

Pêches et Océans Canada



Shellfish Aquaculture Licence under the Fisheries Act

Licence For:AquacultureDate Issued:Licence No:AQSF 2021Expiry Date:

ISSUED TO:

This licence is issued under the authority of the *Fisheries Act* and confers, subject to provisions of the *Fisheries Act* and Regulations made there under, the authority to carry out aquaculture activities including cultivation and harvest of fish and prescribed activities under the conditions included herein and/or attached hereto.

It is the responsibility of the licence holder to obtain all other forms of authorization from federal or provincial agencies that may have jurisdiction for marine shellfish aquaculture facilities. As well, it is the licence holder's responsibility to be informed of, and comply with, the *Fisheries Act* and the regulations made there under, in addition to these conditions.

This licence, or a copy of this licence shall be kept on site at the licensed facility and be available for inspection by a Fishery Officer or Fishery Guardian.

The above licence holder is authorized by this licence to carry on the business of aquaculture at the following location and for the following species:

Facility Reference Number	Location and Legal Description
	«SITECOMMONNAME»
	«LEGALDESCRIPTION»
	«LANDFILENUMBER»
	«PFMA»
	Land File
	PFMA:







Licensed Species	

Site Specific Conditions:

This licence has no site-specific conditions.

Required Record Keeping and Reporting: Details are contained within the attached conditions of this licence.

Compliance Advisory: No person carrying out any activity under the authority of this licence shall contravene or fail to comply with any condition of this licence.

This licence includes further conditions that are included herein and/or attached hereto. These conditions form part of the licence and may not be removed.





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SHELLFISH AQUACULTURE CONDITIONS OF LICENCE

PART A. Definitions

- "Approved Area" refers to the classification of a shellfish growing area which has been approved by the shellfish control authority for growing or harvesting shellfish for direct marketing.
- "Aquaculture Activities" includes the seeding, cultivation and harvesting of fish, the operation of machinery including vehicles and vessels, the installation of structures and anchors and the maintenance and storage of machinery, structures and equipment.
- "Aquatic Invasive Species" means species identified in Part 2 and 3 of the *Aquatic Invasive Species Regulations Schedule: https://laws-lois.justice.gc.ca/eng/regulations/sor-2015-121/FullText.html.*
- "Biofouling" means the organisms that attach and/or live on nets and other structures (excluding herring spawn).
- "Container" means any sack, tray, bag, tote, or other type of material containing shellfish.
- "Cultivate" means growing shellfish at any life stage within a growing area, and involves human intervention in the rearing process to enhance production through methods such as but not limited to regular stocking, feeding, or protection from predators.
- "Debris" refers to any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, enters into the marine environment.
- "DFO" means Department of Fisheries and Oceans Canada.
- "DFO Approved Tag Supplier" is an organization that has current DFO approval to manufacture and/or supply fishery tags to a licence holder.
- "Equipment" is any kind of device, machinery, infrastructure or gear used as part of an aquaculture operation, including but not limited to rafts, work floats, trays and nets.
- "Fishery Tag" means a tag used for equipment or gear identification and manufactured by a DFO approved tag supplier.
- "Foam" means a compound made up of plastic polymers with insulating or floatation properties. Includes, but is not limited to, styrene, extruded polystyrene and expanded polystyrene.
- "Harvest" means the removal of shellfish from the substrate, equipment or structure where they are being cultivated.
- "Important and Sensitive Habitat" refers to any fish habitat, vital to the life processes of marine species, that could be adversely affected by aquaculture or other human activities, including but is not limited to: intertidal stream channels, eelgrass beds (Zostera sp.), fish spawning areas, salmonid bearing streams, salt marshes, rocky reefs, kelp beds, glass sponge (Hexactinellidae) and/or coral complexes, and the residences and habitats critical for Species at Risk Act listed species.
- "Importation" means bringing shellfish into British Columbia from another province or country.
- "Incidental Catch" for the purposes of marine shellfish aquaculture means fish species that:

- (a) are not specifically named on the face of the aquaculture licence; and
- (b) set naturally, or become entrapped or entangled on aquaculture structures with the licensed species.
- "Intertidal growing area" means the area between high tide and chart datum.
- "Introduction" in respect to species introduction, means the deliberate release or holding of live aquatic organisms into waters outside its present range.
- "Licensed Facility" means the area within which aquaculture activities that are authorized by the aquaculture licence may occur.
- "Marine Mammal" means cetaceans (e.g. whales, dolphins, porpoises), pinnipeds (e.g. seals and sea lions), river otters or sea otters.
- "Pacific Fishery Management Area" (PFMA) means areas described in the Pacific Fishery Management Area Regulations and available at: http://www.pac.dfo-mpo.gc.ca/fm-gp/maps-cartes/areas-secteurs/index-eng.htm.
- "Prohibited Area" means the classification of a shellfish growing area determined by the shellfish control authority where shellfish harvesting for food purposes is not permitted.
- "Refuse" means abandoned, lost or otherwise discarded materials, substances or objects.
- "Salt Marsh" is a vegetated coastal ecosystem in the upper intertidal zone between land and open salt water or brackish water that is regularly flooded by the tides. It is characterized by salt-tolerant plants such as herbs (e.g. *Salicornia* sp.) or grasses (e.g. *Scirpus* sp. or *Distichlis* sp.).
- "Secondary Containment" means a containment system, other than the primary containment system, installed around all deleterious storage containers to collect and contain a leak, spill or overfill from the container, or from any tank, connections, vents or pressure relief devices used with the container. A Secondary Containment is not intended for long term or permanent storage of product spills or leakage.
- "Seed" means a submarket size bivalve shellfish requiring a minimum of 6 months (12 months if the source waters have been identified as having a risk of chemical contaminants, as determined by Environment and Climate Change Canada) to reach market size under normal growing conditions, and that has been gathered directly from the wild, or grown in a hatchery.
- "Shellfish Aquaculture Facility Management Plan" means a facility management plan or an approved harmonized Pacific Shellfish Aquaculture Application and may form a part of the Conditions of Licence.
- "Structure" means anything built or modified that is used as part of an aquaculture operation including but not limited to walls, fences, rafts, line arrays, and anchors.
- "Spat" means a bivalve mollusc in the larval stage, including when settled to the bottom or settled on a structure.
- "Toxic" refers to the definition of "toxic substances" under the Canadian Environmental Protection Act, 1999, section 64.
- "Transfer" means the deliberate movement of an aquatic organism from one location to another within its present range.

