

2018 IPHC Contracting Party Report

DATE: 27/DEC/2018

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 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 to harvest groundfish. 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.

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 this management plan. 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 250 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 2018 commercial fishery is described in appendix 1 of this report, "Fisheries and Oceans Canada 2018 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 2018 recreational fishery is described in appendix 2 of this report, "2018 Canadian Recreational Fishery Halibut Catch Report," and appendix 3 of this report, "Halibut Compliance and Enforcement."

RECOMMENDATION/S

1) NOTE paper IPHC-2019-AM095-AR09 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, 2018. <u>http://waves-vagues.dfo-mpo.gc.ca/Library/40657814.pdf</u>.

APPENDICES

Appendix 1: Fisheries and Oceans Canada 2018 IPHC Annual Report Appendix 2: 2018 Canadian Recreational Fishery Halibut Catch Report Appendix 3: Halibut Compliance and Enforcement

APPENDIX 1

Fisheries and Oceans Canada 2018 IPHC Annual Report

PREPARED BY: Fisheries and Oceans Canada (13December2018)

DATE: 13/DEC/2018

CONTRACTING PARTY: CANADA

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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 2018, the CTAC was 6,688,985 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 2018 Commercial and Recreational catch limit for allocation purposes was 6,465,000 net pounds. The net carryover from 2017 to 2018 was 21,927 net pounds between the commercial and Experimental Recreational Halibut fishery pilot program (XRQ fishery). The resulting TAC for commercial and recreational harvest in 2018 was 6,223,937 net pounds¹.



¹ Quota totalling 31,803 net pounds have been set aside for treaty mitigation and as part of the Pacific Integrated Commercial Fisheries Initiative (PICFI). See Table 1 for more details.

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 2018 was 6,223,937 net pounds. As of December 12, 2018, the combined commercial and recreational halibut catch (including landed catch and mortality associated with all released fish in the commercial groundfish fisheries) was 6,106,487 net pounds.

Commercial Fishery Summary

The 2018 Canadian commercial Halibut TAC, including the catch limit allocation and carryover, was 5,295,995 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 2018, the Canadian commercial Halibut catch totalled 5,239,687 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 2018 Halibut catch until February 20, 2019, after which released at-sea mortality will be attributed to the 2019 TAC. As such the 2018 commercial catch is current as of December 12, 2018.

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 2018 season include the ongoing rebuilding measures for Yelloweye Rockfish and Bocaccio in all commercial groundfish fisheries.

The 2019/2020 commercial groundfish fishing season will commence February 21, 2019, 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: <u>http://www.pac.dfo-mpo.gc.ca/fm-gp/ifmp-eng.html#Groundfish</u>

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 2018 recreational



Halibut TAC was 927,990 net pounds. The XRQ fishery has acquired 28,690 net pounds, resulting in a combined recreational and XRQ fishery TAC of 961,076 net pounds as of December 12, 2018 (Table 3). The estimated 2018 Canadian recreational Halibut catch totalled 866,800 net pounds, including 18,756 net pounds of catch in the XRQ fishery. The estimation methods of the recreational catch are outlined in *2018 Canadian Recreational Fishery Halibut Catch Report*. Management measures for the 2018 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. 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, and was continued for an eighth season in 2018. 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 changed 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.

The 2018 XRQ fishery has reallocated 28,690 net pounds of quota (as of December 12, 2018) from the commercial groundfish fisheries, and has carried over 4,396 net pounds of uncaught quota from the 2017 season (Table 3). Reallocations into and out of the XRQ fishery are permitted until January 31, 2019. Any uncaught quota may be reallocated back to the commercial fishery or it may be carried over into the 2019 XRQ fishery (the greater of the 200 net pounds or 10% of the total quota on the licence).

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

Canadian Aquaculture Research

There were no halibut aquaculture research or production activities in area 2B for 2018.

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 2018, approximately 40,994 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 (equivalent to 56,635 pounds in 2018) to the Maa-nulth First Nations for FSC purposes. 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). To date, the 2018 Maa-nulth First Nation's FSC Halibut catch totaled 38,288² net pounds of a total 52,862 net pounds allocated under the Maa-nulth Final Agreement.

