



IPHC Contracting Party Report: Canada

DATE: 22/DEC/2021

CONTRACTING PARTY: CANADA

AGENCY:

Fisheries and Oceans Canada

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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 2021 commercial fishery is described in appendix 1 of this report, “Fisheries and Oceans Canada 2021 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 2021 recreational fishery is described in appendix 2 of this report, “2021 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-AM098-NR01 which provides the Commission with a summary from Fisheries and Oceans Canada of halibut fisheries in IPHC Regulatory Area 2B.

REFERENCES

Integrated Fisheries Management Plan for Groundfish, effective February 21, 2021.
<https://waves-vagues.dfo-mpo.gc.ca/Library/4093732x.pdf>

APPENDICES

Appendix 1: Fisheries and Oceans Canada 2021 Fishery Overview Report
Appendix 2: Fisheries and Oceans Canada 2021 Recreational Fishery Report
Appendix 3: Fisheries and Oceans Canada 2021 Enforcement Report
Appendix 4: Province of British Columbia 2021 Annual Report

APPENDIX 1

Fisheries and Oceans Canada 2021 Fishery Overview Report**PREPARED BY: Fisheries and Oceans Canada (22Dec2021)**

DATE: 22/DEC/2021**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 2021, the CTAC was 6,560,000 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 2021 Commercial and Recreational catch limit for allocation purposes was 6,365,000 net pounds. After accounting for O26 wastage, domestic research, commercial carryover from 2020 to 2021 and net reallocations into and out of the 2021 fishery, the resulting TAC for commercial and recreational harvest in 2021 was 6,245,860 net pounds.

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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 respective “O26” wastage mortality is removed from the commercial and recreational TACs (Table 1). The domestic research allocation (use of fish) is also removed from the commercial sector’s allocation prior to establishing the 2021 commercial TAC. The combined commercial and recreational TAC, including carryover adjustments, for 2021 was 6,245,860 net pounds. As of December 22, 2021, the combined commercial and recreational halibut catch (including XRQ landed catch, commercial landed catch and mortality associated with all released fish in the commercial groundfish fisheries) was 5,846,029 net pounds.

Commercial Fishery Summary

The 2021 Canadian commercial Halibut TAC, including the catch limit allocation and carryover, was 5,310,299 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 2021, the Canadian commercial Halibut catch totalled 5,034,506 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 2021 Halibut catch until February 20, 2022, after which released at-sea mortality will be attributed to the 2022 TAC. As such the 2021 commercial catch is current as of December 22, 2021.

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 2021 season include:

- The ongoing rebuilding measures for Yelloweye Rockfish and Bocaccio Rockfish in all commercial groundfish fisheries.
- A new Halibut Advisory Board (HAB) was elected and appointed in 2021. Commercial Halibut licence holders elected new commercial HAB representatives for the proceeding four (4) year term (2021-2024). Fisheries and Oceans Canada subsequently made appointments to additional seats to ensure HAB has broad representative fishery interests that are consistent



with the HAB Terms of Reference. HAB membership information will be available in the 2022/23 Groundfish Integrated Fisheries Management Plan when publically released in February of 2022.

- Unlike in 2020, the 2021 Experimental Recreational Halibut fishery (XRQ) was open. Any 2019 licence holders who were subsequently licensed to participate in the 2021 fishery were able to carry forward their allowable 2019 uncaught quota in the 2021 fishery.
- A rollover of the seasonal expansion (Nov 1st, 2021 – April 30th, 2022) to the existing 800-line pilot bottom trawl closure was first implemented in 2020. The existing and expanded seasonal closures are 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 2022/2023 fishing season. More information can be found at: https://notices.dfo-mpo.gc.ca/fns-sap/index-eng.cfm?pg=view_notice&DOC_ID=251970&ID=all

The 2022/2023 commercial groundfish fishing season will commence February 21, 2022, 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 two opportunities for recreational halibut fishing in area 2B, the recreational fishery, and the Experimental Recreational Halibut fishery pilot program (XRQ fishery). The 2021 recreational Halibut TAC was 914,750 net pounds. The 2021 XRQ fishery was open and acquired 20,811 lbs of quota from the commercial fishery, with 11,962 lbs of catch (as of Dec 22, 2021). The estimated 2021 Canadian recreational Halibut catch totalled 799,561 net pounds. The estimation methods of the recreational catch are outlined in *2021 Canadian Recreational Fishery Halibut Catch Report*. Management measures for the 2021 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 from the commercial fishery and subsequently retain Halibut that is in excess of the regular recreational fisheries daily and possession limits, and maximum size limits. An XRQ licence holder is 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. 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.

