

PACIFIC REGION

COUNCIL OF THE HAIDA NATION / FISHERIES AND OCEANS CANADA

JOINT MANAGEMENT PLAN

RAZOR CLAM

**JULY 20, 2020 TO
FEBRUARY 28, 2022**



Canada

This Joint Intertidal Clam Management Plan is intended for general purposes only. Where there is a discrepancy between the Plan and the regulations, the regulations are the final authority. A description of Areas and Subareas referenced in this Plan can be found in the Pacific Fishery Management Area Regulations

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1. OVERVIEW

1.1 Introduction

The 2020 Pacific Region Council of the Haida Nation/Fisheries and Oceans Canada Joint Razor Clam Management Plan (JMP) encompasses the period of July 20, 2020 to February 28, 2022.

The Commercial Harvest Plan for 2020/21 is attached as Appendix 1 to this JMP. This appendix will be renewed annually. All commercial harvesters are advised to review the attachments for harvest information.

1.2 Goals and Objectives

- 1.2.1 To ensure conservation and protection of invertebrate stocks and their habitat through the application of scientific management principles applied in a risk averse and precautionary manner based on the best scientific advice available.
- 1.2.2 To meet the federal Crown's obligations regarding First Nations fisheries for food, social and ceremonial purposes.
- 1.2.3 To develop sustainable fisheries through partnership and co-management arrangements with client groups and stakeholders to share in decision making, responsibilities, costs, and benefits.
- 1.2.4 To develop fishing plans and co-operative research programs which will contribute to improving the knowledge base and understanding of the resource.
- 1.2.5 To consider the goals of stakeholders with respect to social, cultural and economic value of the fishery.
- 1.2.6 To consider health and safety in the development and implementation of Integrated Fisheries Management Plans, fishery openings and closures.

1.3 History

Shellfish are an important food and trade item for coastal First Nations and are used fresh or preserved by drying. A pilot razor clam canning operation was undertaken at Tow Hill near Masset in 1923 and resulted in a commercial razor clam fishery and canning operation in 1924. In that year, 5000 cases (22,539 kg of whole clams) were processed. Production increased rapidly to a high of 730 t (1.6 million lb) in 1925 and then dropped sharply. Highs of 390 t and 430 t (0.87 and 0.95 million lb) were landed in 1930 and 1938 respectively. Although landings have been made in most months of the year, the major part of the catch is taken from March to June when daylight low tides occur (<1.2 m or approximately 4 feet above datum).

Historically, the razor clam fishery was controlled through clam leases held by the cannery. In 1968, these leases lapsed and the beaches were opened to other harvesters. The only regulation governing the collection of razor clams in the commercial fishery was a minimum shell length of 3.5 inches (88.9 mm) that continues to this day, with a minor change to 90 mm.

The razor clam fishery is currently managed jointly between the Council of the Haida Nation (CHN) and Fisheries and Oceans Canada (DFO) through a Razor Clam Sub agreement first signed on August 14, 1994 and renewed as part of a Comprehensive Fisheries Agreement. In 2020 there will be no commercial harvest however once commercial harvest resumes, the CHN will designate Haida participants in the commercial fishery under a Communal Licence issued to the CHN. Fisheries and Oceans Canada will continue to licence individual commercial harvesters (licensees). The number of commercial licenses issued by Fisheries and Oceans Canada was limited in 1995.

Most commercially harvested razor clams are used as bait in the crab fishery. In the early 2000's, there was a growing demand for razor clams as a food product. This demand along with high clam abundances resulted in record catches in 2000 (since 1941) and 2008 that coincided with peaks in razor clam biomass. After 2000 recruitment returned to normal levels for several years and catch ceilings were adjusted to reflect the available stock.

Biomass estimates dropped significantly in 2018, pre-season biomass estimates in 2018 of 846 metric tonnes dropped to 277 metric tonnes for 2019. This led to the closure of the commercial fishery beginning in the 2019-20 season. In 2020, this downward trend continued and biomass levels dipped below the reference point and for the second year in a row. The Commercial fishery will remain closed until stock levels improve.

2. STOCK STATUS

Razor clams (*Siliqua patula*) are found between California and the Aleutian Islands on exposed, surf-pounded, sandy beaches. In British Columbia, they occur in concentrations at two localities; Long Beach on the west coast of Vancouver Island between Clayoquot Sound and Barkley Sound, and on Haida Gwaii on the northeast coast of Graham Island, between Masset and Rose Spit. The population on Haida Gwaii is the largest in BC and supports commercial, recreational and Haida non-commercial (i.e. Haida food, social and ceremonial) fisheries.

2.1. Stock Assessment

The Haida Fisheries Program (HFP) has conducted standardized surveys of the beach since 1994. Until recently, the harvest rate was estimated based on a best estimate of exploitable biomass that accounted for recruitment, unsurveyed beaches, and a sustainable harvest rate of 12.3 percent. The sustainable harvest rate (2/3 of maximum sustainable yield (MSY) or 12.3 percent) was based on a 1994 study that estimated the MSY to be 118 tonnes which was 19 percent of the harvestable biomass. For more information see, *Report on the results of surveys of intertidal razor clams (Siliqua patula) on beaches near Massett, Haida Gwaii and recommendations on fishery management* (Jones et al., Research Document 2001-152). This document is available from the contacts listed in Appendix 1 or from the Canadian Science Advisory Secretariat (CSAS) Internet site at:

http://www.dfo-mpo.gc.ca/csas-sccs/publications/resdocs-docrech/2001/2001_152-eng.htm