Marine Protected Area Network and Fishery Closures Summary

The Oceans Act mandates the Minister with leading and coordinating the development and implementation of a national system (or network) of marine protected areas (MPAs). Areas of note include the Hecate Strait and Queen Charlotte Sound Glass Sponge Reefs Marine Protected Area, which has been established to conserve the biological diversity, structural habitat, and ecosystem function of local glass sponge reefs. In addition, Development of a Land-Sea-People Management Plan for the Gwaii Haanas National Marine Conservation Area is underway, due to be finalized by March 31, 2018. There are currently a number of area closures in place:

- In Pacific Fishery Management Area 121, the waters seaward of 12 nautical miles from the shoreline was closed to retention of Halibut, rockfish and Lingcod.
- The waters of Swiftsure Bank, inside a line from 48°34.00'N and 125°06.00'W, thence to 48°34.00'N and 124° 54.20'W, thence to 48°29.62'N and 124°43.40'W, thence following the International Boundary between Canada and the U.S. to 48°29.55'N and 124° 56.20'W, thence in a straight line to the point of commencement, are closed to all finfish, all year.
- Since 2007, 164 Rockfish Conservation Areas have prohibited recreational halibut harvest. Further information may be found at: <u>http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/restricted-restreint/rca-acs-eng.htm</u>
- Since 2015, Strait of Georgia/Howe Sound Sponge Reef Closed Areas have been in effect - Further information may be found at: <u>http://www.dfo-mpo.gc.ca/oceans/ceccsr-cerceef/closures-fermetures-eng.html</u>
- Since 2017, Hecate Strait and Queen Charlotte Sound Glass Sponge Reefs Marine Protected Area have been in effect- Further information may be found at: <u>http://www.dfo-mpo.gc.ca/oceans/mpa-zpm/hecate-eng.html</u>



² The Maa-nulth FSC catch estimate is an in-season estimate which will continue to be updated throughout the year. As such the 2018 Maa-nulth catch is current as of December 12, 2018 and is included in the 405,000 pound estimate.

 As of November 10, 2017 the Offshore Pacific Seamounts and Vents Fishery Closure is in effect. These areas are closed to all commercial and recreational bottom contact fisheries using bottom trawl, hook and line, and trap gear for Groundfish, Halibut, Sablefish, and Shellfish. Further information may be found at: <u>http://www.dfo-mpo.gc.ca/oceans/aoi-si/offshore-hauturiere-eng.html</u>

RECOMMENDATIONS: NA

REFERENCES: See hyperlinks above



Appendices

Tables

Table 1. Halibut allocations in 2B as of December 12, 2018. All values in net pounds.

Commercial / recreational TAC for allocation		ocation	6,465,000	
Commercial allocation		Х	85%	
O26 wastage		-	139,255	
2017 Underages ^A	+ 157,0)34		
2017 Overages ^B	- 135, ²	107		
Net carryover		+	21,927	
Net reallocations into/out	of the	-	16,434	
commercial fishery ^C				
Commercial TAC				5,295,995

Recreational allocation	x 15 %
O26 wastage	- 41,760
Recreational TAC	927,990
XRQ allocation	x 0%
XRQ acquired quota	+ 28,690
2017 XRQ Underages ^A + 4,43	1
2017 XRQ Overages ^B - 3	5
Net carryover	+ 4,396
XRQ TAC ^D	33,086
Recreational and XRQ TAC D	961,076

2B commercial and recreational TAC ^D	6,255,613
2B commercial and recreational catch ^E	6,106,487

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. Of the current net reallocations, 31,803 net pounds have been set aside for treaty mitigation and as part PICFI, and are unavailable to either the commercial or recreational fisheries. This value is current as of December 12, 2018.

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 12, 2018. All values in net pounds.

Commercial TAC	5,295,995
Commercial Groundfish catch	5,239,687

Table 3. Halibut for 2B recreational and the Halibut Experimental Recreational pilot program (XRQ) fisheries as of December 12, 2018. All values in net pounds.