Due to the COVID-related closure of the 2020 XRQ fishery, 2019 Licence holders were allowed to carry forward uncaught quota from the 2019 fishery into 2021 and 7,428 lbs of uncaught quota was carried forward. For the 2021 season, 13,383 lbs of quota has been reallocated from commercial groundfish fisheries, resulting in a total available quota of 20,811 lbs and a total YTD catch of 11,962 lbs (as of Dec 22, 2021).

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 2021.



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 2021, approximately 45,278 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 51,584 pounds in 2021). 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 22, 2021. All values in net pounds.

Commercial / recreational TAC for allocation		6,365,000
Commercial allocation	x 85%	
O26 wastage	- 170,000	
Research (use of fish)	- 60,000	
Commercial TAC for allocation purposes		5,180,250
Net carryover and net reallocations into/out of the commercial fishery ^C	+ 130,049	
Commercial TAC (Total Available Quota)		5,310,299
Recreational allocation	x 15 %	
O26 wastage	- 40,000	
Recreational TAC		914,750
XRQ allocation	X 0%	
XRQ acquired quota	+13,383	
Net carryover	+7,428	
XRQ TAC ^D		20,811
Recreational and XRQ TAC ^D		935,561
2B commercial and recreational TAC		6,245,860
2B commercial and recreational catch ^D		5,846,029

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 (XRQ) pilot program.

D There is no initial allocation provided to XRQ fishery, though quota may be transferred into the XRQ fishery from commercial Halibut fisheries. As a result the XRQ TAC changes proportionately with the commercial TAC as quota is transferred between fisheries.

E 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 22, 2021. All values in net pounds.

Commercial TAC	5,310,299
Total Commercial Catch	5,034,506

Table 3. Halibut for 2B recreational and the Halibut Experimental Recreational pilot program (XRQ) fisheries as of as of December 22, 2021. All values in net pounds.

Recreational TAC	914,750
Recreational catch ^E	799,561
XRQ TAC	20,811
XRQ catch	11,962 ^F
Recreational and XRQ TAC ^D	935,561
Recreational and XRQ catch ^E	811,523

D There is no initial allocation provided to XRQ fishery, though quota may be transferred into the XRQ fishery from commercial Halibut fisheries. As a result the XRQ TAC changes proportionately with the commercial TAC as quota is transferred between fisheries.

E Catch includes all landed fish.

F Effective December 22, 2021.



APPENDIX 2

Fisheries and Oceans Canada 2021 Recreational Fishery Report

PREPARED BY: Fisheries and Oceans Canada (22December2021)

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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. 2021 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
3.7. Biological Sampling	18
4. APPENDICES	19



1. Overview

This report summarizes the 2021 harvest and biological data from the Canadian recreational Halibut fishery in the tidal waters of British Columbia (BC). The recreational total allowable catch for 2021 was 914,750 pounds¹, with an estimated harvest of 799,561² pounds (115,289 pound underage). The estimated harvest by pieces is 60,123 pieces.

The 2021 season opened on February 15 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. 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 year³.

Final estimates are anticipated to be available by the spring of 2022. 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	32,183	379,462
Central Coast	2,629	25,386
South Coast	25,311	394,713
Totals	60,123	799,561

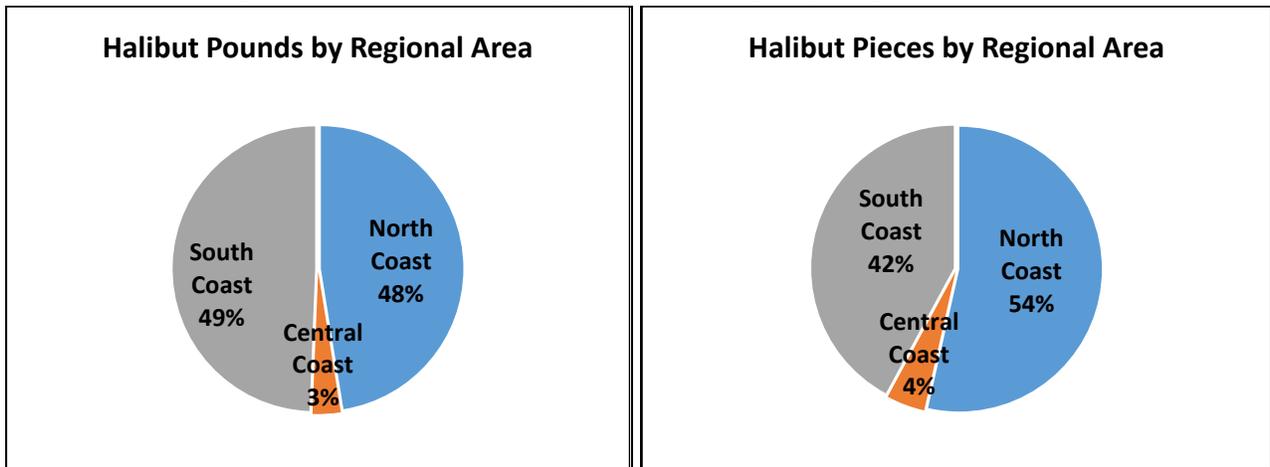
¹ Pounds in this document refer to net weight (head off, dressed) pounds. See Biological Sampling section for the equations used to convert round weight (head on, undressed) and fork length to net weight.

