Aerospace Limited - Surveillance Information System (SIS)

Appendix 4: Table 6 – Violation Summaries**Table 6:** 2017, 2018, 2019 & 2020 Violations for Aboriginal, Commercial and Recreational Halibut – Charges Laid, Charges Pending/Under Review, and Tickets/Warnings Issued⁶

VIOLATIONS	2017	2018	2019	2020	GRAND TOTAL
ABORIGINAL GROUND FISH – HALIBUT	14	2	14	4	34
CHARGES LAID					
CHARGES PENDING/UNDER REVIEW	13	1	12	2	28
TICKET ISSUED			1		1
WARNING ISSUED	1	1		1	3
DIVERTED (ALTERNATIVE MEASURES)			1	1	2
COMMERCIAL GROUND FISH - HALIBUT	25	12	4	13	54
CHARGES LAID			2		2
CHARGES PENDING/UNDER REVIEW	5	3	2	9	19
TICKET ISSUED	7			1	8
WARNING ISSUED	13	9		3	25
RECREATIONAL GROUND FISH - HALIBUT	80	64	85	55	284
CHARGES LAID	8	1	6		15
CHARGES PENDING/UNDER REVIEW	10	6	38	8	62
TICKET ISSUED	26	21 (1 XRQ)	25	22	94
WARNING ISSUED	36	36 (2 XRQ)	16	25	113
GRAND TOTAL	119	78	103	72	372

⁶Source: DFO Departmental Violations System (DVS)

SIGNIFICANT CONVICTIONS: (East Coast – Gulf Region)

- *Observer Treatment – skipper fined \$1500 + Court Order prohibiting skipper from:*
 - *Holding a fishing licence for 5 years*
 - *Fishing for 5 years*
 - *Being on a fishing vessel for 5 years*

Skipper failed to provide all reasonable assistance to the observer. This conviction may be useful should similar cases come up in the Pacific Region.

SIGNIFICANT 2020 INVESTIGATIONS and/or PENDING INVESTIGATIONS:

- *Two (2) Closed Area Fishing*
- *Seven (7) Seabird Avoidance Gear Deployed*
- *Ten (10) unauthorized dual fishing*
- *Six (6) unauthorized retention of fish while dual fishing*

Link to DFO Conviction Tables:

<https://www.dfo-mpo.gc.ca/media/charges-inculpations/pac-eng.htm>



Appendix 5: Background Information

In 2016 the Government of Canada took action to strengthen and restore lost protections and incorporate modern safeguards to the *Fisheries Act*. In June 2019 Bill C-68, an Act to amend the *Fisheries Act* passed Parliament. On June 21, 2019 the amended *Fisheries Act* entered into force.

Fish and Fish Habitat Protection provisions came into force on August 28, 2019. New regulations are coming into force. Training for Fishery Officers is continuing.

COMPLIANCE ISSUES AND STRATEGIES

Overview

Fisheries and Oceans Canada (DFO) is a natural resource management organization with an infrastructure necessary to support professional law enforcement activities. The enforcement policies and activities of DFO with respect to regulatory compliance of aboriginal, commercial and recreational fisheries, is the responsibility of the Conservation and Protection (C&P) program.

The program is delivered through a three pillar enforcement approach which includes:

- Promotion of compliance through education and shared stewardship;
- Monitoring, control and surveillance activities; and,
- Management of major cases/special investigations in relation to complex compliance issues.

C & P, Pacific Region, is responsible for providing monitoring, control and surveillance activity along a coastline of 27,000 kilometers extending from the southern tip of Vancouver Island to northern British Columbia and the Yukon Territory.

Management of the groundfish fisheries off the west coast of Canada is described within the Groundfish Integrated Fishery Management Plan (IFMP). The IFMP is not enforceable; rather, fishery officers rely on conditions of licence, variation orders and acts and regulations for enforcement purposes.

There are currently 160 fishery officers in the Pacific Region, the majority of which are located within four distinct operational areas as well as within the Aquaculture Enforcement unit and Whale Protection Unit. These areas/units are supported by the National Fisheries Intelligence Service and the Major Case Unit. Currently C&P is staffing up to fill a number of vacancies in the region.