Recreational TAC	927,990
Recreational catch	848,044
XRQ TAC	33,086
XRQ catch	18,756 ^F
Recreational and XRQ TAC ^D	961,076
Recreational and XRQ catch ^E	866,800

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 12, 2018.



APPENDIX 2

2018 Canadian Recreational Fishery Halibut Catch Report

PREPARED BY: Fisheries and Oceans Canada (14December2018)

DATE: 14/DEC/2018

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FISHERY SECTOR/S:

Recreational

IPHC REGULATORY AREA:

IPHC Regulatory Area 2B (Canada: British Columbia)

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1. DISCUSSION

This report summarizes the 2018 harvest and biological data from the Canadian recreational Halibut fishery in the tidal waters of British Columbia (BC). The recreational total allowable catch for 2018 was 927,990 pounds¹ and the estimated harvest is 848,044 pounds (79,946 pound underage). The estimated harvest by pieces is 64,647.

The 2018 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. 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 2019. Estimated harvest in pieces and net weight by regional areas are noted below.

1.1. Harvest

Area	Pieces	Pounds
North Coast	35,932	414,534
Central Coast	1,874	20,674
South Coast	26,842	412,836
Totals	64,647	848,044

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

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 22,010 halibut were biologically sampled for either length or weight in 2018, representing 34% of the estimated harvest. The number of biological samples collected by regional areas is noted below.

Area	Samples
North Coast	16,797
Central Coast	1,816
South Coast	3,397
Totals	22,010

Table 2. Number of Halibut Biologically Sampled by Regional Area





Figure 2. Proportion 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.

DFO estimates recreational fishery discard mortality based on the ratio of recreational halibut discard mortality to landed catch in adjacent management areas. The current ratio is 3.6%. Applying this ratio to the 2018 landed catch results in an estimate of 30,530 pounds. 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.



2. MANAGEMENT, MONITORING and POLICY DEVELOPMENT

2.1. 2018 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 2018 equates to a total allowable catch of 927,990 pounds.

The recreational halibut fishery opened on February 1. The management measures included:

- A maximum length of 115 cm (approx. 45 inches)
- A daily limit of one and a possession limit of two, only one of which may be greater than 83cm (35 inches) was implemented on April 1, 2018 and remained in effect for the rest of the season.
- An annual limit of six (6), to be recorded on the Tidal Waters Licence.
- All halibut retained must be recorded on the Tidal Waters Licence plus the 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.

DFO and the Halibut Sub-committee of the Sport Fishing Advisory Board (SFAB) reviewed in-season catch estimates on a monthly basis. By the end of September, it was determined that the estimated harvest to date plus the forecasted catch to December 31 would likely not exceed the 927,990 pound Total Allowable Catch. In October, DFO announced the fishery would remain open until further notice.

For 2019, the SFAB is considering various management options they may recommend to DFO. These options 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.

This year, the experimental fishery commenced April 1 and remained open until December 31, 2018. For the 2018 season, 27,232 pounds of halibut quota was transferred from the commercial sector to experimental licence holders, of which 18,793 pounds of halibut was caught.

3. RECREATIONAL CATCH MONITORING and REPORTING PROGRAMS



Fisheries and Oceans Pêches et Océans Canada

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. In 2018, creel programs were implemented in peak fishing times and areas with specific emphasis on halibut and chinook fishing activities.

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. 2016 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 2018 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 2018, DFO used the average iREC survey bias corrected catch estimates from the most recent years for which these estimates were available at the beginning of the season (the 2015, 2016 and 2017 surveys). Catch estimates in these areas and months were updated with 2018 survey results when bias corrected estimates became available in the summer.

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.

The Haida Gwaii Creel Survey (HGCS) 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 2018, 16,256 halibut were sampled for either



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.

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 2018, 541 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 collected from lodges and some charter operators operating in these areas, primarily through the logbook program. Most lodges participate in the logbook program and collect catch, effort and biological data that are 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.

This year a total of 15 lodges\charter operators reported the number of halibut kept in their logbook along with their associated round weights (i.e. biological samples). In 2018, 1,816 biological samples were reported.