² Landed catch up to 31 October, 2021

³ 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 13,759 halibut were biologically sampled for either length or weight in 2021, representing 23% of the estimated harvest. The number of biological samples collected by regional areas is noted below. 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:

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

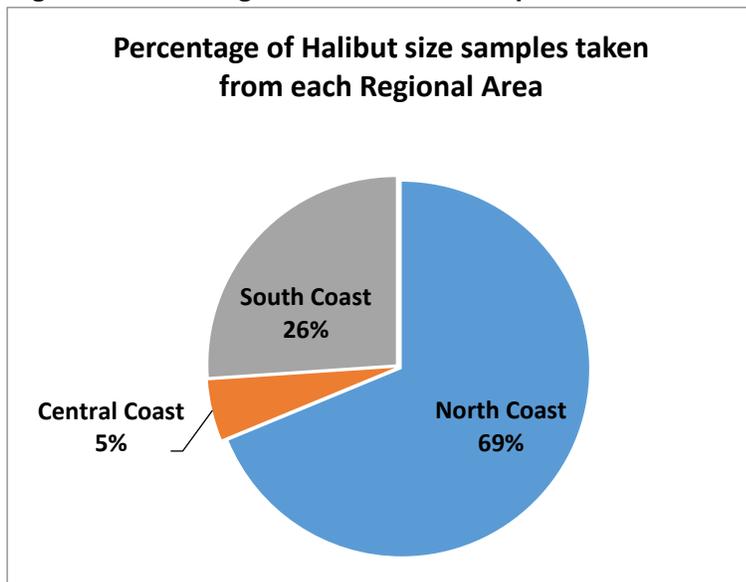
$$\text{Net Weight} = \text{Round Weight} \times 0.75$$

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.

Table 2. Number of Halibut Biologically Sampled by Regional Area

Area	Samples
North Coast	9,461
Central Coast	711
South Coast	3,587
Totals	13,759



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 (TWSFL) 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.

In 2020, DFO began using IPHC’s estimate of Area 2B recreational release mortality. This resulted in a 2021 estimate of 40,000 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.



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2. MANAGEMENT, MONITORING and POLICY DEVELOPMENT

2.1. 2021 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 2021 equates to a total allowable catch of 914,750 pounds.

The recreational halibut fishery opened on February 15, 2021, with a daily limit of 2 fish per day. The fishery operated under the 2020 recreational licence until March 31. On April 1, the 2021 licence and management measures entered into effect. Current regulations – including daily catch and possession limits, open and closed areas, size limits and gear restrictions – are available online in the BC Sport Fishing Guide: <http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/index-eng.html>. The 2021 measures included:

- A maximum length of 133cm head-on length
- A daily limit that is set in regulation, is defined in the conditions of licence and can be varied in-season as required. The possession limit is contingent on the daily limit as defined by the *BC Sports Fishing Regulations*, up to maximum of three per day:
 - If the Daily Limit is one (1) or two (2):
 - the Possession Limit is EITHER of: one (1) halibut measuring from 90 cm to 133 cm head-on length - OR - two (2) halibut measuring under 90 cm head-on length.
 - If the Daily Limit is three (3):
 - the Possession Limit is EITHER of: one (1) halibut measuring from 90 cm to 133 cm head-on length – OR - three (3) halibut measuring under 90 cm 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 ten (10) in aggregate, from April 1, 2021 to March 31, 2022
- 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. Due to the continued impacts of COVID-19 on recreational lodge sector effort, by mid-summer of 2021, it was determined that the recreational sector would be unlikely to reach their TAC under the existing management conditions. Resultantly, 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 two (2) daily to three (3) daily. By the end of October, it was determined that the estimated harvest to date plus the forecasted catch to December 31 would not exceed the 914,750 pound Total Allowable Catch. Resultantly, the fishery will remain open until December 31, 2021.

Due to the Covid-19 pandemic, the issuance of 2021/22 B.C Tidal Waters Sports Fishing Licences (TWSFL) to non-residents was not permitted until the Canada-US border partially re-opened on August 9, 2021. Until August 9, 2021, the fishery was only open to residents of Canada.

For 2022, the SFAB is considering various management options they may recommend to DFO in light of



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existing and/or 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.

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. 2021 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 2021 recreational halibut fishery, DFO used estimates from three sources; the iREC survey, logbook and lodge manifest program, and creel surveys.

DFO uses data from traditional catch monitoring (eg. creel, lodge logbooks and manifests) where available, in



priority of iRec survey data. 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 2021, DFO used in-season iREC survey catch estimates. In 2021, approximately 86% of the catch estimate was derived from traditional catch monitoring sources, and 14% from iRec survey estimates.

