Stonington Shellfish Commission

www.stoningtonshellfishcommission.org/shellwebsite/stonington_shellfish_commission.htm

Shellfish Resource Management Plan

Town of Stonington, Connecticut





Approved by the Stonington Shellfish Commission 06 August 2002 Approved by the Stonington Board of Selectmen 09 October 2002 Approved by the CT Dept. of Agriculture; Bureau of Aquaculture 11 December 2002

Last Updated/Amended—15 March 2005

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Shellfish Resources

Shellfish resources in Stonington waters have historically been rich, and provided an essential source of food to Native American tribes and to early settlers of the region. As growth, development and subsequent alterations in marine habitat and water quality have occurred, shifts in shellfish distribution, abundance and availability has also occurred. Oysters, once quite prolific in their distribution, have become limited in their overall extent in town waters. Hard clams, often called quahogs, continue to be the most predominant shellfish species of importance, and exist in nearly all town waters along the coast. Scallops have been and continue to be a very important element of the recreational shellfishing program, but due to its intermittent natural abundance cycles, interest and opportunity to harvest this shellfish species peaks and ebbs according to that cycle.

While shellfish distributions have changed over time, so has access to the resource. Coastal development has privatized much of the shoreline of Connecticut, which has severely restricted land-based access to coastal resources. Furthermore, changes in water quality, mainly due to contamination with bacteria and viruses considered to be threats to public health as a result of the consumption of raw shellfish products, many areas have become prohibited to the harvest of shellfish.

Eelgrass is an important element of the many bays and coves that make up the coastal ecosystem of Long Island Sound. Eelgrass provides important nursery habitat to finfish and shellfish, and particularly to the bay scallop that use eelgrass fronds as an attachment site to get off the bottom and away from predators during juvenile growth. Eelgrass is also important as a food source for a variety of species of waterfowl that nest in the region or migrate up the Atlantic flyway. Eelgrass also assists in removing nutrients, thereby reducing the probability of "nuisance algal blooms" in coastal waters.

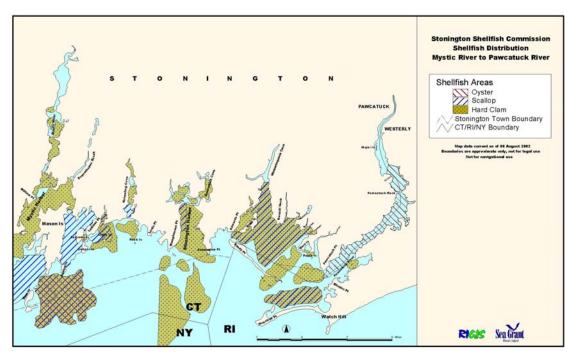
Unfortunately, eelgrass has largely disappeared from areas where it once was plentiful. Little Narragansett Bay is a good example—local mariners used to literally curse the preponderance of eelgrass that would foul their propellers, and even as late as the mid-1990s Little Narragansett Bay was cited as containing some of the most lush beds of eelgrass in the Long Island Sound ecosystem. Today, eelgrass is all but absent from the bay. The causes are not well understood, but coastal development and increased nutrient additions to coastal waters, eelgrass blight and blooms of nuisance algae have no doubt all played a role in the loss of eelgrass.

The commission recognizes eelgrass as a critical component of coastal ecosystems, and as such, considers the presence of eelgrass in its decision-making processes regarding shellfish harvesting operations in Stonington waters. The commission will typically restrict or deny shellfish harvesting operations that infringe upon eelgrass beds. Furthermore, the commission actively takes part in the restoration of eelgrass populations through transplant activities, often in partnership with state, educational and private entities.

The following provides a summary of shellfish resources in Stonington waters and their availability for recreational and commercial harvest. Town waters are summarized for three broad regions that roughly correspond to the jurisdictions of each of the three town harbor

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management commissions so that this information may more easily be accessed and applied for managing the shared coastal resources of Stonington.



Distribution of shellfish in Stonington waters.

Pawcatuck River

Resource Status

The Pawcatuck River supports relatively extensive shellfish populations. The upper river contains excellent oyster habitat, some of the best in Stonington waters. Oyster abundance is sporadic however, and may be tied to river flow and estuarine salinity at critical points in the oyster life cycle, such as during spawning and spat settlement. The river also contains extensive populations of hard clams, particularly in southern areas near the river mouth. Blue mussels, bay scallops, and soft-shelled clams are also found in the river, though to a lesser degree than the more abundant and widespread hard clams and oysters.