3.6. South Coast Creel Survey

In the southern waters of BC creel surveys are the main tool to estimate catch of halibut. Surveys are conducted in select fishery strata based on: the highest catch of halibut and chinook, the highest effort, inseason 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 PFMAs by month. South Coast waters include PFMAs11 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. In 2018 surveys were conducted in months outlined in Tables 3 and 4 below.

Table 3. South Coast surveys in inside water	(Johnstone and Georgia and Juan de Fuca Straits)
--	--

Location	PFMAs	Duration
Port Hardy	11, 12	Jun. – Aug.
Campbell River	13, 14	Jun Sep.*
Sunshine Coast	15, 16	Jun. – Sep.*
Nanaimo	17, 18	Jun Sep.*
Victoria	19, 20	Mar Sep.
Vancouver	28, 29	Jun. – Sep.*

Note:

*coverage may be incomplete during these months

Table 4. South Coast surveys in outside waters (West Coast of Vancouver Island)

Location	PFMAs	Duration
Port Renfrew	20, 21, 121	Jun. – Sep.
Barkley Sound	123	Jun. – Sep.
Port Alberni	23	Jun. – Sep.
Tofino	124, 123	Jul. – Sep.
Tahisis/Nootka	25, 125	Jul. – Sep.
Kyuquot	26, 126	Jun. – Aug.
Winter Harbour	27, 127	Jul.– Aug.

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 2018, 3,397 halibut were sampled for length or weights during the South Coast Creel survey interviews.



3.7. Biological Sampling

A total of 22,010 halibut were sampled for lengths or weights, representing 34% 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:

Round Weight = Fork Length (cm)^{3.24} X (6.921 X 10⁻⁶) Net Weight = Round Weight X 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 2018 recreational halibut fishery in BC. Note: these figures are preliminary and subject to change.

Regional Area	DFO PFMA	Est. Halibut Piece Count	Est. Halibut Total Net Wt. (lbs)				
	1	13,535	134,067				
	2	6,349	77,833				
North Coast	3	4,172	50,190				
	4	8,185	105,493				
	5/6	3,690	46,950				
Central Coast	7/8/9	1,874	20,674				
	10/11	1,662	28,777				
	12	1,700	26,282				
	13/14	331	5,110				
	15-18/28/29	266	3,358				
	19	1,481	37,035				
Courth Conort	20	1,019	19,425				
South Coast	21/121	7,506	93,750				
	23/123	5,035	70,216				
	24/124	1,572	27,799				
	25/125	2,258	38,298				
	26/126	2,353	34,663				
	27/127	1,660	28,122				
То	otal Landed in Canada	64,647	848,044				
	Rec TAC (15% of total CDN) 927,99						
Estimate	Estimated Balance -END OF DECEMBER- (net wt lbs).						

Table 5. Summary of the 2018 Recreational Halibut Catch by Pacific Fishery Management Area (PFMA)



	Ne	et Weight (lbs)	Cumulative Net Weight (lbs)					
Month	2016	2017	2018	2016	2017	2018		
Feb	2,880	17,199	0	2,880	17,199	0		
March	30,615	17,868	16,029	33,495	35,068	16,029		
April	22,213	16,985	15,715	55,708	52,053	31,744		
May	53,720	62,654	58,494	109,428	114,706	90,239		
June	241,328	273,084	176,370	350,756	387,790	266,608		
July	358,114	437,991	296,745	708,870	825,782	563,354		
Aug	254,620	285,783	237,880	963,490	1,111,565	801,234		
Sept	97,213	26,302	25,484	1,060,703	1,137,867	826,718		
Oct	23,064	-	14,053	1,083,767	-	840,771		
Nov	10,603	-	3,866	1,094,371	-	844,638		
Dec	1,091	-	3,406	1,095,461	-	848,044		
Total	1,095,461	1,137,867	848,044					
Recreational Allocation (15% of Canadian TAC)								
Estimated Total Catch								
	Esti	mated Balanc	e -END OF	DECEMBER	- (net wt lbs)	79,946		

Table 6. Recreational Halibut Monthly Catch Estimates (net wt. lbs) for 2016, 2017 and 2018