In 2021, ongoing COVID-related restrictions on travel and the issuance of resident-only TWSFLs until mid-August led to many lodges and guided fishing businesses operating at limited capacity throughout the fishing season. This led to unanticipated early to mid-season reductions in effort and catch from this component of the sector, particularly from the Haida Gwaii region. It is likely that this witnessed reduction in anticipated lodge and guided catch is one of the main contributing factors to the 2021 recreational sector not catching their allocated TAC.

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 ongoing COVID pandemic impacts, many of the lodges in Haida Gwaii did not operate at full capacity in 2021. 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 2021, 8,579 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 operating at limited capacity 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 2021, 882 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 ongoing Covid-19 pandemic with many lodges and guided fishing operations closed or operating at limited capacity. 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 2021, 711 biological samples were reported.

3.6. South Coast Creel Survey

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 2021, 3,587 halibut were sampled for length or weights during the South Coast Creel survey interviews.



4. APPENDICES

The following tables provide detailed catch and biological information collected during the 2021 recreational halibut fishery in BC. Note: these figures are preliminary and subject to change.

Table 5. Summary of the 2021 Recreational Halibut Catch by Pacific Fishery Management Area (PFMA)

Regional Area	PFMA	Piece Count	Total Net Wt. (net lbs)
North Coast	1	10,410	109,305
	2	1,672	23,331
	3	7,303	87,159
	4	10,549	130,089
	5/6	2,249	29,577
Central Coast	7/8/9	2,629	25,386
South Coast	10/11/111	1,419	28,330
	12	1,305	17,758
	13/14	127	1,912
	15-18/28/29	781	10,435
	19	2,094	33,443
	20	778	12,397
	21/121	4,450	63,515
	23/123	5,802	79,889
	24/124	2,588	49,639
	25/125	1,206	19,503
	26/126	2,731	48,456
	27/127	2,031	29,435
Total Landed in Canada		60,123	799,561
Recreational TAC			914,850
Estimated Balance - END OF OCTOBER -			115,289
			12.60%



Table 6. Recreational Halibut Monthly Catch Estimates (net wt. lbs) for 2019, 2020 and 2021

	Net Weight (net lbs)			Cumulative Net Weight (net lbs)		
	2019	2020	2021	2019	2020	2021
Feb	0	0	954	0	0	954
March	8,172	3,814	8,778	8,172	3,814	9,732
April	10,259	7,111	12,017	18,432	10,926	21,749
May	40,988	26,356	56,766	59,420	37,282	78,515
June	152,282	74,348	158,750	211,702	111,630	237,265
July	336,520	182,655	287,218	548,221	294,284	524,483
Aug	207,866	148,422	224,392	756,088	442,707	748,875
Sept	53,956	69,419	49,370	810,044	512,125	798,246
Oct	834	4,236	1,315	810,878	516,361	799,561
Nov	0	398		810,878	516,758	
Dec	5,761	2,216		816,639	518,974	
Total	816,639	518,974	799,561	816,639	518,974	799,561
Recreational TAC						914,850
Estimated Total Catch						799,561
Estimated Balance - END OF OCTOBER -						115,289
						12.60%

Table 7. Estimated 2021 Halibut Catch in Pieces, by Area and Month

PFMA	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Estimated Total Weight by PFMA	% of Total Weight by PFMA	
1	-	-	68	6	528	4,195	4,259	1,354	-			10,410	17.3%	
2	-	-	33	28	282	667	603	57	2			1,672	2.8%	
3	-	56	22	309	1,625	3,103	2,104	84	-			7,303	12.1%	
4	-	58	92	1,192	2,277	3,592	2,841	433	64			10,549	17.5%	
5/6	-	12	14	187	455	883	582	104	12			2,249	3.7%	
7	-	-	-	20	49	21	296	14	-			400	0.7%	
8	-	34	11	52	66	178	354	140	-			835	1.4%	
9	-	-	-	-	138	656	441	160	-			1,395	2.3%	
10/11	-	-	11	80	573	406	329	20	-			1,419	2.4%	
12	-	-	70	42	149	584	256	203	-			1,305	2.2%	
13/14	3	3	3	5	12	59	43	-	-			127	0.2%	
15-18/28/29	-	-	-	143	107	285	161	85	-			781	1.3%	
19	3	193	229	882	359	349	8	61	10			2,094	3.5%	
20	59	131	155	201	77	36	74	41	4			778	1.3%	
21/121	-	3	22	198	1,789	1,905	479	50	4			4,450	7.4%	
23/123	-	8	40	138	605	2,237	2,298	476	-			5,802	9.6%	
24/124	-	13	14	36	1,006	773	557	187	2			2,588	4.3%	
25/125	-	5	33	204	279	266	254	165	-			1,206	2.0%	
26/126	-	-	-	34	688	649	1,230	130	-			2,731	4.5%	
27/127	-	-	31	102	171	785	701	241	-			2,031	3.4%	
2021 Totals	Monthly	64	516	845	3,858	11,234	21,629	17,870	4,007	99	0	0	60,123	
	Cum.	64	580	1,426	5,284	16,518	38,147	56,018	60,025	60,123	60,123	688		