More information about DFO Compliance and Enforcement is available at the following website:

<http://www.dfo-mpo.gc.ca/fm-gp/enf-loi/index-eng.htm>



Sanctions and Deterrence

DFO's C&P program pursues violations of fisheries legislation and regulations in three ways.

1. For violations that are considered minor, an officer may issue warning letters or tickets that will form part of the fisher's compliance history and will be considered when investigating future occurrences.
2. Alternative Measures Agreements are now a part of the new amended *Fisheries Act* and include a range of different types of agreements which may be used as an alternative to prosecution in the court system. The focus is on the rehabilitation of the offender and the public interest which may be better served outside of the traditional criminal court process. Restorative Justice (RJ) is one example of such an agreement and is a community based approach.
3. Finally, serious or repeat offenders are dealt with through the provincial and federal courts where sentencing may include significant fines, prohibitions, licence suspensions and jail time.

MONITORING, CONTROL AND SURVEILLANCE

National Aerial Surveillance Program in Pacific Region

C&P operates a coastal air surveillance program utilizing a specially configured aircraft with a fishery officer on board all flights. Close monitoring of the halibut fleet for compliance with hail-out, use of seabird avoidance gear, and area closures such as Rockfish Conservation Areas is an integral element of all patrols. Patrol coverage also monitors vessel activity within Canada's Exclusive Economic Zone. Air surveillance resources are utilized weekly throughout the year subject to weather conditions and conflicting requirements. A new Dash 8 specially configured plane was due to arrive in the Pacific Region in the fall of 2020. Its arrival has been delayed until 2021.

Information collected on the flights is available to fishery officers via an internet-based flight information system.

Fisheries Patrol Vessels

Inshore and near shore patrols are conducted by fishery officers using program vessels, which are primarily rigid hull inflatable boats, 7.33, 7.53, 8.5 and 10 meters in length.

Marine Patrol Program

There are two Canadian Coast Guard (CCG) mid-shore patrol vessels (MSPV) based in the southern and northern patrol areas. Each of the ships is dedicated to the C&P program and annually conduct 22 patrols each, resulting in between 286 to 309 operational days per year. There are two to three fishery officers on each patrol. In 2020 due to COVID-19 and some staffing issues not as many patrols occurred.

The National Aerial Surveillance Program and the Marine Patrol Program work together to provide effective and efficient use of C&P assets



Fisheries Observer Programs

Additionally, certified fisheries observers, both dockside and at-sea, are designated under Section 39. (1) of the *Fishery (General) Regulations* and perform duties related to monitoring of fishing activities, examination and measurement of fishing gear, collection of biological samples, recording of scientific data, monitoring of the landing of fish and verification of the weight and species of fish caught and retained. Fisheries observers are not armed and do not have authority to enforce the law. They perform an observe, record and report function.

TRANSFORMATION OF THE CONSERVATION AND PROTECTION PROGRAM

C&P continues to develop into a fully integrated, risk-based and intelligence-led program.

National Fisheries Intelligence Service (NFIS) and Major Case Management

In 2020 NFIS continued to develop its intelligence-led program. In the Pacific Region this program will improve C&P's ability to set priorities and make decisions which focus on activities that are most harmful to fisheries and ocean resources. A new initiative involves engagement with international partners. A Pacific Intelligence Partners group has been established and a number of countries from the North and South Pacific are now members.

The application of Major Case Management (MCM) principles and practices will enable the C&P program to focus its resources on investigations that lead to successful prosecutions and sanctions. Currently a dedicated MCM unit is being developed and staffed. It will work with NFIS and Fishery Officers in the Pacific Region in an advisory role.

NFIS in Ottawa has developed a national verification program for designated observer companies and individual observers. The Pacific Region had three (3) fishery officers trained. One has since moved out of the region. The trained fishery officers will conduct field checks of the DFO designation dockside observers to verify that they are carrying out their duties as required by regulation and national and regional policies and procedures. In 2021 Ottawa NFIS staff plan to conduct some of the designated observer company verifications virtually due to COVID-19 restrictions.

