

Scotian Shelf Northern Quahaug

#### Background

The Northern Quahaug, Mercenaria mercenaria, is distributed along the western Atlantic Ocean from the Gulf of St. Lawrence to Florida. It is also referred to as "Bay Quahaug", "Hard Clam", "Cherrystone", and "Littleneck". Because of similarities in appearance this species is sometimes confused with surf clams. The larger beds in Atlantic Canada occur in waters adjacent to the Gulf of St. Lawrence with a few smaller beds occurring along the coast of mainland Nova Scotia and in St. Mary's Bay.

Mercenaria has a thick shell with a shiny purple color on the inside edge of the anterior end. This portion of the shell was used in the past by native peoples as "wampum" which may account for the name Mercenaria. This species is found from intertidal to subtidal depths of 15 meters in sandy, silty and mud bottoms, primarily in estuaries where the salinity is somewhat lower than open ocean levels. Quahaugs are shallow burrowers and are found in the sediment at depths of 5-10 centimeters.

Sexes are separate and spawning occurs from late spring to early summer depending on temperature. Eggs and sperm are released through excurrent siphons. Fertilization occurs externally and larval development is typical of bivalves. Juveniles are typically males which in later years may change sex and spawn as females. Sizes reach 5-10 centimeters.

The scarcity of large beds in the Bay of Fundy and Scotian Shelf discourages interest in commercial harvesting. Some commercial harvesting occurs in P.E.I. and along Northumberland Strait. Size limits and daily quotas differ between locations. It is one of the most valuable shellfish species harvested in the United States.



### The Fishery

**Management**: Although landed value of quahaugs is important in the Gulf of St. Lawrence and Northumberland Strait areas there is presently no commercial fishery for quahaugs along the Atlantic shore of Nova Scotia. Commercial sized beds have not been identified there. Regulations impose a size limit of 38 mm and a daily quota of 300 individuals (all species) in the former Scotia Fundy Region. Daily quota for the area of Nova Scotia within the former Gulf Region is 100 individuals (all species) with a 38 mm size limit. Harvesting is restricted to use of hand held tools.

**Landings**: In the absence of any significant fishery, statistics are not kept for quahaug landings in the former Scotia Fundy Region.

### **Resource** Status

**Ecosystem**: Quahaugs are burrowing filter feeders which inhabit sandy, silt, and mud bottoms from the intertidal zone to subtidal depths of 15 meters. The siphons are extended above the animal which is covered by 5-10cm. of sediment. Predators include crabs, moon snails, oyster drills and starfish.

### Outlook

Despite the high value of this species in the United States, the scarcity of commercial-sized beds indicate that there is no potential for a commercial fishery in Bay of Fundy and Scotian Shelf area.

The current minimum size restriction may not be sufficient. More information is needed on size at maturity.

Available from: Maritimes Regional Advisory Process, Department of Fisheries and Oceans, P.O. Box 1006, Stn B105, Dartmouth, Nova Scotia, Canada B2Y 4A2. Telephone: 902-426-8487. E-mail: d\_geddes@bionet.bio.dfo.ca On peut se procurer une version francaise de ce rapport à l'adresse ci-dessus. March 1997

# For more Information

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