Table 8: Average 2021 Net Weight Estimates of Retained Halibut by Area and Month

PFMA	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec
1	11.3	11.3	11.3	11.3	11.8	10.8	9.9	11.2	10.5	10.5	10.5
2	13.8	13.8	13.8	13.9	13.7	14.1	13.9	13.9	13.9	13.9	13.9
3	13.2	13.2	13.2	14.8	11.5	13.1	10.1	11.6	11.6	11.6	11.6
4	13.2	13.2	13.2	14.8	11.5	13.1	11.0	12.1	12.1	12.1	12.1
5/6	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
7	10.0	10.0	10.0	8.3	11.7	9.9	8.2	8.9	8.5	8.5	8.5
8	7.4	7.4	7.4	7.4	7.9	7.0	7.9	7.9	7.9	7.9	7.9
9	10.7	10.7	9.1	10.7	8.4	13.0	10.0	9.9	9.9	9.9	9.9
10/11/111	20.0	20.0	20.0	20.0	19.4	20.6	20.1	20.4	20.4	20.4	20.4
12	15.6	15.6	15.6	16.2	15.0	13.3	13.0	13.1	13.1	13.1	13.1
13/14	18.3	18.3	14.7	18.5	10.9	16.4	13.6	15.0	15.0	15.0	15.0
15-18/28/29	13.0	13.0	13.0	13.0	13.0	14.8	11.9	12.2	12.2	12.2	12.2
19	18.6	21.2	16.1	15.2	14.6	16.1	15.3	17.1	16.6	16.6	16.6
20	14.5	17.0	12.1	13.1	25.3	19.2	16.8	21.0	21.0	21.0	21.0
21/121	14.3	14.3	14.3	14.3	15.5	13.1	14.3	14.3	14.3	14.3	14.3
23/123	15.4	15.4	15.4	15.4	18.1	12.6	14.5	9.6	12.0	12.0	12.0
24/124	19.8	19.8	19.8	19.8	18.2	18.8	20.7	20.8	20.8	20.8	20.8
25/125	14.0	14.0	14.0	14.0	13.7	14.2	21.9	18.0	18.0	18.0	18.0
26/126	19.1	19.1	19.1	19.1	14.3	19.6	18.5	19.1	19.1	19.1	19.1
27/127	16.0	16.0	16.0	16.0	17.3	14.7	14.7	10.1	12.4	12.4	12.4

Table 9. Estimated 2021 Halibut Catch in Net Weight (lbs) by Area and Month

PFMA	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Estimated Total Weight by PFMA	% of Total Weight by PFMA	
1	-	-	769	68	6,225	45,096	42,036	15,111	-	0	0	109,305	13.7%	
2	-	-	452	387	3,868	9,408	8,388	793	34	0	0	23,331	2.9%	
3	-	734	287	4,573	18,688	40,649	21,250	978	-	0	0	87,159	10.9%	
4	-	768	1,207	17,642	26,186	47,055	31,251	5,215	766	0	0	130,089	16.3%	
5/6	-	154	181	2,456	5,979	11,613	7,660	1,372	163	0	0	29,577	3.7%	
7	-	-	-	167	573	205	2,418	125	-	0	0	3,488	0.4%	
8	-	252	81	386	389	1,248	2,779	1,105	-	0	0	6,239	0.8%	
9	-	-	-	-	1,155	8,528	4,397	1,579	-	0	0	15,659	2.0%	
10/11	-	-	218	1,593	11,116	8,368	6,619	416	-	0	0	28,330	3.5%	
12	-	-	1,089	687	2,229	7,761	3,320	2,670	-	0	0	17,758	2.2%	
13/14	47	48	42	93	131	966	586	-	-	0	0	1,912	0.2%	
15-18/28/29	-	-	-	1,863	1,391	4,227	1,913	1,042	-	0	0	10,435	1.3%	
19	53	4,096	3,682	13,442	5,223	5,612	123	1,046	166	0	0	33,443	4.2%	
20	854	2,230	1,869	2,623	1,945	690	1,243	862	80	0	0	12,397	1.6%	
21/121	-	43	312	2,834	27,730	24,975	6,852	715	55	0	0	63,515	7.9%	
23/123	-	121	611	2,121	10,975	28,186	33,321	4,555	-	0	0	79,889	10.0%	
24/124	-	259	271	703	18,349	14,563	11,552	3,890	51	0	0	49,639	6.2%	
25/125	-	73	456	2,841	3,822	3,777	5,555	2,979	-	0	0	19,503	2.4%	
26/126	-	-	-	646	9,811	12,720	22,802	2,477	-	0	0	48,456	6.1%	
27/127	-	-	490	1,642	2,965	11,571	10,326	2,442	-	0	0	29,435	3.7%	
2021 Totals	Monthly	954	8,778	12,017	56,766	158,750	287,218	224,392	49,370	1,315	0	0	799,561	
	Cum.	954	9,732	21,749	78,515	237,265	524,483	748,875	798,246	799,561	799,561	799,561		