PF	-MA	Feb	March	April	May	June	July	August	Sep	Oct	Nov	Dec	Total
	1	0	149	36	200	3,700	4,050	4,650	750	0	0	0	13,535
	2	0	0	99	400	1,600	2,200	1,650	400	0	0	0	6,349
	3	0	37	0	220	891	1,755	1,269	0	0	0	0	4,172
	4	0	32	157	466	2,638	2,819	2,038	18	18	0	0	8,185
5	5/6	0	165	52	168	840	1,275	1,190	0	0	0	0	3,690
7/	/8/9	0	0	64	3	40	764	706	0	0	0	0	1,874
10	D/11	0	0	22	86	972	396	186	0	0	0	0	1,662
	12	0	219	222	272	274	250	221	87	87	0	69	1,700
13	3/14	0	71	29	65	62	35	70	0	0	0	0	331
15-18	8/28/29	0	0	28	107	40	0	91	0	0	0	0	266
	19	0	75	108	436	58	157	145	85	285	107	25	1,481
	20	0	12	51	382	8	176	71	82	82	72	82	1,019
21	/121	0	157	75	244	1,303	3,624	1,675	214	214	0	0	7,506
23	/123	0	141	70	260	431	1,875	2,258	0	0	0	0	5,035
24	/124	0	0	36	144	143	1,106	143	0	0	0	0	1,572
25	/125	0	114	20	223	704	996	201	0	0	0	0	2,258
26	/126	0	0	0	52	162	912	1,227	0	0	0	0	2,353
27	/127	0	0	19	81	305	823	431	0	0	0	0	1,660
2018	Monthly	0	1,172	1,088	4,146	14,130	23,213	18,222	1,636	686	178	176	64,647
Totals	Cum.	0	1,172	2,260	6,406	20,537	43,749	61,971	63,607	64,293	64,471	64,647	

Table 7. 2018 Estimated Halibut Catch in Pieces by Area and Month

Note: Estimates in shaded cells are three year (2015-17) averages of iREC survey bias corrected estimates for those month-areas.

PFMA	Feburary	March	April	May	June	July	August	Sept	Oct	Nov	Dec
1	9	9	9	9	10	10	10	12	11	11	11
2	12	12	12	11	12	12	13	12	12	12	12
3	12	12	12	12	13	10	14	12	12	12	12
4	13	13	13	13	13	12	14	13	13	13	13
5/6	13	13	13	13	13	13	13	13	13	13	13
7/8/9	14	14	14	13	13	14	12	12	12	12	12
10/11	10	10	10	10	10	10	9	9	9	9	9
12	9	9	9	9	10	9	11	10	10	10	10
13/14	16	16	16	15	17	19	19	19	19	19	19
15-18/28/29	14	14	14	9	18	18	18	18	18	18	18
19	18	18	15	19	11	16	14	15	15	15	15
20	13	13	13	13	13	12	12	12	12	12	12
21/121	21	21	21	25	0	28	26	33	23	23	23
23/123	20	20	20	20	20	17	21	19	19	19	19
24/124	11	11	11	11	11	12	13	24	19	19	19
25/125	15	15	15	15	16	14	13	14	14	14	14
26/126	16	16	16	16	14	18	24	21	21	21	21
27/127	16	16	16	16	13	19	20	20	20	20	20