In 2009 a more recent analysis of the sustainable harvest rate using data from the past 14 years of biomass surveys, including clam ageing data, was analyzed in the research document, *Estimation of reference points and a precautionary harvest strategy for the razor clam (*Siliqua patula*) fishery at Haida Gwaii* (Jones et al. 2009.). Using this updated model, and encompassing the Department's Sustainable Fisheries Framework and precautionary approach, thresholds will be determined through use of a new maximum harvest rate of 22% as was accepted by the PSARC Invertebrate Subcommittee in the *Proceedings of the Pacific Scientific Advice Review Committee (PSARC) Invertebrate Subcommittee Meeting...reference points and a precautionary harvest strategy for the Razor clam fishery on Haida Gwaii*. DFO. (Can.Sci.Advic.Sec. Proceed.SER.2009/055). If the biomass falls below the upper stock reference (USR) of 510 tonnes, this maximum harvest rate will be decreased formulaically, by the difference between pre-season biomass and limit reference point (LRP) of 255 tonnes multiplied by 0.22, divided by the difference between the USR and LRP. No commercial harvest will be allowed if the biomass falls below the LRP of 255 tonnes. Recruitment estimates are not being used in calculating biomass forecasts until the methods for determination are analyzed in future CSAS documents.

The length of beach surveyed has increased slightly over time. From 1994 to 2000, surveys were conducted on three sections of beach totalling 24.35 km in length. In 2001, surveys were expanded to include a further 6.75 km section of beach at the east end of North Beach where there was significant fishing effort in 2000. Also, beginning in 2001, harvesters began to report landings on fish slips by beach section. Since 2001 a modest proportion of razor clam landings has been from 2.17 km long Agate Beach, and transects of this section of beach have been included in the survey since 2007.

Beginning in 2002, a new section of beach in Hecate Strait between Rose Spit and Cape Fife (East Beach 1, Subarea 102-1) was approved for harvesting subject to biotoxin monitoring. This beach section was opened to the commercial fishery in 2003 but few if any landings have been recorded since then.

The biomass of razor clams in Subarea 1-5 has fluctuated over time. Through annual surveys it has been shown that the biomass approximately doubled from 1994 to 2000, but then declined and remained relatively stable at levels near the long term average from 2004 to 2010. Biomass increased in 2007 due to several years of good recruitment, decreased slightly in 2008 and changed little in 2009 and 2010. Biomass at the end of the 2011 season was estimated to be 475 tonnes which was the basis for the 2012 forecast. As this estimate was below the threshold of 510 t described above, the harvest rate for the 2012 season was dropped from 22% to 19% to reflect the needed caution. In 2013 stocks returned to, a level above, the 510 t threshold with the 22% harvest rate. The population underwent a dramatic decrease in 2018 and by 2019 biomass surveys indicated the population has fallen below the LRP.

Razor clam populations in Subarea 1-5 have been assessed on a beach-by-beach basis since 1995 and catches have been monitored by individual beaches since 2001 (see Appendix 3). However, the commercial fishery is currently not managed in-season on a beach-by-beach basis. The commercial fishery annual harvest rate is established pre-season as a sum of the individual beach catch ceilings. Harvesters are requested to report landings by beach section, but to date, there has not been a need to close individual beach sections in-season once their associated catch ceilings

have been reached. It is a goal of the Haida Joint Shellfish Technical Committee and the Razor Clam Diggers Association to continue to assess and monitor the commercial fishery on a beach-by-beach basis.

2.2. Economics

Catches have fluctuated over the years due to changes in biomass and market demand. Poor markets, a rising Canadian dollar, and a downturn in the commercial crab fishery in 2007 resulted in only 20 tonnes from a catch ceiling of 142.9 tonnes being harvested. In 2008 market conditions improved somewhat and 205 tonnes of the 207 tonne harvest rate were harvested although the price per pound received by harvesters was lower than previous years. In 2013 the fishery was closed for the majority of the season due to persistently elevated levels of the paralytic shellfish poisoning toxin. As a result, only 58 tonnes out of a quota of 162 tonnes was harvested. In 2015, there were no closures due to high PSP levels, and 233,873lbs of the 404,000lbs were harvested. In December of 2015, there was a price increase of \$1/lb to \$2/lb due to demand in the bait market in the United States, yet harvester interest in this fishery remained low.

3. RESEARCH AND CONSULTATION

CHN and Fisheries and Oceans Canada will continue with co-operative programs to monitor the fishery and assess sustainable harvest levels in each year of the plan.

4. MANAGEMENT ISSUES

Haida food, social and ceremonial and commercial razor clam harvesters have expressed concern over the effort by recreational diggers on clam stocks on North Beach. In the past creel surveys have been conducted by Haida Fisheries Program staff during the June to August period to estimate catch. These studies indicate that recreational catch has been less than 1,000 pounds annually from North Beach 1 and 2. Fishing effort on the other beaches is thought to be low.

In 2005, an in-season management committee was created to allow for a more transparent and collaborative process between all parties involved in the commercial fishery. The Razor Clam In-Season Management Committee has membership from the Razor Clam Diggers Association, Council of the Haida Nation, Old Massett Village Council, Fisheries and Oceans Canada (Resource Management, Conservation and Protection), and Masset razor clam processors, and will continue to meet as needed throughout the 2020 fishing season to deal with in-season management issues.

