

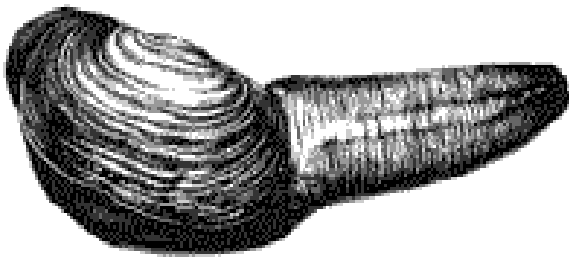


Integrated Fisheries Management Plan Summary

Geoduck and Horse Clam

Pacific Region

2016/17



Geoduck clam: *Panopea generosa*



Horse clam: *Tresus* spp.

The purpose of this Integrated Fisheries Management Plan (IFMP) summary is to provide a brief overview of the information found in the full IFMP. This document also serves to communicate the basic information on the fishery and its management to DFO staff, legislated co-management boards and other stakeholders. This IFMP provides a common understanding of the basic “rules” for the sustainable management of the fisheries resource. The full IFMP is available on request.

This IFMP summary is not a legally binding instrument which can form the basis of a legal challenge. The IFMP can be modified at any time and does not fetter the Minister's discretionary powers set out in the *Fisheries Act*. The Minister can, for reasons of conservation or for any other valid reasons, modify any provision of the IFMP in accordance with the powers granted pursuant to the *Fisheries Act*.

Where DFO is responsible for implementing obligations under land claims agreements, the IFMP will be implemented in a manner consistent with these obligations. In the event that an IFMP is inconsistent with obligations under land claims agreements, the provisions of the land claims agreements will prevail to the extent of the inconsistency.

Signature and title of DFO approval authority

General Overview/Introduction

IFMP Section 1

The Geoduck and Horse Clam fishery began in 1976. The commercial fishery is a limited entry fishery with 55 licence eligibilities. The fishery occurs year round to provide consistent product to markets, primarily in China. Geoduck and Horse Clam are harvested by divers. The commercial fishery operates under a Total Allowable Catch (TAC), broken up into transferable quota blocks. All commercial landings are tracked using a coastwide Dockside Monitoring Program (DMP). Other management measures in place for the fishery include area quotas, rotational fishing of most areas, the use of an On-Grounds Monitor and a precautionary harvest rate. The commercial fishery takes place along the majority of the British Columbia coast in units called Geoduck Management Areas (GMA) which are comprised of portions of Areas and Subareas, as described in the *Pacific Fishery Management Area Regulations*.

The recreational fishery is open coastwide year-round, subject to sanitary and biotoxin closures, and is an open entry fishery with a daily bag limit, two-day possession limit and gear limits.

There has been interest in Geoduck aquaculture in British Columbia since the early 1990s. Opportunities to enter into this industry are being provided in a phased approach based on existing policies and protocols. Interest in this sector continues to increase and existing policies are being reviewed and may be revised in the future.

Stock Assessment, Science & Traditional Knowledge

IFMP Section 2

Since the early 1980s, a long-term approach has been used in the management of Geoduck stocks. Annual harvest rates were originally set at 1% of the estimated original (pre-fishery) biomass, with the objective of taking no more than that replaced by recruitment of juveniles into the biomass. Starting with the 2007 fishery year, geoduck harvest options were calculated using regional exploitation rates, ranging from 1.2 to 1.8%, applied to the range of current biomass estimates of each bed. The use of current biomass for quota calculations eliminates the uncertainties around estimating original biomass.

Harvestable biomass is estimated as the product of harvestable bed area, geoduck density and mean geoduck weight on each bed. Bed area is estimated through harvest locations, substrate and dive surveys, and feedback from On-Grounds Monitors and harvesters at meetings and through logbook questionnaires. Density is estimated by dive surveys. Mean weight is estimated from landings data. Biomass on unsurveyed beds is estimated by extrapolating from surveyed beds and using density categories where appropriate. The harvest rate multiplied by the biomass yields harvest options. The prospect for this fishery is that it is sustainable under the current assessment and management framework.

The Underwater Harvesters Association (UHA), in collaboration with First Nations and the Department continue to conduct stock assessment research leading towards an improved understanding of the resource. Scientific research and stock assessment surveys are of vital importance to this fishery as it continues to be managed under the precautionary approach to Canadian fisheries.

Aboriginal Traditional Knowledge is not generally available. Traditional Ecological Knowledge in the form of observations and comments collected from commercial divers and patrolmen over many years contributes to decisions on scientific survey locations and is considered in management decisions.

Economic Profile of the Fishery

IFMP Section 3

The Pacific Region has the only commercial Geoduck fishery within Canada. Harvested Geoducks are shipped to processing plants where they are packed and delivered live to Asian markets. This is a high-value fishery – though the geoduck harvest accounts for only 12% of the shellfish harvest by weight, but 32% of the shellfish landed value and approximately 20% of the shellfish wholesale value.