Table 8: 2018 Average Net Weight Estimates by Area and Month

PF	MA	Febura ry	Marc h	April	May	June	July	Augus t	Sept	Oct	Nov	Dec	Total
	1	0	1,386	335	1,779	35,798	38,576	47,081	9,113	0	0	0	134,06 7
	2	0	0	1,153	4,531	19,140	27,225	20,790	4,995	0	0	0	77,833
	3	0	436	0	2,581	11,619	18,296	17,258	0	0	0	0	50,190
	4	0	399	1,984	6,079	34,400	34,462	27,717	226	226	0	0	105,49 3
5	6/6	0	2,087	661	2,122	10,610	16,108	15,362	0	0	0	0	46,950
7/	8/9	0	0	757	2,118	1,629	8,695	7,475	0	0	0	0	20,674
10)/11	0	0	349	1,291	16,143	7,462	3,532	0	0	0	0	28,777
-	12	0	2,966	3,011	2,524	4,884	4,573	3,949	1,568	1,568	0	1,239	26,282
13	6/14	0	1,293	422	1,202	671	567	954	0	0	0	0	5,110
15-18	8/28/29	0	0	359	1,400	517	0	1,082	0	0	0	0	3,358
	19	0	1,544	2,312	10,89 9	1,451	4,383	3,837	2,841	6,682	2,495	590	37,035
	20	0	234	996	7,466	156	2,957	1,524	1,571	1,571	1,372	1,577	19,425
21/	/121	0	1,724	1,126	2,668	14,263	42,591	22,204	5,170	4,005	0	0	93,750
23/	/123	0	2,120	1,062	3,912	7,055	25,817	30,252	0	0	0	0	70,216
24/	/124	0	0	562	2,260	1,958	19,549	3,470	0	0	0	0	27,799
25/	/125	0	1,839	327	3,601	9,148	19,269	4,115	0	0	0	0	38,298
26/	/126	0	0	0	783	2,795	11,566	19,519	0	0	0	0	34,663
27/	/127	0	0	303	1,277	4,135	14,649	7,758	0	0	0	0	28,122
2018	Monthl	0	16,02	15,71	58,49	176,37	296,74	237,88	25,484	14,053	3,866	3,406	848,04

 Table 9. 2018 Estimated Halibut Catch in Net Weight (lbs) by Area and Month

Total	у		9	5	4	0	5	0					4
S	Cum.	0	16,02 9	31,74 4	90,23 9	266,60 8	563,35 4	801,23 4	826,71 8	840,77 1	844,63 8	848,04 4	

References

Zetterberg, P.R., Maher, J.M., and Watson, N.M., 2009. <u>Strait of Georgia recreational fishery creel survey finfish data, 2002 to 2006</u>. 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.

South Coast Stock Assessment Creel Survey Bulletin #1 – Program Overview, 17 July 2018.

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

APPENDIX 3

Fisheries and Oceans Canada 2018 IPHC Annual Report

PREPARED BY: Fisheries and Oceans Canada (18 December 2018)

DATE: 18/DEC/2018

CONTRACTING PARTY: CANADA

AGENCY:

Fisheries and Oceans Canada

CONTACT:

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FISHERY SECTOR/S:

All

IPHC REGULATORY AREA:

IPHC Regulatory Area 2B (Canada: British Columbia)



DISCUSSION

Halibut Compliance and Enforcement – Commercial Halibut Summary 2018

2018 Halibut Fishery

The 2018 commercial halibut fishery opened at 12:00 hours local time on March 24, 2018 and closed at 12:00 hours local time on November 7, 2018. A total of 148 vessels and 449 fishing trips were recorded during the 2018 commercial halibut fishing season.

Compliance and Enforcement Priorities - 2018

Groundfish, including commercial Halibut, enforcement priorities for 2018 were identified in the Groundfish Integrated Fisheries Management Plan and by the Groundfish Enforcement Coordinator as follows:

- Investigate incidents of fishing in closed areas such as Rockfish Conservation Areas (RCAs), and sponge reef marine protected areas;
- Continue to enforce compliance with Dockside Monitoring Program (DMP);
- Conduct investigations and enforcement actions in response to the retention of groundfish caught, retained, or possessed without licence authority. Priority will be placed on occurrences where retention for the purpose of sale is indicated;
- Enforce compliance with conditions of licence for dual fishing, where 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'; and
- Enforce compliance with electronic monitoring (EM) conditions of licence, especially time gap occurrences.
- Investigate false and misleading information provided to dockside observers.
- Investigate allegations of dockside observers not carrying out their duties.

Link to Pacific Region Groundfish Integrated Fisheries Management Plan – 2018:

http://www.pac.dfo-mpo.gc.ca/fm-gp/ifmp-eng.html#Groundfish

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.



See Appendix 1 - Table 1

Halibut Compliance and Enforcement – Recreational Halibut Summary - 2018

2018 Halibut Fishery

The 2018 recreational halibut fishery opened at 00:01 hours on March 1, 2018 until further notice. Between January 1, 2018 and November 30, 2018 at total of 231,926 recreational licences were issued.