INTERNATIONAL PACIFIC
HALIBUT COMMISSION

Fisheries and Oceans Canada 2021 IPHC Annual Report

PREPARED BY: Fisheries and Oceans Canada (22 December 2021)

Canadian Enforcement Report for IPHC Regulatory Area 2B (Canada: British Columbia)

CONTACT:

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Fishery Officer

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DISCUSSION

Compliance and Enforcement Priorities – 2021

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:

- ***Closed Area fishing*** in rockfish conservation areas, sponge reef marine protected areas, marine conservation areas and other permanent and in-season fishing closures;
- ***Vessel masters*** not providing all reasonable assistance to DFO designated observers;
- ***Owner or any person in charge or in control of a fish landing station*** not providing the DFO designated dockside observer with such assistance as is reasonably necessary to enable observer to perform their duties;
- ***Retention of groundfish caught, retained or possessed without a licence authority.*** Priority will be placed on occurrences where retention for the purpose of sale is indicated;
- ***False and misleading statements*** to DFO designated observers;
- ***Unauthorized Dual Fishing*** (FSC/Commercial fishing on same trip);
- ***Non-deployment of seabird avoidance gear.*** Seabird avoidance gear is required to be deployed as per conditions of licence.
- ***Non-compliance with hail-out, hail-in, electronic monitoring and other elements of the 100 percent at-sea and dockside monitoring programs.***

Links to Pacific Region Groundfish Integrated Fisheries Management Plan – 2021/2022:

Full Text: <https://waves-vagues.dfo-mpo.gc.ca/Library/40990151.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 – Commercial Halibut Summary 2021

2021 Commercial Halibut Fishery

The 2021 commercial halibut fishery opened at 12:00 hours local time on March 6, 2021 and closed at 12:00 hours local time on December 7, 2021. A total of **155** vessels and **532** fishing trips were recorded during the 2021 commercial halibut fishing season.

Table 1. Commercial Halibut Fishing Trips – Trip Type, Number of Fishing Trips, Number of Vessels and Licence Type – March 6, 2021 to December 7, 2021 [Source: DFO Fishery Operations System (FOS)].

Fishing Trip Type	Number of Fishing Trips	Number of Licences	Licence Type
Commercial	260	92	L
Communal Commercial	141	40	FL
Combo (Halibut/Sablefish)	108	20	K/L
Combo (Halibut/Sablefish)	23	4	FK/FL & L/FK
IPHC	16	3	XL
Experimental	10	3	XL

Table 2: Commercial Halibut Fishery Occurrences - January 1, 2021 to December 7, 2021¹

Occurrence Type (not all are found to be violations)	Number of Occurrences
Area/Time (closed area)	4
Dual Fishing Issues	121 (not included in total)*
Catch Related Issues	24
Gear Illegal/Used Illegally	1
Piece Count Issues	3
Hails	2
Processed Fish On Board	3
Reported Overages	1
Offload Related Issues	4
Hold Check Not Completed	19
Undersize Fish	15
Prohibited Species	3
Total	79

¹Source: DFO Departmental Violations System (DVS), National Enforcement Tracking System (NETS) and Archipelago Marine Research Ltd.(AMR) Portal for Clients

*A Fishery Officer is working on addressing all the dual fishing occurrences, with the support of the groundfish enforcement coordinator, until March 31, 2021. Many of the occurrences require communication and the sharing of information.

Halibut Compliance and Enforcement – Recreational Halibut Summary – 2021

2021 Recreational Halibut Fishery

The 2021 recreational halibut fishery opened coast-wide at 00:01 hours February 15, 2021 and closes at 23:59 hours December 31, 2021. Between January 1, 2021 and December 22, 2021 a total of **306,248** recreational licences were issued.

Table 3: Recreational Halibut Fishery Occurrences - January 1, 2021 to December 7, 2021²

Number of Occurrences	Action Taken	
32	Investigation Initiated	31
	No Action Warranted	1

²Source: DFO Departmental Violations System (DVS) and National Enforcement Tracking System (NETS). Occurrence type unavailable.