Much of the profitability of the wild commercial fishery comes from managing the timing of and rate at which product enters the market. The wild commercial fishery is managed to maximize long-term profitability and stability, and to allow for an orderly year-round supply of product. However, there is still variation in average monthly landings due to market demand and supply from other countries.

The 55 commercial licence eligibilities are usually distributed over 40 or more vessels.

The commercial TAC had remained relatively constant for many years at 3.4375 million pounds until 2012 when it was decreased by approximately 4.0% to 3.3 million pounds. The drop was a result of stock assessments and increasingly conservative management strategies. Geoduck harvesters have reliable access to the resource, with catch shares of a fishery that has had a fairly consistent TAC over many years. The price paid to harvesters remains high averaging approximately \$12.00 per pound. There has been a further drop in quota as a result of a large sanitary closure on the West Coast of Vancouver Island and the lack of available product from the enhancement program. The TAC for the 2016/17 season is 3.08 million pounds.

First Nations are also interested in economic opportunities through participation in BC's wild commercial fisheries as well as increasing interest in economic opportunity through aquaculture.

Recreational interest in harvesting shellfish species is directed mainly at crab and prawn. The recreational harvest of Geoduck is believed to be minimal.

Access and Allocation

IFMP Section 6

The Minister can, for reasons of conservation or for any other any other valid reasons, modify access, allocations and sharing arrangements outlined in this IFMP in accordance with the powers granted pursuant to the *Fisheries Act*.

The commercial fishery is managed through a TAC, limited entry licensing, area licensing, area quotas and a precautionary harvest rate. To date there have been no limits placed on First Nations' harvest for Food, Social and Ceremonial (FSC) purposes. The daily limit for recreational Geoduck harvest is 3 Geoduck with a possession limit of 6 and gear is limited to hand picking only. The needs of aquaculturists will be given equitable consideration to those users in the commercial and recreational sectors.

Management Issues, Objectives and Measures

IFMP Sections 4, 5 and 7

#	Management Issue	Objectives	Management Measure
1	Collection of biological information	To conduct on-going surveys and research to improve information on stocks, biological characteristics and impacts of the commercial fishery.	<p>A precautionary approach to management, which ensures the Department is meeting its conservation goals, will continue for the foreseeable future.</p> <p>Research will continue on Geoduck in collaboration with the Underwater Harvesters Association and First Nations.</p>
2	Managing the commercial fishery to an appropriate scale.	To manage the commercial fishery to an appropriate scale in order to avoid any risks of localized overharvesting.	<p>A movement to a smaller scale management (by bed) has removed the risk of localized overharvesting.</p> <p>However more recently it has been suggested it may be more appropriate to allocate on a group of beds especially with small beds. This it being reviewed.</p>
3	Geoduck aquaculture	Meet conservation objectives and ensure healthy and productive fisheries and ecosystems.	The Department is in the process of reviewing and potentially revising the current Geoduck aquaculture policy to ensure the Wild fishery remains sustainable while allowing for the development of Geoduck aquaculture.

Governance Process

The Geoduck and Horse Clam fishery is governed by the *Fisheries Act* and regulations made thereunder.

The primary consultative body for this fishery is the Geoduck Sectoral Committee. The committee includes members from the Department, First Nations, commercial industry, and other sectors. The Sectoral Committee meets annually to provide advice to the Department on the IFMP. The draft IFMP goes out for a 30-day public consultation approximately 3 1/2 months prior to the fishery season start date and the final version of the IFMP goes for approval by the Regional Director General for the Pacific Region. Licensing for the commercial fishery starts one month prior the fishing season start date. For this year only the fishery will run January 1, 2016 to the end of February 28, 2017. Following seasons will run from March 1 to the end of February the following year to better account for market needs.

A research subcommittee meeting is generally held early in the year in order to plan research activities for the upcoming year.

Compliance Plan

IFMP Section 9

Conservation and Protection (C&P) staff will pursue opportunities to monitor and enforce this fishery, in conjunction with the monitoring and enforcement priorities directed by senior management in the Pacific Region.

Performance Review

IFMP Section 10

Performance indicators are reported in the Post-Season Review (Appendix 1 of the IFMP)

Stock assessment and research activities are outlined. The post season review may include outcomes from meetings with First Nations and other sector regarding Geoduck. The delivery of the commercial fishery will be assessed by performance measures such as the amount of product landed and the value of the fishery. Input from members at the Sectoral Committee meetings will be included. The post season review will also include time spent attending to enforcement of the fishery.

Fisheries and Oceans Canada Contact

For additional information on this IFMP Summary or to request an electronic version of the full IFMP, please contact Erin Wylie at 250-756-7271 or Erin.Wylie@dfo-mpo.gc.ca