- "Transport Water" means all water exposed to shellfish, shellfish products, debris, and potential additional marine animal or plant life during the collection and transport of shellfish.
- "Water Classification" means the bacteriological water quality designation assigned to a shellfish harvest area, which indicates the suitability of the area for harvesting shellfish, according to accepted water quality standards and general sanitary conditions in the shellfish harvest area.
- "Wet Storage" means the temporary storage of live harvested bivalve shellfish sourced from approved licensed wild commercial fisheries, or from licensed aquaculture facilities other than the approved receiving aquaculture facility.

PART B. General Licence Conditions

1. Facility Management Plan

- 1.1 The licence holder shall have a Shellfish Aquaculture Facility Management Plan containing the elements described in Appendix I.
- 1.2 A submission for changes to the Shellfish Aquaculture Facility Management Plan shall be made in the form of a harmonized Provincial/Federal Pacific Shellfish Aquaculture Application (available from FrontCounter BC) when the request is for:
 - (a) changes to species, including addition and removal;
 - (b) a proposed change to size of the licensed facility;
 - (c) an addition of a floating living accommodation; or
 - (d) a change to equipment or infrastructure not deemed to be standard, as outlined in Appendix II. For other minor amendments to the Shellfish Aquaculture Facility Management Plan, the licence holder shall notify DFO within 30 days of the change at: Shellfish.Aquaculture@dfo-mpo.gc.ca.

2. Facility Installation and Inspection

- 2.1 The licence holder shall conduct inspections of equipment, installation methods and anchoring systems at the licensed facility, to ensure that equipment and structures are capable of functioning as intended in the environment where they are located. These inspections shall take place:
 - (a) when the facility is first installed and before any fish are initially introduced or transferred to the facility;
 - (b) any time structures or equipment are altered;
 - (c) as required; and
 - (d) at least once per year.
- 2.2 All sub-tidal and intertidal boundaries shall be clearly marked in a manner which:
 - (a) only uses markers at the corners of the licensed area; and
 - (b) shall not include the use of lines or ropes.

3. Transfer of Fish

- 3.1 The licence holder may transfer live seed, spat, juveniles to or from the licensed facility and another licensed facility possessing a valid aquaculture licence provided that:
 - (a) the species of live shellfish are listed as part of the "Species" section on the face of this licence;
 - (b) the receiving licensed facility possesses a valid aquaculture licence for the species;
 - (c) shellfish are to be transferred only inside the Shellfish Transfer Zone within which they are licensed [see Appendix III (Figure 1 Map of Shellfish Transfer Zones)], with the following exceptions:
 - (i) Manila Clam (*Venerupis philippinarum*) may be transferred within and between Zones 1, 2, 3 and 4 and from any zone to Zone 5. Manila Clam leaving Zone 5 may only be transported to a facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission;

- (ii) Pacific Oyster (*Crassostrea gigas*) may be transferred within a Zone, as well as between Zones 1 & 2, or between Zones 3 & 4. Pacific Oyster may be transferred from Zones 3 & 4 to Zone 5. Pacific Oyster leaving Zone 5 may only be transported to a facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission.
- (iii) Wild adult Manila Clam and wild adult Pacific Oyster, obtained via lawful commercial shellfish harvest, may be transferred to licensed facilities without a separate Introductions and Transfers Licence, provided all applicable conditions under the Pacific Aquaculture Regulations and Canadian Shellfish Sanitation Program are met.
- (d) this licence does not allow for the transfer of Geoduck, Sea Cucumber, Sea Urchin or Varnish Clam:
- (e) the shellfish at the licensed facility do not display any observable symptoms of disease;
- (f) while in transit to or from licensed facilities, the shellfish and transport water must not enter or come into contact with any growing waters; and
- (g) harvested bivalve shellfish must not enter or come into contact with any growing waters while in transit from a licensed aquaculture facility to a facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission.
- 3.2 A copy of this licence shall accompany all movements of fish to and from a licensed facility, and it shall be available for inspection by a Fishery Officer or Fishery Guardian.

4. Access to Wild Fish

- 4.1 The licence holder may:
 - (a) collect spat of the licensed species on the licensed facility; and
 - (b) retain wild shellfish of the licensed species on the licensed facility when they are harvested along with the cultivated licensed species.

5. Escapes or Releases

- 5.1 The licence holder shall take all reasonable precautions to prevent the escape or release of cultured fish while:
 - (a) transporting fish on, over or through fresh or tidal waters; and
 - (b) transporting fish to or from the licensed facility.

6. Incidental Catch

6.1 With the exception of Varnish Clam, which may be retained, and licensed species as prescribed in 4.1(b), every person who catches a fish incidentally must immediately return it to the water in a manner that causes it the least harm.

7. Predator Control

- 7.1 The licence holder shall ensure that predator exclusion equipment, gear or devices:
 - (a) are installed and maintained to prevent entrapment, injury, or death to fish or marine mammals;
 - (b) do not cause any adverse effects to important and sensitive habitat; and
 - (c) function as intended.

- 7.2 The licence holder shall ensure all netting used for the purpose of predator exclusion is inspected and maintained to ensure the netting is:
 - (a) cleaned regularly to minimize biofouling;
 - (b) not buried or infilled with sediment, any more than needed to ensure its proper securing to the substrate; and
 - (c) secured tightly on all sides so as to not billow or float.