5. MANAGEMENT MEASURES FOR THE DURATION OF THE PLAN

See the Commercial, First Nations and Recreational Harvest Plans, Appendices 1 to 3 for detail on the following:

- Total Allowable Catch (TAC), Subarea Thresholds;
- Fishing Season/Areas;
- Control and Monitoring of Removals
- Licensing

6. ENFORCEMENT PLAN

DFO has the responsibility to enforce the *Fisheries Act* and associated regulations, to address conservation, health and safety issues and to maintain proper management and control of the various fisheries.

Any suspected or actual fisheries, wildlife or pollution violations can be quickly and discretely reported to the appropriate Enforcement Officer by using the toll free Observe, Record and Report hotline. This toll free number is available 24 hours a day. Confidentiality is assured.

OBSERVE, RECORD AND REPORT - 1-800-465-4DFO (1-800-465-4336)

Enforcement enquiries can also be directed to the local field offices during regular office hours.

7. PERFORMANCE REVIEW

All aspects of the fishery, including pre-season planning, quota and threshold establishment, and post-season review, are discussed at Haida Joint Shellfish Technical Committee meetings held annually.

8. REFERENCES

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- Bourne, N., and D.B. Quayle. 1970. Breeding and growth of razor clams in British Columbia. Fish. Res. Board Can. Tech. Rep. 232: 42 p.
- Caddy, J. 1998. A short review of precautionary reference points and some proposals for their use in data-poor situations. FAO Fish. Tech. Pap. 379. 30p.

Gillespie, G.E. and A.R. Kronlund. 1999. A manual for intertidal clam surveys. Can. Manusc. Rep. Fish. Aquat. Sci. 2270. 144p.

Jamieson, G.S. 1986. Paralytic shellfish poisoning, p. 44-46. In G.S. Jamieson and K. Francis [ed.] Invertebrate and marine plant resources of British Columbia. Can. Spec. Publ. Fish. Aquat. Sci. 91.

Jones, R., C. Schwarz, B. DeFreitas, L. Lee. 2001. Results of Surveys of Intertidal Razor Clams (*Siliqua patula*) on Beaches Near Massett, Haida Gwaii and Recommendations on Fishery Management. Can. Tech. Rep. No. 152

(Jones et al. 2009, document to be numbered). Estimation of reference points and a precautionary harvest strategy for the razor clam (*Siliqua patula*) fishery at Haida Gwaii

Kenchington, E., R. Duggan and T. Riddell. 1998. Early life history characteristics of tile razor clam (*Etzsis directus*) and the moonsnails (*Euspiru* spp.) with applications to fisheries and aquaculture. Can. Tech. Rep. Fish. Aquat. Sci. 2223: vii + 32 p.

Several research documents are available at the PSARC Internet site:

<http://www.isdm-gdsi.gc.ca/csas-sccs/applications/Publications/index-eng.asp#RES>

Appendix 1: 2020-21 Razor Clam Commercial Harvest Plan

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1. DEFINITION OF TERMS

“Area A” means Fisheries and Oceans Canada Pacific Fishery Management Subarea 1-5 and a portion of Subarea 102-1 (as described in the Pacific Fishery Management Area Regulations) which includes McIntyre Bay from Rose Point to Wiah Point and Rose Point south to Fife Point.

“Communal licence” means the communal licence issued to the Citizens of the Haida Nation (CHN), through the Secretariat of the Haida Nation, for the commercial harvesting of razor clams by Participants.

“CHN Fisheries Guardian” means a person hired by the CHN and designated by the Minister pursuant to *Section 5* of the *Fisheries Act* and by the CHN.

“Islands” means the land area and adjacent water known variously as Haida Gwaii and the Queen Charlotte Islands.

“Licensee” means a holder of a category Z-2 license eligibility issued by Fisheries and Oceans Canada authorizing commercial harvest of razor clams in the Islands.

“Participants” means Citizens of the Haida Nation, as per the Constitution of the Haida Nation, who are designated by CHN to commercially harvest razor clams under the Communal Licence.

2. MANAGEMENT FOR THE COMMERCIAL FISHERY

2.1. Management Highlights for 2020

The commercial fishery has been closed as stock assessment indicates that pre-season biomass estimates do not support a commercial harvest.

2.2. Licensing and Designation of Harvesters

When harvesting razor clams (*Siliqua patula*) for sale, each participant must be in possession of a non-transferable designation card from the CHN and each Licensee must be in possession of a current year Area A clam “Z-2” licence from Fisheries and Oceans Canada. Identification and designation cards or licences must be carried at all times when harvesting clams and must be produced upon request of a CHN fisheries guardian, Fisheries and Oceans Canada Fishery Officer, or Fisheries and Oceans Canada fishery guardian.

Since 1995, Area A clam “Z-2” licences eligibilities are non-transferable and subject to limited entry. Licence eligibilities were allocated to individuals who held a Fisheries and Oceans Canada category “Z-2” clam licence for Haida Gwaii, personally fished the licence, and provided records of razor clam landings during at least three years from 1990 to 1994. Category “Z-2” clam licence issuance is available from the Nanaimo Pacific Fishery

Licence Unit only. Both a category “Z-2” clam licence and a Fisher’s Registration Card (FRC) are required to participate in commercially harvesting razor clams.

The license is issue by the NSLIS system under the ACFLR and approved by the DFO manager.

For complete information in regards to category “Z-2” licence eligibilities please contact the Pacific Fishery Licence Unit toll-free at 1-877-535-7307 or by email at fishing-peche@dfo-mpo.gc.ca.

2.3. Size Limit

When fishery is open no person shall commercially harvest razor clams that measure less than ninety (90) millimetres through the greatest breadth of the shell (see Appendix 4).