2021 Halibut Experimental Recreational Fishery

For halibut, in addition to the regular tidal water sport fishing licence, recreational harvesters may obtain an experimental licence, on a voluntary basis, that will allow the licence holder to lease halibut quota from the commercial sector for use in the recreational fishery. For more information: [Pacific Region Halibut Experimental Recreational Fishery Program Details](#)

The halibut experimental recreational fishery (XRQ) is open from April 1, 2021 to December 31, 2021. A total of **234** XRQ Licences have been issued as of December 20, 2021

Halibut Compliance and Enforcement – Commercial, Food, Social and Ceremonial (FSC) and Treaty Fisheries - 2021

For all dual fishing (commercial and FSC) halibut trips the vessel master is responsible for following the halibut commercial and/or communal commercial conditions of licence including those specific to dual fishing. All of the fish require 100% monitoring at-sea and 100% monitoring at the dock. In 2021 **53** commercial or communal commercial halibut vessels hailed out for **153** dual fishing trips.

Currently a Fishery Officer is working on addressing the 2021 dual fishing occurrences until March 31, 2022. The officer, with support from the groundfish enforcement coordinator, will use various approaches including direct engagement with vessel masters and Indigenous organizations and enforcement action where appropriate.

FSC halibut fishing does not have the same monitoring requirements as commercial and dual halibut fishing.

Table 4: Aboriginal Halibut Fishery Occurrences - January 1, 2021 to December 7, 2021³

Number Of Occurrences	Action Taken	
7	Investigation Initiated	4
	No Action Required	1
	Unable to Respond	2

³Source: DFO Departmental Violations System (DVS) and National Enforcement Tracking System (NETS)
Occurrence type unavailable.

Fishery Officer Enforcement Effort Summary

Table 5: 2019, 2020 & 2021 Conservation & Protection (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 waters⁴

	2019	2019	2020	2020	2021	2021
FISHERY TYPE	HOURS	% TOTAL ENF. EFFORT	HOURS	% TOTAL ENF. EFFORT	HOURS	%TOTAL ENF EFFORT
ABORIGINAL HALIBUT	392	0.5%	176.5	0.22%	546.25	0.77%
COMMERCIAL HALIBUT	666.5	0.85%	776.25	0.97%	1079.25	1.53%
RECREATIONAL HALIBUT	693.75	0.89%	356.5	0.45%	298.5	0.42%
TOTAL	1,752.25	2.24%	1,309.25	1.64%	1,924.00	2.72%
RECREATIONAL HALIBUT	729.75	0.94%	37.25	0.047%	82	0.12%
RECREATIONAL FINFISH – TIDAL WATERS	2,502.5	3.2%	626.5	0.78%	1254.3	1.77%
RECREATIONAL SALMON – TIDAL WATERS	4667.0	6.02%	1599.75	2.0%	3298.12	4.68%
TOTAL	7,899.25	10.16%	2,263.5	2.83%	4634.42	6.57%

⁴**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.

Aerial Surveillance Patrol Summary

The DFO aerial surveillance program received a new plane in 2021 with enhanced technology and ability to go greater distances including outside Canada's EEZ.

Table 6: 2021, 2020, 2019, 2018, C&P Aerial Surveillance Patrols – number of missions, total hours spent flying, and number of halibut vessels viewed during missions⁵

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, 2021 – November 30, 2021	N/A	N/A	Not available in time for this report (N/A)
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)

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

L = commercial halibut licence

FL= communal commercial halibut licence

Violation Summaries

Table 7: 2018, 2019, 2020 & 2021 Violations for Aboriginal, Commercial and Recreational Halibut – Charges Laid, Charges Pending/Under Review, and Tickets/Warnings Issue⁷. **Note:** Not all information is in yet.

VIOLATIONS	2018	2019	2020	2021
ABORIGINAL GROUND FISH – HALIBUT	2	14	4	4
CHARGES LAID				
CHARGES PENDING/UNDER REVIEW	1	12	2	4
TICKET ISSUED		1		
WARNING ISSUED	1		1	
DIVERTED (ALTERNATIVE MEASURES)		1	1	
COMMERCIAL GROUND FISH - HALIBUT	12	4	13	Information not available
CHARGES LAID		2		
CHARGES PENDING/UNDER REVIEW	3	2	9	

VIOLATIONS – cont'd	2018	2019	2020	2021
TICKET ISSUED			1	
WARNING ISSUED	9		3	
RECREATIONAL GROUND FISH - HALIBUT	64	85	55	52
CHARGES LAID	1	6		
CHARGES PENDING/UNDER REVIEW	6	38	8	8
TICKET ISSUED	21 (1 XRQ)	25	22	21
WARNING ISSUED	36 (2 XRQ)	16	25	23
TOTAL FOR ALL HALIBUT FISHERIES	78	103	72	56

⁷Source: DFO Departmental Violations System (DVS) and National Enforcement Tracking System (NETS).