8. Marine Mammal Interactions

- 8.1 In accordance with Appendix IV, the licence holder shall:
 - (a) install sea lion exclusion devices on equipment such as rafts and/or work floats when one or more sea lions hauls out onto that equipment; and
 - (b) maintain sea lion exclusion devices until such time that no more sea lions are interacting with the equipment or within the licensed facility.
- 8.2 The licence holder is prohibited from using acoustical deterrent devices for marine mammals.
- 8.3 Upon discovery of a live entangled or dead marine mammal:
 - (a) the licence holder shall report immediately to DFO Observe, Record and Report (ORR) line by emailing DFO.ORR-ONS.MPO@dfo-mpo.gc.ca; calling 1-800-465-4336; or by contacting the Canadian Coast Guard via VHF channel 16;
 - (b) within 7 days of the incident, a written report shall be submitted to the Marine Mammal Reporting inbox: AQFF.MarineMammals@dfo-mpo.gc.ca. A report shall be filed even if the animal is released alive. The report shall include as much information as available at the time of the incident as specified in Appendix V.

9. Protection of Fish and Fish Habitat

- 9.1 The licence holder shall:
 - (a) ensure any floatation material that is degrading, including exposed or inadequately contained foam, is immediately removed from the marine environment and transferred to an appropriate land-based facility for recycling or disposal;
 - (b) not install new floatation made from, or containing, foam except when the foam is fully encased in a rigid, durable, non-toxic shell; and
 - (c) not use floatation made from or containing foam, after April 1, 2023 and for the remainder of the term of this licence, except when the foam is fully encased in a rigid, durable, non-toxic shell.
- 9.2 The licence holder shall ensure that operations and activities conducted on the licensed facility do not result in the deposition of shell material within important and sensitive habitat.
- 9.3 The licence holder shall not introduce or cause or allow the introduction of refuse (including but not limited to infrastructure, equipment and materials) into the environment in the course of conducting aquaculture activities.
- 9.4 The licence holder shall not store or leave any aquaculture equipment or structures on the licensed facility unless the equipment or structures are affixed/secured so as not to move off the licensed facility.

- 9.5 The licence holder shall not use rafts or work floats for storage, unless surrounded by walls or other means to adequately contain and prevent the loss of any equipment into the marine environment.
- 9.6 The licence holder shall take all reasonable measures consistent with public safety and with the conservation and protection of fish and fish habitat to expediently retrieve any lost or errant gear or equipment.
- 9.7 If reinforcing metal bar (rebar) is used to secure gear or equipment to the substrate it shall:
 - (a) have a curved, bent, or shepherd hook on the exposed portion; and
 - (b) not be installed or affixed to the substrate by the use of hardening or bonding substances, such as concrete.
- 9.8 Starting April 1, 2022 and for the remainder of the term of this licence, at intervals no less than once every 12 months, all deepwater or subtidal licence holders shall conduct a seafloor inspection of the entire licensed facility.
- 9.9 For all seafloor inspections, the licence holders shall:
 - (a) retrieve any identified debris, equipment or gear;
 - (b) maintain records as outlined in Appendix VI;
 - (c) produce records upon request of a Fishery Officer or Fishery Guardian; and
 - (d) dispose of, or recycle all debris, broken or unusable equipment at an appropriate land based facility.
- 9.10 The licence holder shall ensure concrete anchors or blocks are pre-cast and pre-cured away from the marine environment.
- 9.11 The licence holder shall not install equipment or gear, nor conduct activities, within important and sensitive habitat.
- 9.12 In the event important and sensitive habitat grows or otherwise moves into an actively cultured area containing existing equipment or gear, the licence holder shall take all reasonable steps to avoid the harmful alteration, disruption, or destruction of that habitat.
- 9.13 The licence holder shall ensure that all deleterious substances are properly secured, stored, and adequately contained within secondary containment.

10. Machinery Operations

- 10.1 The licence holder shall:
 - (a) ensure all machinery used on the licensed facility is in clean condition and maintained free of fluid leaks; and
 - (b) take immediate action to stop, contain, and clean up any spill of fuel, lubricants or other substances that may be deleterious to fish or otherwise may cause adverse effects to the environment. All such spills shall be reported to the Canadian Coast Guard at 1-800-889-8852 or via VHF Channel 16.

11. Gear and Equipment Identification

11.1 Starting April 1, 2023 and for the remainder of the term of this licence, the licence holder shall ensure all gear and equipment listed in Appendix VII, be identified in a manner that is:

- (a) legible, block letters without ornamentation, durable, long lasting and waterproof; and
- (b) branded or other imprinted with identification. If the nature of the gear or equipment makes this impossible the licence holder shall use a fishery tag; and
- (c) maintained to ensure legibility.
- 11.2 Identification shall include:
 - (a) licence holder name; and
 - (b) DFO Facility Reference number or BC Land File number
- 11.3 Starting April 1, 2023 and for the remainder of the term of this licence, all netting stored or in use at a facility shall be identified with a minimum of:
 - (a) one (1) fishery tag when the length of netting is less than 12 metres; or
 - (b) two (2) fishery tags when the length of netting is 12 metres or greater.
- 11.4 Unless otherwise outlined in a DFO approved equipment identification plan, any identification on gear or equipment transferred between facilities shall:
 - (a) be updated to reflect the current licence holder name, and the current BC Land File number or current DFO Facility Reference number; and
 - (b) only have the current licence holder and current facility information visible.
- 11.5 Fishery tags shall be produced by a DFO approved tag supplier for Canadian commercial fisheries; or by an approved aquaculture industry association as outlined in Appendix VII

12. Harvesting and Handling

- 12.1 In respect of tagging containers of shellfish:
 - (a) Prior to leaving the licensed facility, all containers holding harvested shellfish that are destined for market sale shall be marked with a visible tag identifying the following:
 - (i) licence holder name;
 - (ii) species;
 - (iii) Pacific Fishery Management Area;
 - (iv) BC Land File number or DFO Facility Reference number; and
 - (v) date of harvest.
 - (b) Tags shall be waterproof and all information shall be written in water resistant ink and legible.
 - (c) The licence holder shall not use flagging tape as a tag, unless as part of a tagging plan that is authorized by DFO, as part of this licence.
 - (d) For the purpose of bulk tagging of shellfish destined for market sale, the licence holder shall not bulk tag harvested shellfish destined for market sale, unless as part of a tagging plan that is authorized by DFO, as part of this licence.
- 12.2 For the purposes of wet storage of market-sized bivalves, the licence holder shall not wetstore harvested shellfish on this licensed facility, originating from facilities other than the licensed facility unless authorized by DFO as part of this licence.