2.4. Harvest Area

Participants and licensees are to harvest only in Clam Licence Area A (Pacific Fishery Management Subarea 1-5 and a portion of Subarea 102-1).

Harvesters are asked to report effort using the following definitions (a map is shown in Appendix 3 and is available from the Haida Fisheries Program):

Subarea 1-5:

- a) **North 1:** the beach between Tow Hill and a point 7.0 km east of Tow Hill.
- b) **North 2:** the beach between points 7.0 km and 13.0 km east of Tow Hill.
- c) **South 1:** the beach between Yakan Point and White Creek (Kliki River).
- d) **South 2:** the beach between White Creek and a point on the beach 400 m (1/4 mile) east of the Sangar River/Chown Brook estuary.
- e) **Agate Beach:** the beach between Tow Hill and Yakan Point also known as the Horseshoe.

Subarea 102-1:

- f) **East 1:** the beach north of Fife Point

2.5. Fishing Gear

All harvesters will be restricted to digging for razor clams by hand.

2.6. Catch Ceiling

No Total Allowable Catch is forecasted for the season due to conservation concerns..

2.7. Open Times

To promote harvest efficiency and avoid impact on juvenile clams that appear to be more prevalent in the higher areas of the beach, the Razor Clam Diggers Association has recommended that the fishery be managed in-season to the following opening dates: days when the tide level is 5.5 feet and under, based on the Prince Rupert tide tables. The Razor

Clam In-season Management Committee may make recommendation to change the suggested dates. Openings and closures will be announced by Fisheries and Oceans Canada Fishery Notice. Haida Fisheries will work with the razor clam buyers to determine days that the buyers will be purchasing. Haida Fisheries will advertise the agreed upon dates. Diggers are reminded to check these notices on a regular basis due to potential biotoxin closures. Fishery Notices are available on the Internet at:
www-ops2.pac.dfo-mpo.gc.ca/xnet/content/fns/index.cfm?pg=search_options&lang=en&id=commercial

The Fishery Notices will also be posted at the Hiellen & Tow Hill Notice board, DFO Masset office, the Haida Fisheries Program office, and the Old Massett Village Council office. For 2020, the commercial fishery will remain closed.

Month	Recommended opening dates
January	Closed
February	Closed
March	Closed
April	Closed
May	Closed
June	Closed
July	Closed
August	Closed
September	Closed
October	Closed
November	Closed
December	Closed

2.8. Closures

Intertidal clam fisheries are limited by programs for monitoring marine biotoxins, sanitary growing water surveys, and DFO capability to enforce closures. These requirements are defined under the Canadian Sanitary Shellfish Program (CSSP) which has been put in place to ensure public health and safety.

Paralytic Shellfish Poisoning or Domoic Acid: Shellfish harvesters must “check before they harvest” to ensure that an area is not closed for PSP (red tide). For information on the location of current marine biotoxin closures either:

- call the toll free number 1-866-431-3474
- check the Shellfish Contamination Closures page on the Department website at: www.pac.dfo-mpo.gc.ca/fm-gp/contamination/index-eng.htm
- check with the nearest DFO office

Sewage Contaminated Closures: Participants and licensees will not harvest razor clams in areas which are closed due to risk of sewage contamination. **For information on the location of current sanitary shellfish closures please check with the nearest Fisheries**

and Oceans Canada office or refer to the Shellfish Contamination page on the Fisheries and Oceans Canada Internet site at: www.pac.dfo-mpo.gc.ca/fm-gp/contamination/index-eng.htm

Permanent bivalve harvesting closures are in place for Canadian fisheries waters of the Pacific Ocean within:

- a) 300 m radius around industrial, municipal and sewage treatment plant outfall discharges;
- b) 125 m radius of any marina, ferry wharf, finfish net pen, and, subject to subsection (c), any floating living accommodation facility; and
- c) 25 m of any floating living accommodation facility located within a shellfish aquaculture tenure where a zero-discharge waste management plan is a condition of the Provincial aquaculture licence and is approved by the Regional Interdepartmental Committee.

3. BIOTOXIN / WATER QUALITY ASSESSMENT

3.1. Biotoxin Monitoring

Area openings are dependent upon regular submission and analysis of samples for PSP, ASP and DSP analysis, as set out in a biotoxin monitoring protocol administered by the Canadian Food Inspection Agency (CFIA). Areas will be closed to fishing if unacceptable levels of marine biotoxins (PSP, ASP or DSP) are detected. Closed areas will be opened to fishing according to protocols required by the Biotoxin Monitoring Program, approved by CFIA, and overseen by the Haida Fisheries Program.

Three consecutive samples containing acceptable levels of biotoxin must be received in order for CFIA to lift a harvest restriction in an area. CFIA will recommend lifting the biotoxin prohibition and a harvest site can then be considered by DFO for fisheries openings. Once an area is open, on-going submission of samples is required to maintain the opening. CFIA will recommend closure of the harvest area to DFO if there is a lapse in sample submissions or if unacceptable levels of PSP, ASP or DSP are detected (>80 ug/100g PSP; >20 ppm domoic acid (ASP); >0.2 ug /g Okadaic Acid /DTX Toxin and/or Pectenotoxin (DSP)).

3.2. General Information on Closures under the Canadian Shellfish Sanitation Program

Closures may be implemented on short notice in the event of changes to contamination status, including sanitary and biotoxin events. Licence holders, vessel masters, and harvesters are reminded that:

- It remains the responsibility of the licence holders and harvesters to ensure that an area is not closed for harvest due to sanitary or biotoxin contamination. Fishing in a closed area is an offence under the Fisheries Act. Consumption of product harvested from within a closed area poses a serious health risk.