Halibut Compliance and Enforcement – Halibut Experimental Recreational Program - 2018

2018 Halibut Fishery

The halibut experimental recreational fishery opened on April 1, 2018 and closes on December 31, 2018. Two hundred and forty-three (243) licences were issued in 2018. This year a new staff member in the Groundfish Management Unit closely tracked and sent out information to licence holders. This has resulted in an increased ability to identify non-compliance issues.

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

Halibut Compliance and Enforcement – Commercial, Food, Social and Ceremonial (FSC) and Treaty Fisheries - 2018

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 atsea and 100% monitoring at the dock.

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

RECOMMENDATIONS: NA

REFERENCES: See hyperlinks above



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Appendix 3: Tables – Aerial Surveillance Patrol Summary	8
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Appendix 1: Tables - Occurrences

Table 1: Commercial Halibut Fishery Occurrences - January 1, 2018 to November 30, 2018¹

Occurrence Type (not all are	Number of Occurrences
found to be violations)	Number of Occurrences
Iound to be violations)	
Dual fishing	
Dual listing	77
Area/Time (closed area)	7
, , ,	
Illegal Buy/Sell/Possess	5
Gear Illegal/Used Illegally	4
Observer Treatment	1
Registration / Licence	5
Prohibited Species	2
Pologog Pool/figh	27
Release Rocklish	57
Reporting	1
reporting	'
Species/Size Limit	1
Hold Check Not Completed	8
-	
Personal Use of Prohibited	1
Species	
Total	149

¹Source: DFO Departmental Violations System (DVS) and Archipelago Marine Research Ltd. Portal for Clients



Table 2: Recreational Halibut Fishery Occurrences - January 1, 2018 to November 30, 2018²

Occurrence Type	Number of Occurrences
Reporting	27 (20 XRQ)
Quota/Bag Limits	4
Gear-Illegal/Used Illegally	1
Area/Time	3
Species/Size Limit	14
Registration/Licence	6
Illegal Buy/Sell/Possess	5
Illegal Transportation	5
Inspection	1
Total	66

²Source: DFO *Departmental Violations System (DVS*)

Table 3: Aboriginal Halibut Fishery Occurrences - January 1, 2018 to November 30, 2018³

Occurrence Type	Number Of Occurrences
Illegal Buy/Sell/Possess	13
Registration/Licence	1
Gear – Illegal/Used Illegally	2
Species/Size Limit	1
Illegal Transportation	1
Total	18

³Source: DFO Departmental Violations System (DVS)



Appendix 2: Tables – Fishery Officer Enforcement Effort Summary

<u>Table 4</u>: 2016, 2017, 2018 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

ENFORCEMENT ACTIVITY – Comparison of years 2016, 2017, and 2018 (January 1, 2018 to November 30, 2018)								
HALIBUT DEDICATED HOURS and % of TOTAL ENFORCEMENT EFFORT FOR PACIFIC REGION								
	2016	2016	2017	2017	2018	2018		
FISHERY TYPE	HOURS	% TOTAL ENF. EFFORT	HOURS	% TOTAL ENF. EFFORT	HOURS	% TOTAL ENF. EFFORT		
ABORIGINAL HALIBUT	481.25	1%	427.5	0.6%	220.75	0.3%		
COMMERCIAL HALIBUT	1297.5	1%	592.25	0.8%	318.75	0.5%		
RECREATIONAL HALIBUT	445	0%	500.5	0.7%	520.75	0.8%		
TOTAL	2223.75	2%	1520.5	2%	1060.25	1.6%		
RECREATIONAL HOURS and % of	TOTAL ENFOR	CEMENT EFFO	RT FOR PACIF	IC REGION				
RECREATIONAL HALIBUT	445	0%	500.5	0.65%	520.75	0.8%		
RECREATIONAL FINFISH – TIDAL WATERS	1082.25	1%	1366.25	1.77%	2057.25	3.1%		
RECREATIONAL SALMON – TIDAL WATERS	5607.5	6%	5025.5	6.5%	6280.75	9.4%		
TOTAL	7134.75	7%	6892.25	8.92%	8858.75	13.3		

<u>Note</u>: 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: Tables – Aerial Surveillance Patrol Summary

<u>Table 5</u>: 2018, 2017, 2016 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>	Total Halibut Vessels Recorded Per Year					
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)					
January 1, 2016 – December 15, 2016	154	876.04	388 (338 L, 50 FL).					