This national initiative along with the Marine Patrol Program and Aerial Surveillance Program round out C&P's commitment to improved compliance monitoring and enforcement.

HALIBUT ENFORCEMENT OVERVIEW

Fisheries observers and electronic monitoring (EM) systems perform a key role in observing and documenting fishing-related occurrences. Fishery officers have access to EM and observer data for enforcement purposes.



Fishery officers conduct inspections both dockside and at sea for compliance with licence conditions. Directed enforcement effort on the Halibut fishery is dependent on work load and the priorities identified by the respective C&P Area Chiefs.

The hook and line halibut fishery has 100% monitoring through the use of sophisticated GPS, hydraulic sensors and video imaging equipment, logbooks and dockside observers. This along with significant court sanctioned penalties has resulted in a high rate of compliance.

Commercial Licence Categories

A Commercial Halibut category 'L' or Communal Commercial Halibut category 'FL' licence is required to participate in the directed commercial Pacific Halibut fishery.

Category 'L' Halibut eligibilities are limited entry and vessel-based. Category 'FL' eligibilities are party-based; an indigenous group or organization is the licence eligibility holder and the eligibility must be designated to a commercially registered fishing vessel.

Vessels are permitted to conduct combined Halibut 'L' or 'FL' and Sablefish 'K' or 'FK' trips. These vessels are required to identify their intentions at the time of hail-out.

DFO INTERNATIONAL CONSERVATION & PROTECTION

The Pacific Region has a Senior Compliance Program Officer involved in monitoring and addressing illegal, unregulated and unreported (IUU) fishing in international waters. They are seeing a shifting dynamic in the "legal" fleets operating further north and east in the Pacific Ocean due to shifting climate and economics (collapse of their local stocks).

Link to Global Fishing Watch article:

<https://globalfishingwatch.org/impacts/gfw-assists-us-coast-guard-patrol-in-pacific/>

Prepared by Groundfish Enforcement Coordinator 2020-12-21



References

Zetterberg, P.R., Maher, J.M., and Watson, N.M., 2009. Strait of Georgia recreational fishery creel survey finfish data, 2002 to 2006. Can. Data Rep. Fish. Aquat. Sci. 1212: xix + 299 p.

Van Tongeren, V.A. 2009. North Coast (Areas 3 & 4) Creel Survey Statistics for Salmon and Groundfish. Can. Manusr. Rep. Fish. Aquat. Sci. 2907:97p.

Bocking, Robert C. and Gary F. Searing, March 2000. Haida Gwaii Creel Survey of Ocean Sport Fisheries, Area 1 and 2W. LGL Limited.

DFO. 2015. Evaluation of the Internet Recreational Effort and Catch (iREC) Survey methods. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2015/059. http://www.dfo-mpo.gc.ca/csas-sccs/publications/sar-as/2015/2015_059-eng.html





Province of British Columbia 2020 Annual Report

PREPARED BY: British Columbia Ministry of Agriculture, Food and Fisheries

DATE: 23/DEC/2020

CONTRACTING PARTY: CANADA

AGENCY:

The Province of British Columbia represented by the Minister of Agriculture, Food and Fisheries.

CONTACT:

Mike Turner, Senior Manager, Intergovernmental Relations, Fisheries, and Aquaculture,
Michael.R.Turner@gov.bc.ca

Kevin Romanin, Senior Seafood Analyst, Kevin.Romanin@gov.bc.ca

FISHERY SECTORS:

All sectors within British Columbia.

IPHC REGULATORY AREA

IPHC Regulatory Area 2B (Canada: British Columbia)

DISCUSSION

The Province of British Columbia (B.C.) has a long history of involvement with the Pacific halibut fishery and the International Pacific Halibut Commission (IPHC). B.C. recognizes the importance of Canada working bilaterally with the United States through the Pacific Halibut Treaty as well as the work done by the IPHC to develop and conserve Pacific halibut stocks. The significant history of this Treaty, as one of the first Canadian international agreements and the near-century of mutual benefit to both countries, serves as a tremendous example in global fisheries management. B.C. commends the efforts made by the Commission to reach agreement during the 96th session of the IPHC Annual Meetings in 2020. Thousands of jobs rely on this continued cooperation and it is critical that this history of collaboration continues.