- Prior to commencement of each day’s fishing, the licence holder must take care to confirm that an area is open for harvesting either through the DFO website at: <http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/index-eng.html> or the toll-free information line at 1-866-431-3474, or by contacting a local DFO office directly. Contact information is available in Appendix 7.
- Information may also be available through weekly broadcasts over a commercial or marine radio station (“the weather channel”). In the North Coast, this method is only updated weekly on Tuesdays and it is recommended that the sources listed above be the primary avenue for information.

3.2.1 Sanitary Contamination Closures

Shellfish may not be harvested from closed contaminated areas except by special permit licence under the *Management of Contaminated Fisheries Regulations (MCFR)*. Currently there is not an approved depuration process for oysters. There are both seasonal and permanent sanitary contamination closures. Descriptions and maps of contaminated closures may be found at the following DFO website: <http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/index-eng.html>

A copy of this list may also be obtained from the resource managers. Sanitary closures are amended annually in May and November, and may also be amended in-season. Consequently, harvesters are advised to check the internet, prior to harvesting in an area, to ensure that they have the most recent contamination closure information.

Permanent bivalve harvesting closures are in place for Canadian fisheries waters of the Pacific Ocean within:

1. 300 m radius around industrial, municipal and sewage treatment plant outfall discharges;
2. 125 m radius of any marina, ferry wharf, any floating living accommodation facility (other than a floating living accommodation described in subsection (3)) or finfish net pen described in subsection (4);
3. 25 m radius of any floating living accommodation facility located within a shellfish aquaculture tenure where a zero-discharge waste management plan is a condition of the aquaculture licence and is approved by the Regional Interdepartmental Shellfish Committee.
4. Zero (0) metres of any finfish net pen within an aquaculture tenure where an Integrated Multi-trophic Aquaculture Management Plan approved by the Regional Interdepartmental Committee is in operation.

3.2.2. Biotxin Contamination Closures

Shellfish may not be harvested from closed areas except by special permit licence issued under the *Management of Contaminated Fisheries Regulations*. Shellfish may not be harvested for consumption from any area closed due to biotoxin contamination. Descriptions of biotoxin closures may be found at the following DFO internet site: <http://www.pac.dfo-mpo.gc.ca/fm-gp/contamination/index-eng.html>

Areas will be opened and fished according to protocols required by the Biotxin Monitoring Program, approved by the Canadian Food Inspection Agency (CFIA). Three consecutive weekly samples containing acceptable levels of biotoxin must be received in order for CFIA to lift a harvest restriction in an area. CFIA will make recommendation to lift the biotoxin (Paralytic Shellfish Poison (PSP)/red tide, Domoic Acid Poisoning) (ASP) or Diarrhetic Shellfish Poisoning (DSP) prohibition and a harvest site can then be considered by DFO for Aboriginal, commercial or recreational harvesting. The resource manager will prepare the documentation necessary for an area opening for approval by the Regional Director General. For further details on the CSSP, see the internet at:

<https://www.inspection.gc.ca/food/food-specific-requirements-and-guidance/fish/canadian-shellfish-sanitation-program/eng/1527251566006/1527251566942?chap=0>

3.3. Reminder of Requirements for Legal Sourcing and Harvest of Bivalve Shellfish

The safety of consumers is a top priority for the Government of Canada. The reputation of Canada's food supply is a responsibility shared by all parties, including industry and federal and provincial governments. As partners for delivery of the Canadian Shellfish Sanitation Program (CSSP), Fisheries and Oceans Canada (DFO) and the Canadian Food Inspection Agency (CFIA) collaborate to prevent illegal harvesting and selling of bivalve shellfish, including suspected laundering of illegal products through legitimate aquaculture businesses. DFO also remains committed to meeting conservation objectives for bivalves as well as supporting priority for Food, Social and Ceremonial fisheries. Any harvest occurring in conflict with established management measures and controls has the potential of negatively impacting the conservation of bivalve populations. DFO will investigate reports of illegal harvesting violations and will take appropriate enforcement actions, including prosecution. Furthermore, DFO may consider more restrictive management approaches if needed to protect public health. Commercial growers and harvesters are reminded that they are required, by law, to follow specific record-keeping and tagging requirements. Records of shellfish movement through the growing cycle and to the point of distribution provide evidence to support public health, regulatory decisions and closure recommendations.

Commercial harvesters and aquaculture operators are required to:

- Understand and abide by the conditions of licence;
- Keep complete, clear and legible records and be able to produce them to a DFO fishery officer when requested;
- Ensure bivalve product destined for market sale is appropriately tagged with complete and accurate harvest information and is processed by an operator licenced by the Canadian Food Inspection Agency to process shellfish;
- Harvest only from open and approved areas and check our website before heading out for the latest information (www.dfo-mpo.gc.ca/CheckBeforeYouHarvest).

If you are aware of illegal bivalve harvest activities and/or are aware of violations, please call the DFO Observe, Record and Report (ORR) phone line at 1-800-465-4336.

More information on the policies and criteria for harvesting shellfish can be found in the CSSP manual. See also Fishery Notice FN1142 (2019): https://notices.dfo-mpo.gc.ca/fns-sap/index-eng.cfm?pg=view_notice&DOC_ID=227228&ID=all

3.4. Water Quality Assessment

Environment Canada conducts water quality surveys to assess the sanitary conditions in shellfish growing waters. These surveys are a requirement under the Canadian Shellfish Sanitation Program to establish and/or maintain approved growing area classification.