Management Status

Water quality in the Pawcatuck River at present does not allow for the taking of shellfish for direct human consumption and is therefore closed to recreational shellfishing. These waters remain closed due in large degree to the presence of two sewage treatment facilities (Westerly and Pawcatuck) in the upper reaches of the estuary.

MOUTH OF THE PAWCATUCK RIVER TO STANTON WEIR POINT is available to commercial harvesters only for depuration prior to consumption.

STANTON WEIR POINT TO HEAD OF TIDE (STILLMANVILLE BRIDGE) is classified PROHIBITED. No shellfish may be taken from this area except by aquaculture operations expressly licensed by DA/BA.

Commercial Activities

The river/estuarine ecosystem provides good conditions for the culture of oysters and hard clams, though shellfish must be relayed to state certified waters for depuration prior to harvest for market. Readers are instructed to visit the commission's web site for up-to-date information on location, extent and operations of commercial shellfish aquaculture operations in the Pawcatuck River area.

[http://www.stoningtonshellfishcommission.org/shellwebsite/stonington_shellfish_commission.htm]

Stonington Harbor & Little Narragansett Bay

Resource Status

Stonington Harbor supports a rich and extensive population of hard clams, but only limited populations of bay scallops, soft clams and blue mussels. The hard clams are widely and thickly distributed throughout the harbor. The scallops are thinly scattered in the eelgrass beds on the west side of the harbor. Although this is a small population that is rarely important for recreational harvesting, it is important as a breeding stock, in part because of the protection afforded by the healthy eelgrass bed.

Little Narragansett Bay also contains a rich and extensive population of hard clams, and in some years an extensive bay scallop population. There are lesser populations of soft-shelled clams, oysters and blue mussels. Hard clams are widely and thickly distributed. Scallops are usually limited to the area near Barn Island in the eastern part of the bay.

Management Status

Currently water quality in Stonington Harbor and Little Narragansett Bay does not allow for the harvesting of shellfish for direct human consumption and is therefore closed to recreational shellfishing.

STONINGTON HARBOR anchorage area, which encompasses most of the harbor, is open to commercial shellfish operations during a designated seasonal period for depuration. During the boating season this area is closed to all shellfishing activity. That area of Stonington Harbor located within a 1000-foot radius of the effluent outfall from the Stonington Borough Wastewater Pollution Control Facility is classified as PROHIBITED.

THE REMAINDER OF STONINGTON HARBOR, the entrance to Little Narragansett Bay and the bay itself are open to commercial shellfish operations that harvest shellfish for transfer to APPROVED areas for natural biological purification.

Commercial Activities

Stonington Harbor presents limited aquaculture opportunities due to its busy, congested nature, and because of the presence of a sewage treatment discharge. Readers are instructed to visit the commission's web site for up-to-date information on location, extent and operations of commercial shellfish aquaculture operations in the Stonington Harbor area.

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Mystic River

Resource Status

Nearly the entire Mystic River region is excellent habitat for shellfish. In particular, Mystic Harbor, and the waters all along Masons Island are exceptionally productive. Shellfish include hard clams, soft shell clams, bay scallops, oysters, blue mussels, razor clams, conch and whelk.

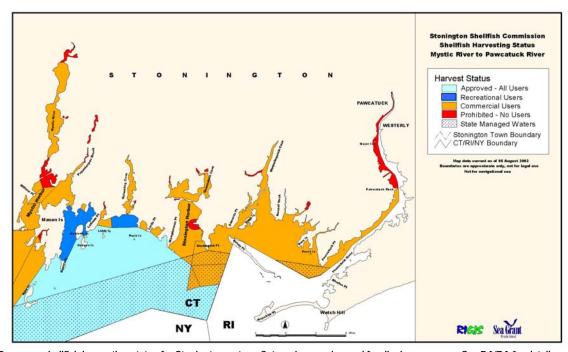
Management Status

THE UPPER MYSTIC RIVER and its mid sections are open to commercial shellfish harvesting operation. A PROHIBITED area is in the immediate vicinity of the Mystic Sewage Treatment Facility effluent outfall. Lower sections of the river are open to commercial shellfishing operations. There are some APPROVED areas in the outer harbor.

Commercial Activities

The Mystic River area provides significant opportunities for aquaculture ventures. Readers are instructed to visit the commission's web site for up-to-date information on location, extent and operations of commercial shellfish aquaculture operations in the Mystic River area.

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Summary shellfish harvesting status for Stonington waters. Categories are clumped for display purposes. See DA/BA for details.