The B.C. Ministry of Agriculture, Food and Fisheries is responsible for collection and reporting of data and statistics for the agri-food sector. An important part of that mandate is to analyze the impact of various sectors, including fisheries and seafood, to the broader provincial economy. B.C. commercially harvests and reports on over 25 wild fisheries including Pacific halibut which is among B.C.'s most valuable wild fishery

commodities¹. The Pacific halibut fishery supports significant commercial harvests in Canada's waters while providing many fishing and processing jobs and is significantly important to small coastal communities and First Nations across Canada's west coast. The Province licences seafood processors and annually collects data on the volumes and values of the various seafood products. In 2019, the survey showed the processing of 3,160 tonnes (6.96M lbs) of Pacific halibut, which includes some imported halibut processed in B.C. The survey also showed landed and wholesale values of \$46.42M and \$75.07M respectively. Pacific halibut account for 8.5% of the wholesale value of all B.C.'s wild fisheries including all groundfish, salmon, and shellfish. In 2019, B.C. exported 1.6M kilograms (3.5M lbs) of halibut products worth \$35M. The Province also conducts a seafood sector employment survey every three years which provides data on jobs, wages, and seafood processing activities. The results from the most recent survey conducted in 2019 will be available for distribution in 2021. The last published data from 2016 shows 85 processing facilities that reported processing halibut and generated 319 jobs with an estimated \$14M paid in wages².

In addition, the recreational halibut fishery supports the hundreds of fishing lodges, charter companies, and individuals that contribute tremendously to the economies of coastal communities. In 2019 and 2020, there were severe restrictions on salmon fishing in B.C. which are expected to continue into future years. This is amplifying the importance of the recreational halibut fishery to the sector which contributed to an over \$1.1B (2016) annual impact on the B.C. Gross Domestic Product³. B.C. will continue to provide available data to the IPHC from provincially licensed seafood processors to advance the IPHC economic report which will help highlight the benefits that Pacific halibut provide. As B.C.'s agency responsible for fisheries and seafood economic data, the Ministry of Agriculture, Food and Fisheries recognizes the importance of understanding the broader socioeconomic impacts and downstream effects of the Pacific halibut fishery and looks forward to continuing to work together.

First Nations are entitled to a Food, Social and Ceremonial (FSC) allocation of the total allowable catch (TAC), and many jobs within the halibut fishery and halibut processing facilities are held by members of First Nations across British Columbia. In the commercial halibut fishery, approximately 23% of licenses are held by B.C. First Nations. In 2019, B.C. became the first province in Canada to introduce legislation aimed at adopting the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which mandates that government bring its laws and policies into harmony with the aims of the declaration. The B.C. government has set Indigenous reconciliation as a top priority and is actively working to ensure that First Nations are meaningfully included in management of all B.C. fisheries.

B.C. has an integrated groundfish fishery with 100 per cent monitoring and 100 per cent bycatch accountability. This well-developed program, which includes at-sea observers and electronic monitoring solutions, is regarded as one of the most well-monitored fisheries in the world. In September 2009, the B.C. Pacific halibut fishery earned Marine Stewardship Council certification for being a sustainable, well-managed fishery. These extensive fisheries monitoring programs come at a direct cost to fishermen and license holders as they are entirely funded by industry. West coast Canadian fishers respect that monitoring programs level the playing field by keeping all fishery participants compliant with the rules which help to ensure sustainable stocks and the future of their industry. In 2020, with the interruption of groundfish observer programs due to the COVID19 pandemic, fisheries were able to implement an Emergency Electronic Monitoring program in place of at-sea observers and begin working on alternate methods of estimating halibut bycatch mortality like area-based halibut mortality estimations. The long running electronic monitoring programs and observer coverage along with the data sets available from these robust programs provided the ability to adapt quickly to the unprecedented changes brought on by the pandemic.