3.5. Human Waste Containment Regulations

Disposal of human waste into waters where shellfish are harvested or adjacent to shellfish harvest areas creates unnecessary and potentially serious health risks for shellfish consumers. In accordance with the Canadian Shellfish Sanitation Program (CSSP) and Transport Canada Regulations, raw sewage (Human wastes, sewage or refuse) shall not be discharged from vessels while in or adjacent to shellfish areas. Vessels operating at a distance which does not allow for timely access to on-shore washroom facilities are expected to have a designated human waste receptacle on board. Receptacles could include a portable toilet, a fixed toilet, or other containment device as appropriate. Such devices must be made of impervious, cleanable materials and have a tight-fitting lid. (Refer to Transport Canada's Regulations for *Vessel Pollution and Dangerous Chemicals Regulations under the Canada Shipping Act*):

1. Portable toilets or other designated human waste receptacles shall be used only for the purpose intended, and shall be so secured and located as to prevent contamination of the shellfish area or any harvested shellfish on board by spillage or leakage.
2. The contents of toilets or other designated human waste receptacles shall be emptied only into an approved sewage disposal system.
3. Every person onboard a shellfish harvest vessel must wash and sanitize their hands after using or cleaning a waste receptacle, or after using an onshore washroom facility.

Information on human waste containment receptacle requirements can be found at the following CFIA internet site:

<https://www.inspection.gc.ca/preventive-controls/fish/cssp/questions-and-answers/eng/1563470479199/1563470589053>

3.6. Harvesting Bivalves in the Vicinity of Wastewater Treatment Plants

Concerns have been raised regarding bivalve shellfish harvested in the vicinity of wastewater treatment plants. Increased controls were implemented in 2009 to prevent shellfish harvest in

areas where a trigger event at a wastewater treatment plant may potentially cause contamination. Conditional Management Plans have been developed at some of the priority wastewater treatment plants to manage harvest activities in the vicinity of the wastewater treatment plants. DFO will consult with shellfish harvesters in areas where Conditional Management Plans must be developed.

For further information, contact Elysha Gordon at (250) 756-7192.

4. CATCH REPORTING

4.1. Fish Slip Requirements

Participants and licensees must record all landings on a Clam Fish Slip or Clam Slip Aboriginal (in the case of First Nations harvested clams). A report must be completed even if the clams landed are used for bait, personal consumption, or otherwise disposed. The true return shall be mailed not later than seven days after the offloading and sent to:

Regional Data Unit
Fisheries and Oceans Canada
200 - 401 Burrard Street
Vancouver, B.C. V6C 3S4
Phone: (604) 666-3784

Fish slip books may be purchased at the above address. Fish slips will be collected by the Haida Fisheries Program to compile catch and effort in the fishery (see Appendix 2).

4.2. Landing Reports

As agreed to in the Razor Clam Sub-agreement, the Haida Fisheries Program will forward catch and effort data on a regular basis to the Department on behalf of all participants and licensees. This information will be sent to:

Fisheries and Oceans Canada
North Coast Resource Management - Shellfish Unit
417 2nd Avenue West
Prince Rupert, BC V8J 1G8
Phone: (250) 627-3021
Fax: (250) 627-3427
Email: Coral.Cargill@dfo-mpo.gc.ca

5. OTHER RESTRICTIONS AND GENERAL INFORMATION

5.1. Tagging of Clam Product Containers or Sacks

Prior to placing clams in a sack or container participants and licensees will label the sack or container with tags showing:

- a) Name of the clam harvester.
- b) Clam harvester's licence or designation card number.
- c) Beach location (e.g. Area A).
- d) Pacific Fishery Management Area and Subarea (e.g. Subarea 1-5).
- e) Beach section (e.g. North 1, North 2, South 1, South 2, Agate , East 1).
- f) Date of harvest.

According to Provincial requirements, the tag must be affixed and remain attached to the sack or container and may only be removed after the clams have entered a federally registered processing plant.

5.2. Harvester Responsibility

All clams shall be inspected and processed at an approved shellfish processing plant. Participants and licensees shall not sell clams directly to the public, restaurants, retail outlets, or distributors. Under Provincial and Federal Regulations, all shellfish harvested must be processed through a federally registered plant whether it is for domestic or international consumption. As well, product destined for a bait market must be processed through a federally registered plant. For further information regarding processing requirements please contact the Canadian Food Inspection Agency (CFIA), see Section 1 Contacts.

5.3. Product Handling and Transportation

To ensure product quality, care must be exercised to protect razor clams from contamination and exposure to the sun, weather, temperature, etc. Clams may be rinsed at the harvest site to remove excess mud or sand, but shall not be rinsed elsewhere before delivery because of risk of contamination.

5.4. Wet Storage

Wet storage of razor clams on the beach, alongside a boat, in unapproved live tanks, or any body of water is illegal. Such practices may expose the clams to contamination.

5.5. Beach Traffic

Harvesters are reminded that traffic on the beach can damage shellfish stocks and degrade the local habitat. Vehicles, including ATVs, should not be driven on the beach below the 1.5 m (5.5 foot) tide level. This is approximately 100 m from the shore. In addition, the Razor Clam Diggers Association recommends that vehicles not be driven between the five foot and eight foot tide level as juvenile razor clams can be prevalent in this area and may be impacted by vehicle traffic. Vehicle traffic is also a hazard to commercial diggers and other user groups. The In-Season Management Committee recommends vehicle operators regularly inspect their vehicles to ensure that they are in sound working condition and not leaking any fluids onto the beach environment.