L = commercial halibut licence

FL= communal commercial halibut licence

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

Appendix 4: Tables – Violation Summaries

<u>Table 6</u>: 2015, 2016, 2017, 2018 Violations for Aboriginal, Commercial and Recreational Halibut – Charges Laid, Charges Pending/Under Review, and Tickets/Warnings Issued⁶

PACIFIC/PACIFIQUE REGION

VIOLATIONS	2015	2016	2017	2018	GRAND TOTAL
ABORIGINAL GROUNDFISH – HALIBUT	12	6	14	2	34
CHARGES LAID					
CHARGES PENDING/UNDER REVIEW	5	4	13	1	23

⁶ Source: DFO Departmental Violations System (DVS)



ABORIGINAL GROUNDFISH – HALIBUT (Cont'd)	2015	2016	2017	2018	GRAND TOTAL
TICKET ISSUED	1				1
WARNING ISSUED	5	1		1	7
COMMERCIAL GROUNDFISH - HALIBUT	44	27	25	14	110
CHARGES LAID		1			1
CHARGES PENDING/UNDER REVIEW	14	11	5	3	33
TICKET ISSUED			7		7
WARNING ISSUED			13	9	22
RECREATIONAL GROUNDFISH - HALIBUT	78	51	80	69	278
CHARGES LAID	3	5	8	1	17
CHARGES PENDING/UNDER REVIEW	20	5	10	6	41
TICKET ISSUED	12	20	26	21 (1 XRQ)	79
WARNING ISSUED	42	21	36	36 (2 XRQ)	135
GRAND TOTAL	134	84	119	85	422

⁶ Source: DFO Departmental Violations System (DVS)

SIGNIFICANT CONVICTIONS:

- **Recreational Halibut** Fishing Lodge Court order fine of <u>\$2000.00</u> plus Section 79.2 (f) Fisheries Act Order of <u>\$45,500.00</u> for failing to comply with conditions of licence by catching and retaining one (1) halibut which was greater than 133 cm, and possessing fish caught in contravention of the Fisheries Act and Regulations.
- **Restaurant Sales** Halibut fined <u>\$5000.00</u> and forfeiture of 106 lbs. halibut & other groundfish for providing false statements to Fishery Officer and obstructing Fishery Officer.

SIGNIFICANT 2018 INVESTIGATIONS:

• **Seven Closed Area** – Gwaii Haanas, Southern Glass Sponge Marine Protected Area, RCAs and Halibut Closed Time.



Appendix 5: Background Information

COMPLIANCE ISSUES AND STRATEGIES

<u>Overview</u>

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 approximately 140 fishery officers in the Pacific Region, the majority of which are located within four distinct operational Areas and the Aquaculture Enforcement unit. These areas/units are supported by the National Fisheries Intelligence Service. 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: <u>http://www.dfo-mpo.gc.ca/fm-gp/enf-loi/index-eng.htm</u>

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. Restorative Justice (RJ), a community based approach, may be used as an alternative measure to the court process for people faced with fisheries offences and conflict in an inclusive and meaningful way.



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.

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.

The National Aerial Surveillance Program and the Marine Patrol Program work together to ensure 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.

In 2018 between January 1, 2018 and November 30, 2018 the dockside monitoring program observers attended 100% of all hailed-in commercial landings in the commercial halibut fishery.



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 2018 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. The western region of NFIS is now fully staffed.

The application of Major Case Management principles and practices will enable the C&P program to focus its resources on investigations that lead to successful prosecutions and sanctions.

NFIS has developed a national verification program and the Pacific Region will have a total of three (3) fishery officers trained by the end of 2018. In 2018 the one trained fishery officer started verifying that the dockside observers were carrying out their duties as required by regulation and national and regional policies and procedures.

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.