Links of interest:

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

Transnational crime: <https://www.interpol.int/News-and-Events/News/2021/Depleting-fish-stocks-fueling-transnational-crime>

Canadian commercial fisher receives significant conviction/sentence: <https://www.cbc.ca/news/canada/british-columbia/nanaimo-crab-poacher-lifetime-ban-1.6292864>

Motto, vision, and mission statement

Through consultation and engagement with Conservation and Protection staff across the Pacific Region, we have developed a motto, vision and mission statement that showcases the pride we take in our collected work and reflects our Regional values.

- **Motto:** "Serving Canada, Protecting our Resources."
- **Vision:** "To be a world leader in law enforcement and natural resource protection by adapting to change and striving for excellence to conserve and protect Canada's waters, aquatic species and habitat for the benefit of future generations."
- **Mission:** "Protecting our resources and ensuring sustainable fisheries through our dedication to law enforcement, conservation, reconciliation, and public outreach as a team of professional, knowledgeable, and passionate individuals."



Province of British Columbia 2021 Annual Report

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

DATE: 22/DEC/2021

CONTRACTING PARTY: CANADA

AGENCY:

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

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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 again during the 97th session of the IPHC Annual Meetings in 2021. 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 2020, the survey showed the processing of 3,120 tonnes (6.88M lbs) of Pacific halibut, which includes some imported halibut processed in B.C. The survey also showed landed and wholesale values of \$33.26M and \$64.63M respectively. In 2019 Pacific halibut accounted for 8.5% of the wholesale value of all B.C.'s wild fisheries including all groundfish, salmon,

and shellfish. In 2020, B.C. exported 1.5M kilograms (3.4M lbs) of halibut products worth \$30M. The Province historically conducts a seafood sector employment survey every three years which provides data on jobs, wages, and seafood processing activities, however, impacts of the COVID19 global pandemic have delayed this process and we expect to have employment data from 2019 and 2020 available for distribution in spring of 2022. 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. Beginning in 2019 and through 2021, there were severe restrictions on salmon fishing in B.C. which will continue in future years. This amplifies the importance of the recreational halibut fishery to the recreational 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 percent monitoring and 100 percent 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 and has adapted quickly in response to obstacles encountered by the COVID-19 global pandemic to maintain data integrity. The B.C. Pacific halibut fishery has held Marine Stewardship Council certification since 2009 for being a sustainable, well-managed fishery.

The 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 (EEM) program in place of at-sea observers and begin working on alternate methods of estimating halibut bycatch mortality like area-based halibut mortality estimations. Efforts on the EEM program continued through 2021 for improved data accuracy. The long running electronic monitoring programs in B.C. and 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 571,000 salmon caught as bycatch in Alaskan fleets in 2020, of which 32,600 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 year after year that Regulatory Area 3 remains the area where non-directed commercial discard mortality is estimated most poorly⁵. The 2021 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. This section of the IPHC data overview report has remained constant despite that as part of the interim agreement, the Commission agreed to continue the development of a workplan to 1) explore methods for improvement of monitoring requirements in directed and non-directed fisheries, and 2) examine options in each IPHC Regulatory Area for mitigating the impact of bycatch in one IPHC Regulatory Area on available harvest in other IPHC Regulatory Areas.

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. The lack of confidence in the total number of halibut removals in some regulatory areas continues to create issues in the management of this shared resource. British Columbia regulatory area 2B maintains an excellent understanding of total halibut removals across its integrated commercial fishery structure through robust monitoring programs that come at a direct cost to fishers.

The Province of B.C. commends the commission for reaching agreement during the 2021 IPHC annual meetings, and for recalling three paragraphs from the previous annual meeting report which intend to address the issues of bycatch accountability and better monitoring⁶. B.C. would like to see continued work on the advancement of initiatives supporting these previous agreements which include:

- a) to continue the development of a workplan to explore methods for improvement of monitoring requirements in directed and non-directed fisheries;
- b) to continue work on evaluating and redefining TCEY to include the U26 component of discard mortalities, including non-directed commercial fisheries, as steps towards more comprehensive and responsible management of the resource, in coordination with the IPHC Secretariat and Contracting Parties. The intent is that each Contracting Party to the Treaty would be responsible for counting its U26 mortalities against its collective TCEY; and,
- c) to account for some of the impact of U26 non-directed discard mortality from US IPHC Regulatory Areas on available harvest in IPHC Regulatory Area 2B.

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. recommitting to the development of a workplan for addressing the needed improvements of monitoring requirements; and**
- 2. establishing a robust method of accountability for all halibut mortality within each regulatory area including non-directed commercial discard mortality.**

REFERENCES

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3. *British Columbia's Fisheries and Aquaculture Sector, 2016 Edition (2018)*. Prepared for BC Ministry of Agriculture by BC Stats.
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6. *Report of the 97th Session of the IPHC Interim Meeting (IM097); IPHC-2021-IM097-R*