13. Measures to Prevent the Spread of Aquatic Invasive Species

- 13.1 The licence holder shall not import, transport, release or cause the introduction of an aquatic invasive species beyond waters where it is currently found.
- 13.2 In all Pacific Fishery Management Areas, the licence holder shall:
 - (a) thoroughly examine harvested shellfish for signs of aquatic invasive species prior to removing harvested product from the licensed facility; and
 - (b) thoroughly examine equipment for signs of aquatic invasive species prior to being removed from the licensed facility; and
 - (c) remove and destroy any aquatic invasive species discovered on harvested shellfish and/or equipment.
- 13.3 All containers within the licensed facility used for transport of harvested shellfish must be maintained in such a manner that no aquatic invasive species may escape into marine waters.
- 13.4 In Pacific Fishery Management Subareas 20-6 and 20-7 and from Pacific Fishery Management Areas 23 to 27, the licence holder must:
 - (a) rinse harvested shellfish using waters from the licensed harvest area prior to being removed from the harvest area;
 - (b) rinse and dry equipment using waters from the licensed harvest area prior to being removed from the harvest area; and
 - (c) rinse all containers using water from the licensed harvest area and all water, including transport water, must be disposed of in a manner that ensures aquatic invasive species do not re-enter marine waters.

14. On-board Waste Containment

- 14.1 All vessels within the licensed facility shall be equipped with 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.
- 14.2 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.
- 14.3 Designated human waste receptacles shall be emptied only into an approved sewage disposal system, and portable toilets or other designated human waste receptacles shall be cleaned before being returned to the vessel.

15. Records

- 15.1 The licence holder shall maintain written or electronic records relating to the licensed aquaculture activities throughout the species growing cycle. The records shall:
 - (a) contain the elements listed in Section 15.2, 15.3 and 15.4;
 - (b) be produced upon request by a Fishery Officer or Fishery Guardian;
 - (c) be submitted to DFO in an electronic and sortable format within 24 hours upon request of a Fishery Officer or a Fishery Guardian.
- 15.2 The licence holder shall record, by 11:59pm on the day of the conclusion of activity, for each individual licensed facility:

- (a) the importation or transfer of shellfish to the licensed facility;
- (b) the transfer of shellfish from the licensed facility;
- (c) harvest for market sale for that day; and
- (d) the transfer of harvested shellfish from other locations for wet storage or relay at the licensed facility, prior to market sale.
- 15.3 For each activity listed in Section 15.2, the licence holder shall record:
 - (a) BC Land File number, or DFO Facility Reference numbers, or groups of BC Land File numbers or DFO Facility Reference numbers associated with the licence holder for licensed facilities in the same Pacific Fishery Management Area;
 - (b) activity date;
 - (c) species common name;
 - (d) the nature of the activity (i.e. Activity Code (IP Importation) (TS Transfer) (H Harvest for Market Sale) (W- Wet Storage) (R Relay));
 - (e) number of containers;
 - (f) container type;
 - (g) source of shellfish arriving at the licensed facility (source BC Land File number or DFO Facility Reference number, or other); water classification of source of shellfish arriving at the licensed facility; destination of shellfish leaving the licensed facility including:
 - (i) destination facility BC Land File number or DFO Facility Reference number for transfers of product; or
 - (ii) name of the facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission (including Canadian Food Inspection Agency facility licence number), if product is harvested for market sale.
- Within fourteen days of the product being accepted by a facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission, the licence holder shall record:
 - (a) date product accepted a facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission (must be completed even if product wet stored at another licensed aquaculture facility that is approved for wet storage); and
 - (b) total weight, OR number of dozens, OR number of individuals of harvested product accepted by a facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission. The unit of measure reported must match what is reported in the Annual Aquaculture Statistical Report.
- 15.5 All transfers of shellfish that are leaving the licensed facility for grow-out at another destination, (at a licensed facility held by another licence holder, or in a different Pacific Fishery Management Area), shall be accompanied by a record of the date, source, destination, species and amount of shellfish in transit.
- 15.6 The licence holder shall keep and maintain a log of facility inspections conducted under Section 2.1 and of equipment maintenance actions. The facility inspection and

- maintenance log above shall be made available for inspection upon request of a Fishery Officer or Fishery Guardian.
- 15.7 The licence holder shall keep and maintain annual seafloor inspection records containing the requirements outlined in Section 9.8 and 9.9. These records shall be made available for inspection upon request of a Fishery Officer or Fishery Guardian.

16. Annual Aquaculture Statistical Report

16.1 Starting January 25, 2022, and annually, not later than January 25 thereafter, the licence holder shall complete and submit to DFO the Annual Aquaculture Statistical Report (Appendix VIII) for the previous calendar year to the following email address: DFO.PACAASR-RSAAPAC.MPO@dfo-mpo.gc.ca.

17. Administrative Matters

17.1 Unless otherwise noted in specific licence conditions, all reports and submissions required by this licence shall be submitted by email or mail to DFO at:

Attn: Aquaculture Resource Management

PBS Mailroom

3190 Hammond Bay Road

Nanaimo, BC, V9T 6N7

Email: Shellfish.Aquaculture@dfo-mpo.gc.ca

PART C. Additional Conditions by Species or Activity

1. General Culture of Bivalve Species

In addition to conditions in Part A and Part B, where applicable, the following conditions are applicable, if licensed for any of the following species:

Pacific Oyster Crassostrea gigas
American/Eastern Oyster Crassostrea virginica

European Oyster Ostrea edulis

Kumamoto Oyster Crassostrea sikamea

Eastern Blue Mussel Mytilus edulis

Western Blue Mussel Mytilus trossulus

Gallo Mussel Mytilus galloprovincialis
Japanese Scallop Mizuhopecten yessoensis

Pacific Scallop (Hybrid) M. yessoensis x Patinopecten caurinus

Giant Rock Scallop Crassadoma gigantean
Weathervane Scallop Patinopecten caurinus.