The decisions made annually by the IPHC greatly impact the livelihood of many coastal B.C. residents and local economies. With the extensive and costly efforts of accounting for all halibut bycatch in place, B.C. expects that all fishers who share access to the Pacific halibut stocks should be held to similar standards of

catch accounting. B.C. fishers need to be assured that the decisions made by the IPHC are based on the best data and science possible by ensuring that all contributing data sources are as thorough and reliable as what they contribute.

The large trawl fisheries in Alaska have high volumes of bycatch that impact many species that move between Canadian and US waters. This includes over 370,000 salmon caught as bycatch in Alaskan fleets in 2020, of which 46,000 were vulnerable chinook salmon⁴. Incomplete monitoring and Alaskan bycatch of halibut in trawl fisheries impact recruitment of juvenile halibut to the fishery as many halibut caught in industrial trawl nets do not survive release. This results in significant mortality in juvenile halibut that might otherwise grow and become available to the fishery. Uncertainty regarding post-release mortality rates and its implication for total removals adds to these concerns. The annual IPHC Fishery Statistics reports continue to confirm that Regulatory Area 3 remains the area where non-directed commercial discard mortality is estimated most poorly⁵. The 2020 preliminary fishery statistics report again outlines issues in area 3 with low observer coverage and observed trips not being representative of all trips in multiple ways, leading to high uncertainty and potential for bias in the provided discard mortality estimates. The Province of B.C. supports more robust monitoring programs and increased measures to more accurately estimate bycatch and ensure that fisheries are held accountable for their catch and bycatch, especially in areas with incomplete and/or less reliable data. The integrity of the data collected in all areas is important to managing Pacific halibut as a shared resource.

With the trend of overall TAC decreasing year after year, it is exceedingly important that the issues of bycatch uncertainty and lack of bycatch accountability are addressed as soon as possible. Allowing these issues to continue in areas known to have higher levels of U26 halibut could hinder recruitment and impact future sustainability for all regulatory areas.

The Province of B.C. commends the Commission's decision during the 2020 IPHC Annual Meeting to continue work on evaluating and redefining the Total Constant Exploitation Yield (TCEY) to include the Under 26 inch (U26) component of discard mortalities, including non-directed commercial fisheries, as steps towards more comprehensive and responsible management of the resource, with the intent that each Contracting Party to the Treaty would be responsible for counting its U26 mortalities against its collective TCEY. B.C. also commends the decision to continue the development of a workplan to explore methods for improving monitoring requirements in directed and non-directed fisheries but would like to see expectations and timelines developed as to limit the continuation of unreported and unaccounted mortalities by poorly monitored fisheries.

RECOMMENDATION

The Government of British Columbia's position is that the IPHC must exercise its authority to regulate the incidental catch of Pacific Halibut in all regulatory areas by:

- 1. developing a workplan for addressing the needed improvements of monitoring requirements including timelines to ensure that this priority is advanced; and**
- 2. establishing a robust method of accountability for U26 bycatch within TCEY.**

REFERENCES

1. *The B.C. Seafood Industry Year in Review (2020)*. British Columbia Ministry of Agriculture. https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/statistics/industry-and-sector-profiles/year-in-review/bcseafood_yearinreview_2018.pdf

2. *British Columbia Fish Processing Employment 2016 (2018)*. British Columbia Ministry of Agriculture. https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/statistics/industry-and-sector-profiles/employment/2016_british_columbia_seafood_processing_employment.pdf
3. *British Columbia's Fisheries and Aquaculture Sector, 2016 Edition (2018)*. Prepared for BC Ministry of Agriculture by BC Stats.
4. *NOAA Fisheries Catch and Landings Reports in Alaska (2020)*. <https://www.fisheries.noaa.gov/alaska/commercial-fishing/fisheries-catch-and-landings-reports-alaska>
5. *State of the Fishery (2020): Preliminary fishery statistics (L. Erikson & H. Tran; 8 November 2020.)* IPHC-2020-IM096-05 Rev_1