Appendix 2: Haida Razor Clam Food, Social, and Ceremonial Fishery

HAIDA NON-COMMERCIAL FISHERY

There is no daily, possession, or size limit for razor clams harvested in the Haida non-commercial (food, social and ceremonial) fishery. However, the In-Season Management Committee strongly urges all razor clam harvesters to respect the commercial fishery minimum size limit of 90mm or greater through the greatest breadth of the shell (see Appendix 4). Respecting this minimum size limit will ensure conservation of juvenile clam stocks and allow them to reproduce before they are recruited into the fishery.

Harvesters are reminded that traffic on the beach can damage shellfish stocks and degrade the local habitat. Vehicles, including ATVs, should **not be driven on the beach below the 1.5 m (5.5 foot) tide level**. This is approximately 100 m from the shore.

The Haida Fisheries Program will continue to collect samples in following the requirements of the CSSP for the marine biotoxin monitoring program throughout the year to facilitate Haida access to traditional food sources. All FSC harvest is to be conducted in accordance with all CSSP requirements (for further clarification see Appendix 1, Section 3). Any closures will be announced by fisheries notice, through signage on North Beach, by public notice and will be broadcast on local radio.

Appendix 3: Razor Clam Recreational Harvest Plan

RECREATIONAL FISHERY

The recreational fishery has been closed as stock assessment indicates that pre-season biomass estimates are below the Limit Reference Point (LRP) and in the Critical Zone. Razor Clam fishery continues for FSC only.

When abundance allows the recreational fishery for razor clams is supported by the Council of the Haida Nation who provide biotoxin monitoring on a year round basis. Recreational harvesters are required to hold a valid British Columbia Tidal Waters Sport Fishing Licence to harvest razor clams. The recreational harvest of razor clams for the 2020-2021 season has been reduced to a 0 clams in keeping with the closure. This limit will be reviewed for the 2021-2022 season following the review of stock assessment data. There is no size limit for razor clams harvested recreationally. However, the In-Season Management Committee strongly urges all razor clam harvesters to respect the commercial fishery minimum size limit of 90mm or greater through the greatest breadth of the shell (see Appendix 4). Respecting this minimum size limit will ensure conservation of juvenile clam stocks and allow them to reproduce before they are recruited into the fishery.

Since 2005, creel surveys have been conducted during the June to August period to estimate catch. These studies indicate that recreational catch has been less than 1,000 pounds annually from North Beach 1 and 2. Fishing effort on the other beaches is thought to be low.

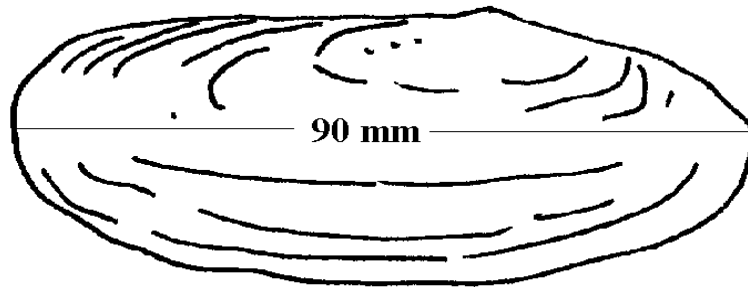
Recreational fishery regulations are outlined in the British Columbia Tidal Waters Sport Fishing Guide, available on the Internet at:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/index-eng.html>

HFP will initiate a NB Stewardship public awareness initiative to inform the public of various issues including:

- Limiting vehicle traffic below 5.5 foot
- Diggers harvest area (line perpendicular to surf line)
- Informing all user groups of best practices during commercial clam digging.
- Camping and littering regulations
- Vehicle and ATV traffic best practices

Appendix 4 : Minimum Size Limit - Razor Clam



No person shall commercially harvest razor clams that measure less than ninety (90) millimetres through the greatest breadth of the shell.

Appendix 5: Clam Slip and Clam Slip - Aboriginal

ALL INFORMATION ASKED FOR MUST BE COMPLETED ON EVERY SLIP AT THE TIME THE FISH ARE DELIVERED

PLEASE PRINT

THE STATISTICAL AREA OF CATCH IS TO BE MARKED ON EVERY SLIP
PRESS HARD

**CLAMS
FISH SLIPS**

97
095226

COMPANY NAME _____

PLANT _____ YEAR _____ MONTH _____ DAY _____

NAME OF FISHERMAN _____ SURNAME _____ GIVEN NAMES _____

ADDRESS _____

CLAM HARVESTING LICENSE NUMBER _____ **A B C D E F G**
CIRCLE CLAM FISHING AREA

AREA-SUB AREA OF CATCH _____ LOC. OF HARVEST _____ DAYS DIGGING _____

QUANTITY	CODE	SPECIES	PRICE	VALUE
		RAZOR		
		BUTTER		
		MANILA LN (JAPANESE)		
		NATIVE LN		
		MIXED CLAMS		

I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT.