Pink Scallop Chlamys rubida,
Spiny Scallop Chlamys hastata
Horse Clam Tresus capax

Pacific Geoduck Clam Panopea generosa

Littleneck Clam Protothaca staminea

Manila Clam Venerupis philippinarum

Butter Clam Saxidomus gigantea

Nuttall's Cockle Clinocardium nuttallii

- 1.1 The licence holder shall ensure all harvested bivalves are:
 - (a) sold to a facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission prior to sale for human consumption; or
 - (b) received by a facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission prior to sale for human consumption.
- 1.2 The licence holder shall not provide, or sell harvested bivalves to a shellfish buyer, or receiver, prior to the harvested bivalves being landed, or sold to a facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission.
- 1.3 The licence holder shall not seed, transplant or in any other manner engage in aquaculture activities with Varnish Clam other than harvesting, as set out in Section 6 in Part B.
- 1.4 No licence holder shall cultivate, store, or harvest shellfish within 125 meters of any floating living accommodation, unless in possession of a valid *Management of Contaminated Fisheries Regulations* licence to allow for the eventual harvest of seed from a Prohibited area.

- 1.5 If an approved Zero Discharge Waste Management Plan is in place that reduces the Prohibited area to 25 meters, no licence holder shall cultivate, store or harvest shellfish within 25 meters of any floating living accommodation, unless in possession of a valid *Management of Contaminated Fisheries Regulations* licence to allow for the eventual harvest of seed from a Prohibited area.
- 1.6 No licence holder shall cultivate, store or harvest bivalves within 125 meters of any finfish net pen unless an approved Integrated Multi-Trophic Aquaculture Management Plan is in place that specifies the Prohibited area.
- 1.7 Any bivalve seed transferred to a licensed facility from a licensed facility having a Prohibited Area classification shall remain in growing waters with an Approved Area classification for a minimum of 12 months prior to harvest, except as authorized under the *Management of Contaminated Fisheries Regulations*.

2. General Culture of Sea Urchin/Sea Cucumber

- 2.1 In addition to conditions in Part B, the following conditions are applicable if licensed for any of the following species:
 - (a) Sea Urchin:

Red Strongylocentrotus franciscanus

Green S. droebachiensis
Purple S. purpuratus

(b) California Sea Cucumber Parastichopus californicus

2.2 Harvest Plan:

- (a) Not less than 120 days prior to the first intended harvest at the licensed area, the licence holder shall submit a written Harvest Plan to DFO for approval.
- (b) The Harvest Plan shall contain:
 - (i) a summary of Sea Cucumber or Sea Urchin seeding or husbandry activities that have taken place, including the location of seeding;
 - (ii) the projected harvest dates; and
 - (iii) anticipated harvest amount for the current year.
- (c) The licence holder shall not harvest any Sea Urchin or Sea Cucumber unless as part of a Harvest Plan that is approved by DFO, as part of this licence.
- (d) The licence holder shall follow and comply with the Harvest Plan approved by DFO at all times and have it available for inspection upon the request of a Fishery Officer or Fishery Guardian.

2.3 Harvest Notification:

- (a) The licence holder shall notify the DFO Radio Room

 (PACRadioRoomRHQ@dfo-mpo.gc.ca and Aquaculture Resource Management

 (Shellfish.Aquaculture@dfo-mpo.gc.ca) by electronic mail no less than 72 hours prior to any Sea Cucumber harvest, using a completed Aquaculture Harvest Notification Form (Appendix IX).
- (b) The licence holder shall submit an amended Aquaculture Harvest Notification Form (Appendix IX) if harvest plans change.

2.4 Landing Reports:

- (a) The licence holder shall complete an approved Sea Cucumber/Sea Urchin Aquaculture Landing Logbook form for each shipment landed. A copy of the completed landing log shall accompany each shipment of harvested Sea Cucumber or Sea Urchin from the licensed aquaculture facility to a facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission
- (b) The Sea Cucumber/Sea Urchin Aquaculture Landing Logbook form shall contain the following:
 - (i) licence holder name;
 - (ii) BC Land File number or DFO Facility Reference number;
 - (iii) aquaculture facility location;
 - (iv) Pacific Fishery Management Area and Subarea;
 - (v) harvest date;
 - (vi) vessel name, Vessel Registration Number (VRN), landing location and vessel operator for deepwater facilities or beach supervisor name for intertidal facilities;
 - (vii) number of Sea Cucumber/Sea Urchin landed;
 - (viii) gross weight landed (including containers and liners);
 - (ix) net weight landed;
 - (x) trucking company details;
 - (xi) final destination (licensed processing facility); and
 - (xii) a signed declaration.
- (c) The licence holder shall scan and email a copy of each days Landing Logbook form(s) to the following location not later than 24 hours following product landing:

Aquaculture Resource Management

Email to Shellfish.Aquaculture@dfo-mpo.gc.ca

3. General Culture of Geoduck

- 3.1 In addition to conditions in Part B and Part C(1), where applicable for the species, the following conditions apply if licensed for:
 - (a) Geoduck

Panopea generosa

3.2 Harvest Plan:

- (a) Not less than 120 days prior to the first intended harvest at the licensed facility, the licence holder shall submit a written Harvest Plan to DFO for approval.
- (b) The Harvest Plan shall contain:
 - (i) a summary of Geoduck seeding and husbandry activities that have taken place, including the location of seeding;
 - (ii) the projected harvest dates;

- (iii) anticipated harvest amount for the current year; and
- (iv) anticipated size of individuals to be harvested.
- (c) The licence holder shall not harvest any Geoduck unless as part of a Harvest Plan that is approved by DFO, as part of this licence.
- (d) The licence holder shall follow and comply with the Harvest Plan approved by DFO at all times and have it available for inspection upon the request of a Fishery Officer or Fishery Guardian.

3.3 Harvest Notification:

- (a) The licence holder shall notify the DFO Radio Room

 (PACRadioRoomRHQ@dfo-mpo.gc.ca or (fax) 604-607-4156) and Aquaculture
 Resource Management (Shellfish.Aquaculture@dfo-mpo.gc.ca) by electronic
 mail no less than 72 hours prior to any Geoduck harvest, using a completed
 Aquaculture Harvest Notification Form (Appendix IX).
- (b) The licence holder shall submit an amended Aquaculture Harvest Notification Form (Appendix IX) if harvest plans change.

