



Scotian Shelf Atlantic Surf Clam

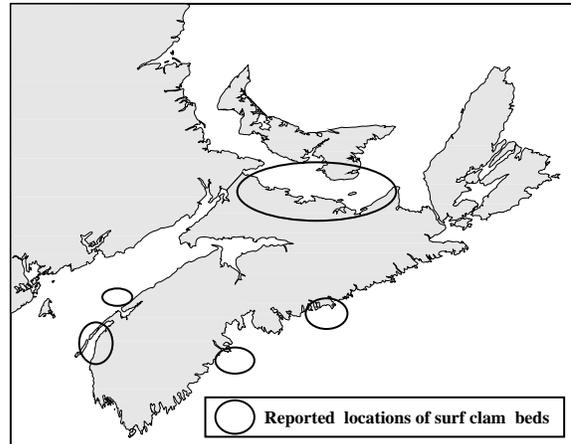
Background

The Atlantic Surf Clam, *Spisula solidissima*, occurs in the western Atlantic Ocean from Labrador to South Carolina. The clam has a number of names and is known as "Bar Clam", "Hen Clam", "Skimmer", "Horse Clam", or "Grosse Coque" depending on location. Because of similarities in appearance this clam is sometimes confused with quahaugs. The name "Bar Clam" is more appropriate in the Maritime Provinces where clams are often found on sandbars at or just below the low water mark. They are also found in deeper water (to 75 meters) and are harvested from these depths by hydraulic harvesters in the United States. There is a limited amount of commercial bar clam harvesting on Northumberland Strait in Nova Scotia, but most is recreational for personal use.

Bar clams have separate sexes and spawn from late June to August. They are the largest bivalves found on this coast and can grow to shell lengths of 175 millimeters. This species is not a deep burrower, usually found only 2-3 centimeters into the substrate, and is somewhat mobile in that it will use a muscular foot to move across the substrate.

Diggers use a variety of hand tools such as garden forks, clam hacks and shovels and can be seen searching the sandbars during extreme low tides. In the past several years, harvesters have used wet suits and snorkels to collect clams beyond the low water line. Bar clams are usually processed; clams are shucked and meats are minced for chowders or cut into strips for deep frying. Recreational harvesters will typically shuck the meats and preserve them in a brine solution. These clams have been used in the past as bait for longline fisheries.

Management regulations impose quotas and size limits which differ between areas.



The Fishery

Management: Landings of bar clams are reported by the DFO Statistics Branch in the "clams, unspecified" category. Bar clam harvesting for the most part is recreational. In 1995, there were 2257 commercial licenses issued. Commercial clam licenses are not subject to quotas and, at present, are multi-species although most are purchased for harvesting soft shell clams. An unexpected demand for licenses in early 1996 prompted a freeze on issuance in March, 1996 and DFO is now considering making the licenses species specific. The quota for recreational fishers of 300 individuals (all species) and minimum size of 76 mm shell length for surf clams applies to all harvesters. The recreational quota for the Nova Scotia portion of the Gulf of St. Lawrence is 100 individuals (all species) with a minimum size of 102 mm. Commercial fishing, at best, is supplementary to other activities. Three hydraulic harvester licenses in southwest Nova Scotia allow bar clams as bycatch but are directed at other species.

Resource Status

Interest in this fishery has been limited and there is little recent data on the status of the resource in Bay of Fundy and Scotian Shelf areas. Previous resource surveys indicated potential commercial quantities from several areas in the Gulf of St. Lawrence. One large bed of stunted clams was reported from the Digby area but was found to be contaminated with PSP year round. Some of the more heavily fished beds seem to be depleted to the point where recreational fishers aren't able to fill daily quotas on a single tide.

Bar clams are filter feeders found on exposed sandbars and in sheltered harbours. Frequently the habitat is shared by razor clams. Deep water populations are found on offshore bars to depths of 75 meters. Moon snails, crabs, seagulls, cod and some marine mammals are reported as predators.

Outlook

At present there is little interest in commercial fishing for this species in the former Bay of Fundy and Scotian Shelf areas. Abundance of this species along the Atlantic coast is not well documented. Exploratory fishing might help to improve information on distribution and abundance.

Traditionally, bar clams have been harvested by hand by local individuals for private use and to some extent as a supplement to other fishing activities. In most areas, commercial fishing would have to be mechanized to be efficient and it is doubtful whether known beds could support increased effort. The occurrence of paralytic shellfish poisoning in the Bay of Fundy may preclude commercial ventures in this area. Previous surveys have located subtidal beds in the Gulf of St. Lawrence where hydraulic harvesters have been employed. The results of these fisheries are variable in that some areas have been abandoned and others provided a consistent harvest.

For More Information

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