BUYER'S INITIAL _____

RECEIVED PAYMENT _____

ALL INFORMATION REQUESTED MUST BE COMPLETED ON EVERY SLIP AT THE TIME THE FISH ARE DELIVERED

CLAM SLIP - ABORIGINAL

93
950604

COMPANY NAME & ADDRESS: _____

PLANT: _____

BAND: _____

FISHERMAN'S NAME: _____ DESIGNATION CARD # _____

ADDRESS: _____ LOCATION OF HARVEST: _____

DAYS DIGGING: _____

CIRCLE CLAM FISHING AREA: **A B C D**
E F G
AREA/SUB AREA OF CATCH _____

WEIGHT	CODE	SPECIES	PRICE	VALUE
		RAZOR		
		BUTTER		
		MANILA LN (JAPANESE)		
		NATIVE LN		
		MIXED CLAMS		

I certify that the above information is complete and correct

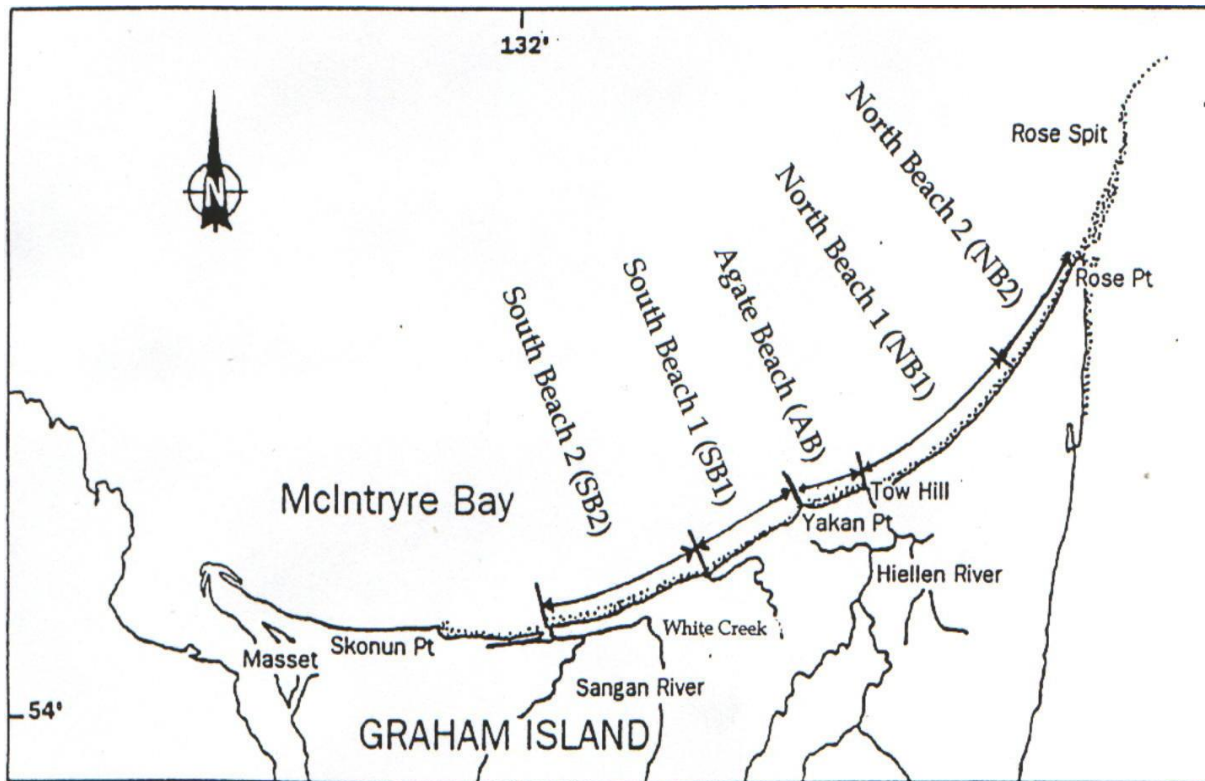
Buyer's signature * _____

Harvester's signature * _____

WHITE - FIRM'S COPY
YELLOW - FISHERIES STATISTICAL COPY
GREEN - BUYER'S COPY
PINK - FISHERMAN'S COPY

Systems Business Forms Limited 11311232

Appendix 6: Clam Management Areas, North Beach



Appendix 7: CONTACTS

Observe, Record and Report (Enforcement Line) (800) 465-4336
Fisheries Information and Shellfish Contamination Closure Update (24 Hours) (866) 431-3474
or (for Greater Vancouver) (604) 666-2828
Invertebrate webpage: <http://dfo-mpo.gc.ca/shellfish-mollusques/index-eng.htm>

Haida Fisheries Program

Council of the Haida Nation
PO Box 589
Masset, B.C. V0T 1M0

Dan McNeil (250) 626-3302
Vanessa Bellis Fax: (250) 626-3309

Fisheries and Oceans Canada

Regional Resource Manager - Invertebrates
200 - 401 Burrard Street
Vancouver, B.C. V6C 3S4

Lisa Mijacika (604) 666-3869
Fax: (604) 666-9136

Stock Assessment
3190 Hammond Bay Road
Nanaimo, B.C. V9T 6N7

Dominique Bureau 250-756-7114
Fax: (250) 756-7138

Resource Management
417 2nd Avenue West
Prince Rupert, B.C. V8J 1G8

Coral Cargill (250) 627-3021
Fax: (250) 627-3427

Conservation and Protection
137 Bay Street, Box 99
Queen Charlotte, B.C. V0T 1S0

Eric Zimmerman (250) 559-8580
Fax: (250) 559-4678

Canadian Food Inspection Agency
Fish Inspection Directorate
4321 Still Creek Drive
Burnaby, B.C. V5C 6S7

Sabirah Bacchus (604) 666-3737

Environment and Climate Change Canada
North Coast Water Quality Co-ordinator
201-401 Burrard Street
Vancouver, B.C. V6C 3S5

Heather Lord (604) 903-4478