3.4 Harvest Container Tags:

- (a) The licence holder shall attach a completed site specific tag to each container of harvested Geoduck on the vessel or beach where harvested. No container shall be left untagged on the licensed facility or during transport.
- (b) The container tags shall be waterproof and provide the following information written in water resistant ink:
 - (i) licence holder name;
 - (ii) DFO Facility Reference number;
 - (iii) BC Land File number:
 - (iv) aquaculture facility location;
 - (v) Pacific Fishery Management Area and Subarea;
 - (vi) harvester name;
 - (vii) harvest date;
 - (viii) the words "Aquaculture" and the common name of the shellfish harvested "Geoduck Clam"; and
 - (ix) tags are to be visible and remain in the containers of harvested Geoduck until delivered to a facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission.

3.5 Landing Reports:

- (a) The licence holder shall complete an approved Geoduck Aquaculture Landing Logbook form for each shipment landed. A copy of the completed landing log must accompany each shipment of harvested Geoduck from the licensed aquaculture facility to a facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission.
- (b) The Geoduck Aquaculture Landing Logbook form shall contain:
 - (i) licence holder name;

- (ii) DFO Facility Reference number;
- (iii) aquaculture facility location;
- (iv) BC Land File number;
- (v) Pacific Fishery Management Area and Subarea;
- (vi) harvest date;
- (vii) vessel name, Vessel Registration Number (VRN), landing location and vessel operator for deepwater facilities or beach supervisor name for intertidal facilities;
- (viii) number of Geoduck landed;
- (ix) gross weight landed (including containers and liners);
- (x) net weight landed;
- (xi) trucking company details;
- (xii) facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission; and,
- (xiii) a signed declaration.
- (c) The licence holder shall scan and email a copy of each day's Landing Logbook form(s) to DFO at Shellfish.Aquaculture@dfo-mpo.gc.ca no later than 24 hours following product landing.

PART D. Information and Requirements for Shellfish Aquaculture Licence Holder

Appendix I: Elements of a Shellfish Aquaculture Facility Management Plan

Information provided as part of the Shellfish Aquaculture Facility Management Plan (the management plan for the licensed facility) will, at a minimum, include the following elements:

- licence holder(s) and contact information;
- location and legal description of the licensed facility, including map(s);
- culture species;
- type of culture conducted at the licensed facility i.e. intertidal, subtidal on/in bottom, deepwater suspended, nursery operation;
- culture equipment, gear and physical structures details including rafts, longlines, predator nets, etc. and the amount and placement of equipment, gear and structures; and,
- licence facility layout, structures, boundary marking where applicable, as outlined in the Harmonized Provincial/Federal Pacific Aquaculture Application.

The Harmonized Provincial/Federal Pacific Aquaculture Application and associated guidebook may be obtained from the Province of BC website: https://www2.gov.bc.ca/gov/content/industry/crown-land-water/crown-land-uses/aquaculture

From FrontCounter BC by the following means:

In Person: Any FrontCounter BC office.

Visit http://www.frontcounterbc.gov.bc.ca for the location nearest you.

By Mail: FrontCounter BC, 2080a Labieux Road, Nanaimo, BC V9T 6J9

By Email: frontcounterbc@gov.bc.ca

A copy of the approved DFO Facility management plan on file can be obtained by emailing DFO at: shellfish.aquaculture@dfo-mpo.gc.ca

Appendix II: Standard Equipment or Infrastructure

The following equipment or infrastructure types are considered to be standard infrastructure in their respective culture areas, provided that important and sensitive habitats are avoided:

Intertidal:

- Addition or removal of predator netting
- Addition or removal of intertidal long-lines
- Addition or removal of rack and bag systems
- Addition or removal of oyster retention fencing (eg. Vexar fencing)

Deepwater:

- Addition or removal of rafts
- Addition or removal of long lines
- Addition or removal of a FLUPSY
- Addition or removal of work floats

Notifications:

If changes are made to standard infrastructure, notify DFO by email at: shellfish.aquaculture@dfo-mpo.gc.ca to update your Shellfish Aquaculture Facility Management Plan.

Non Standard Infrastructure:

The use of any of these infrastructures in an area not outlined above, the use of any other infrastructure, or the use of any infrastructures in sensitive habitats must be approved by DFO in the form of a Harmonized Pacific Shellfish Aquaculture Application, prior to installation.

Appendix III: Introductions and Transfers

Shellfish Transfer Zones in British Columbia

Figure 1 shows the five zones established for shellfish introductions and transfers in BC. These zones are generally delineated based on definable oceanographic and ecographic discrete areas (e.g. oceanic vs. inside waters). Consideration is also given to historical movements of shellfish in the aquaculture and commercial fisheries sectors for trade and commerce.

The terms of the Shellfish Aquaculture Conditions of Licence specify the conditions under which licence holders may move shell stock within and between zones.

Only licensed shellfish growers will be free to move stock between licensed shellfish growing facilities *within the same zone* under the conditions of their Shellfish Aquaculture Licence as long as the receiving facilities are licensed for the species to be transferred (some exceptions apply).

Additional information and guidance on transfers of shellfish can be found at:

https://www.dfo-mpo.gc.ca/aquaculture/moving-fish-deplacement-poissons-eng.html or by contacting ITC@dfo-mpo.gc.ca.

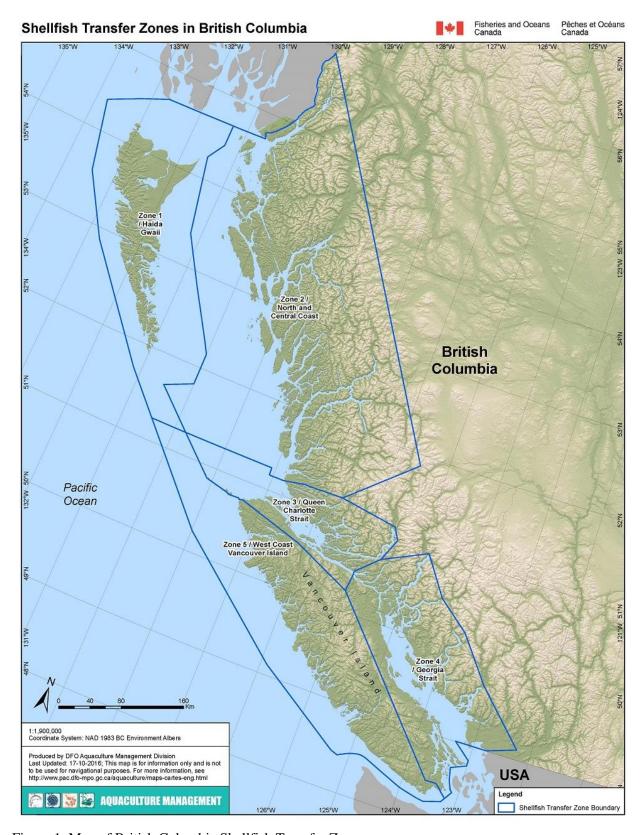


Figure 1. Map of British Columbia Shellfish Transfer Zones.

Appendix IV: Sea Lion Exclusion Devices

Acceptable exclusion devices may include examples in the list below. Devices shall not include any measure which would cause injury or death to a marine mammal. Licence holders shall avoid using construction materials that could easily break apart and become marine debris.

Examples of acceptable exclusion devices:

- electric livestock fencing;
- wood fencing;
- closely spaced posts;
- well secured perimeter netting;
- commercially available pinniped exclusion systems utilizing non-lethal, humane, electric pulses.

Appendix V: Marine Mammal Incident Report Form

The licence holder shall report immediately to DFO Observe, Record and Report (ORR) line by emailing DFO.ORR-ONS.MPO@dfo-mpo.gc.ca; calling 1-800-465-4336; or by contacting the Canadian Coast Guard via VHF channel 16. The form below must be completed and submitted within 7 days of the incident.

Company information		Dates	File numbers
Company Name:		Discovery	ORR #:
DFO Facility Reference number:		Date/time:	
DFO Facility Name:		/	
		Reported to ORR	
Address:		Date/time:	
Phone:			
Email:			
Specify type of mammal:_			
Animal condition	Incident type	System	Component
Alive, Fresh or Advanced or Moderate decomposition	Accidental drowning / entanglement (if unknown describe as best possible)	Eg. Predator net, long line, ancho	
	gation measures in place at this aclude equipment and/or proced		owning and/or

Describe in detail the circumstances that led to the failure of these mitigation measures.
Describe in detail what corrective measures are being undertaken to prevent recurrence of this event. (Please include procedural and/or equipment modifications.)
Actions taken with Marine Mammal:
☐ Collected, stored until DFO advises further☐
☐ Collected, discarded (where):
☐ Photograph of tooth dentition pattern with date stamp
□ Other
□ Released
DFO requests all dolphins & porpoises are collected and stored on ice until arrangements can be made for their collection & necropsy
Comments:

SUBMIT the completed form by email to DFO at: <u>AQFF.MarineMammals@dfo-mpo.gc.ca</u>

Appendix VI: Seafloor Inspection and Clean-up Protocol

Seafloor inspection and clean-up instructions for licensed aquaculture facilities starting April 1, 2022 and for the remainder of the term of this licence:

- 1. Survey of the seafloor:
 - (a) must cover the entire area within the licensed facility boundaries;
 - (b) should be completed using commercially certified divers or a Remotely Operated Vehicle;
 - (c) must consider methodology of underwater visibility and be adjusted accordingly.
- 2. The licence holder must complete a detailed report outlining all items identified and retrieved during the seafloor survey. The report shall be produced or submitted upon request by a Fishery Officer or Fishery Guardian.
- **3.** Survey report must include:
 - (a) DFO Facility Reference number;
 - (b) BC Land File number, if applicable;
 - (c) name and contact information of the individual or company that conducted the survey and cleanup;
 - (d) description of the survey methodology;
 - (e) date of survey clean up;
 - (f) start and end times of survey and clean up (if survey and clean up occur over the course of several days, the start and end times must be recorded each day);
 - (g) photographs showing all items retrieved from the seabed. Each item needs to be identified in a Summary Table (see example); and
 - (h) the following Summary Table populated accordingly.
 - **4.** All debris items within the licensed facility must be identified and retrieved.

Table 1. Example of Summary Table:

Item	Location Coordinates (Degree Minutes)		Debris	Photo #	Retrieved	Name of Disposal Facility where	
Number	Latitude	Longitude	Description		(Y/N)	Debris was taken	
1	50 35.316	126 09.748	Stack of oyster trays	123	Y	ACBD Landfill	
2	50.35.407	126 09.789	Scallop pearl nets	456	Y	ACME Marine Plastic Recycling	

Appendix VII: Equipment or Gear Identification

Starting April 1, 2023 and for the remainder of the term of this licence, the following types of shellfish aquaculture equipment or gear must be clearly identified:

- 1. Plastic containers used for culturing shellfish:
 - oyster trays and baskets (both sections of two piece gear types, if applicable)
 - pouches, including vexar pouches and floatation pouches
 - mesh or vexar bags used for the growing of shellfish or used in the collection of oyster spat
 - pearl, scallop, lantern nets
- 2. Types of floatation materials:
 - air-filled billets/floats
 - foam filled or encased foam billets/floats
 - plastic buoys
 - round plastic floats
- 3. Bivalve predator exclusion
 - netting, all forms and types

Format for identification:

All equipment and gear identified in this appendix shall be clearly labelled with:

"Licence Holder Name" followed by the "BC Land File number" or "DFO Facility Reference number", unless otherwise outlined in a DFO approved equipment identification plan attached to this licence.

Example:

GENERAL SHELLFISH CO LF#555555

GENERAL SHELLFISH CO FACILITY#1111

Licence holders are not eligible to become a DFO approved tag supplier. Aquaculture Associations may request approval to become a DFO approved tag supplier by contacting: shellfish.aquaculture@dfo-mpo.gc.ca.

Appendix VIII: Annual Aquaculture Statistical Report (AASR) Annual Aquaculture Statistical Report

Once completed, this document is confidential within the provisions of the Access to Information and Privacy Act.

For Internal Use Only	Licence Type:	Facility Number:	Landfile Number:
Reporting Year:	Licence Type:	Facility Number:	Landille Number.
Licence Holder:			

Introduction

In British Columbia, Fisheries and Oceans Canada is the lead authority responsible for regulating the aquaculture industry. Production statistics collected through this form may be used for analytical and operational purposes and will be shared with other government partners for statistical use. These organizations agree to take appropriate steps to protect all sensitive personal and commercial information, and to release data only in aggregated form. In compliance with licences issued under the *Pacific Aquaculture Regulations*, all aquaculture licence holders are required to complete the Annual Aquaculture Statistical Report (AASR) under Section 61 of the Federal *Fisheries Act*.

The completed forms for each calendar year are due no later than January 25 of the following year.

Instructions for Completing the AASR

- ▶This form is for use by shellfish, marine finfish and freshwater/land-based aquaculture licence holders.
- ▶ Complete all sections of this form, unless otherwise indicated
- ▶ Print in BLACK INK and using BLOCK LETTERS.
- ► This form must be completed and submitted via email to fishstats@dfo-mpo.gc.ca or DFO.PACAASR-RSAAPAC.MPO@dfo-mpo.gc.ca or DFO.PACAASR-RSAAPAC.MPO@dfo-mpo.gc.ca.
- ▶ Provide weights and measures using metric (e.g. kg, cm) unless other units are indicated.

Section 1 - Harvest for Food Market Sales

Note: Please complete one line per species

Were any fish or shellfish sold for Food Ma	ere any fish or shellfish sold for Food Market Sales?		
Species (provide full common or latin name)	Quantity	Unit of Measure (For Shellfish use Lbs, Dozens or Gallons)	Total Value (CDN \$)

Section 2 - "U-Catch-Em" Sales

Note: Section 2 only applies to Freshwater/Landbased facilities

Annual Aquaculture Statistical Report (cont'd) Reporting Year: Facility Reference #:						
Section 3 – Processing Information						
Were any fish or shellfish	processed?				O Yes	O No
What facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission did you land your harvested bivalve shellfish at or sell your harvested bivalve shellfish to?						
Section 4 – Sales for I Note: Include sales only – not	Restocking purchases or a	g or Ongrowi acquisitions	ng Pu	rposes		
Were any fish/shellfish sol	d for restock	ing or ongrowi	ng?		O Yes	O No
Species (provide full common or latin	n name)	Life Stage (Adults or Seed, La		Number Sold in BC (not exported)	Number exported	Total Value (\$)
Section 5 – In-zone In						
Did you conduct movements of shellfish to your site during the reporting year? O Yes O No O Not Applicate					t Applicable	
	Complete the table below if you answered Yes to question Section 5 AND the transfer(s) <u>did not require</u> a separate Introductions & Transfers Licence. Otherwise, check "Not Applicable" in the space above.					
Examples of shellfish movements that don't require an Introductions & Transfers licence include: Initial stocking of a site with shellfish seed from a hatchery in the same shellfish transfer zone or moving wild Pacific Oyster to an aquaculture site for wet storage. Provide one line per species, unless transfers were for more than one purpose.						
Examples for Freshwater/Land-based include: Introduction of fish, for land-based, U-catch and other FW facilities, from a within-zone source.						
Provide one line per species (i.e. all transfer data for each species should be aggregated and reported on a single line)						
Species Brought on Site	Source (provide aquaculture facility reference number or commercial licence number)			al Number of Fis Transferred		Number of ransfers

Annual Aquaculture Statist	tical Repo	rt (cont'd)	Repo	rting Year:
Alliani Aquadana o otatio	Facility Re	eference #:		
Section 6 Subtidal On-Bottom S Note: Subtidal refers to culture activities occ				
Did you conduct subtidal shellfish sthis year?		ny species	Yes O No	o O Not Applicable
Complete this section if you answere	ed "Yes" to Se	ction 6.		
➤ 6a. If you purchased geoduck (Panco of purchase. If submitting electronic				
> 6b. List all species that you seeded				
Species	Total Area Seeded (m²)	Month Seeding Activities Commenced	Proof of Purchase Attached	Comments
		1		
		-		
		 		
			<u> </u>	
Section 7 – Stock on Hand and Note: Section 7 only applies to Freshwater/L				
Will this site be actively culturing dur	ring the next r	eporting year?	0	Yes O No
If this site had any stock on hand as o	of December 3°	1, list all species:		
•		•		
-				
Section 8 – Declaration				
DECLARATION: I have read all inform belief.	ation contained	d on this report and it	t is true to the h	best of my knowledge and
Name (print)			Date	
Position in Company	Email address		Phone #	

Appendix IX: Aquaculture Harvest Notification Form for Geoduck, Sea Urchin or Sea Cucumber

AQUACULTURE HARVEST NOTIFICATION FORM

for Geoduck, Sea Urchin or Sea Cucumber

This form must be submitted to DFO offices noted below at least 72 hours prior to harvest of any cultured Geoduck, Sea Urchin or Sea Cucumber.

Sea Cucumber

Licence Holder Name:		Date:		
Or if applicable:				
Harvester/Vessel Master N	Name:	Cell Ph		
DFO Facility Reference no	umber:			
BC Land File number or F	Parcel Identification number	r:		
Pacific Fishery Manageme	ent Area (PFMA) and Sub-	Area:		
Location:				
Designated Vessel Name ((DVN) (if applicable):			
Vessel Registration Numb	er (VRN) or Transport Car	nada Registration number:		
Landing Location (public	wharf or other):			
Scheduled Harvest Date(s) (dd/mm/yy)	Product Arrival Date (dd/mm/yy)	Destination (Geoduck harvest must specify facility licensed by the Canadian Food Inspection Agency with the appropriate shellfish processing permission.) (Sea Cucumber or Urchin harvest must specify licensed processing facility.)		
Offices for Notification	<u> </u>	<u>I</u>		
DFO Radio Room, Vancouver Email:		PACRadioRoomRHQ@dfo-mpo.gc.ca		
	Telephone:	1-800-465-4336 or 604-607-4186		
DFO Aquaculture Management Email:		Shellfish.Aquaculture@dfo-mpo.gc.ca		

Check one:

Geoduck

Sea Urchin