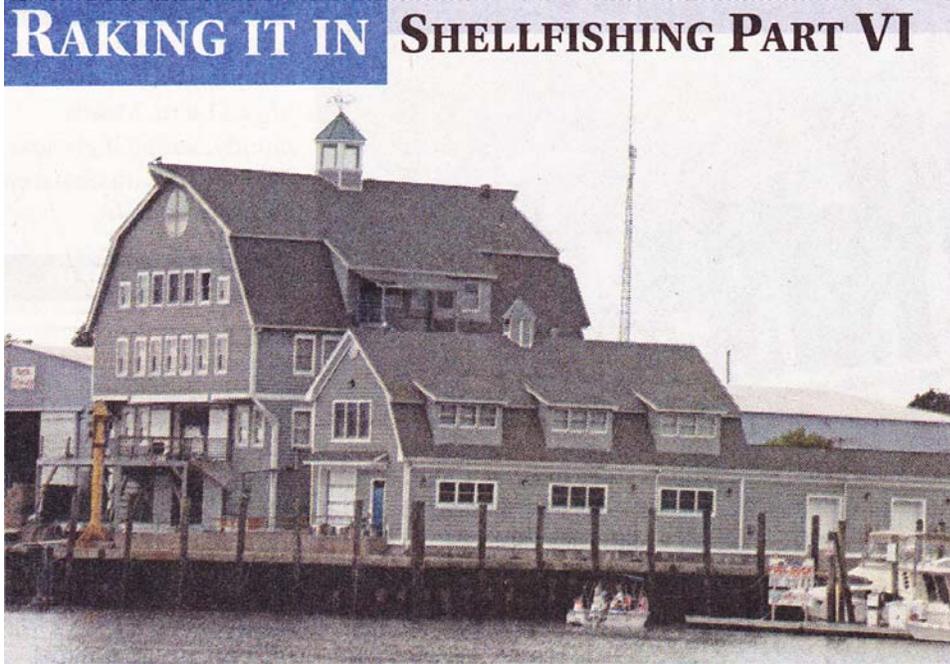


## Commercial shellfish businesses doing well on Long Island Sound

### RAKING IT IN SHELLFISHING PART VI



The Hillard Bloom oysterhouse on Water Street in Norwalk Saturday morning.  
*Hour Photo / Danielle Robinson*

**EDITOR'S NOTE:** This is the sixth in a ten-part series on shellfishing, both recreational and commercial. The next topic will be how shellfishing is regulated and managed.

By **RINDY HIGGINS**  
Special to The Hour

From the wheelhouse, the man known to his crew as Captain Rob, of Norm Bloom and Son, keeps one steady hand on the helm. With the other hand, he manipulates the controls for the dredge boom. He moves and lowers the boom overboard, and the dredge suspended by chain disappears into the water. The dredge, a cage-like structure with teeth, scrapes along the bottom of Long Island Sound. After circling for about three minutes, Captain Rob winches up the dredge and dumps a generous catch onto a tray table on deck. Two deck hands in aprons separate the harvestable shellfish from empty shells, rocks and bi-catch which are returned to the water. They sort bivalves by size on the deck or back at the shop on land. It's a 12 hour workday, year round. It's never been easy work. And profitability is never guaranteed.

The last few years have been good for the commercial oyster industry, although how good depends on who you ask. Along the Connecticut shoreline today, about 45 businesses farm shellfish on 22,000 acres of leased state land and another 67,000 acres on privately owned property. Annual shellfish harvest exceeds 450,000 bushels, contributing more than \$15 million and over 300 jobs to the state's economy. Oysters are the largest seafood product in Connecticut.

Locally, the shellfish industry appears to be holding its own. In Norwalk, many shellfish beds have changed ownership, but the total acreage owned by commercial harvesters has not changed significantly over the past 10 years. In Westport, there have been several new leases created in the last few years.

Though the current outlook sounds promising, the local commercial shellfishing industry over the years has had its ups and downs. The area's shoreline waters have historically been a good environment for shellfish. The mix of the fresh waters of rivers and the saltier waters of Long Island Sound have provided a beneficial salinity, a cleansing flow, appropriate temperature ranges and plenty of plankton to support the growth and propagation of clams, mussels and oysters.

Long ago, Native American tribes such as the Pequots and the Algonquins enjoyed a seacoast rich in shellfish. They reaped oysters by using tongs from dugout canoes. The early European colonists in the Norwalk- Westport area found the same abundance, and purchased two large tracts in 1640-41 from King Charles I of England. These tracts were between Five Mile River and the Norwalk River, and "between the Norwalk and Saugatuck rivers and a day's walk north from the sea." By learning harvesting techniques from the Native Americans, the settlers supplied themselves with food crucial to their very survival. From the rich resources of Connecticut's "gardens under the sea", these early settlers laid the foundation for what would become the nation's most famous oyster industry.

But the path from survival of the individual to a thriving industry hasn't been easy. The vagaries of weather along with population growth, pollution, predators including sea stars and man, as well as the waning interest in working 12 hour days, has strained the steady growth of the industry. And yet the business of supplying discriminating palates with shellfish has continued here for three centuries.

By the early 1800's, oystering had become a viable business venture. Within two decades, consumer demand outpaced the supply of inshore oysters. That encouraged the development of new techniques of oyster planting and cultivation, which continue to this day. In 1840, Nathan Roberts of Norwalk and others took young oysters, called spat, from natural beds located in shallow waters and replanted them in other areas to grow.

Local innovations in boat design prompted oystermen to use shallow-draft sailboats called sharpies to access very shallow water areas as well as to sail out to deeper waters. Around 1848, Captain Henry Bell from Norwalk made one of the first attempts to cultivate oysters. He planted clean empty shells, called cultch, among the Norwalk islands upon which the oyster larvae would settle and grow.

In 1857, the Allen family of Westport brought Blue Point seed oysters from Peconic Bay, Long Island, and planted it in their Sherwood Mill Pond shellfish beds. As a closed system, Mill Pond

offered excellent salinity as well as protection from predatory seastars and diseases. It was so productive and hearty that the Allens were able to sell spat back to oystermen in Peconic Bay in the early 1900's when the oysters there were suffering from blight. Other oystermen also decided to purchase and sell seed oysters, making Connecticut a leading oyster seed producer.

New technologies made harvesting easier. In the 1880's, the dependency on hand rakes and tongs gave way to the various styles of a dredge, a rake modified with a bag or cage and pulled by a chain along the water's bottom. The dredge increased the daily catch, thereby encouraging, in turn, the use of a larger boat called an oyster sloop. About 1870, Captain Peter Decker of Norwalk added steam engines to his sloops, and within 10 years, Norwalk had the largest number of steam powered oyster boats in the world.

By 1875, Connecticut had 86,000 acres of beds under cultivation. Norwalk, known as "Oyster Town", was considered the oyster capital of the nation. Tallmadge Brothers and several other oyster growers led the way. More than twice as many oysters were shipped in one day in 1878 than were for the entire year in 1823. A million dollar industry had been established and was so well regarded internationally that people came from all around, even from as far away as Japan, to learn about oyster farming. By 1889, Norwalk oysters accounted for one fifth of national oyster exports with most of the shucked and canned product headed for England. At the turn of the century, Connecticut oyster cultivation was in its heyday. The harvest in 1900 was four million bushels. Nearly everyone ate oysters several times a week.

Then there came a period of serious decline. Concern about contaminated oysters brought tighter regulations regarding storage and shipping of oysters, as well as the sanitary operations of oyster companies. The increase of pollutants from growing human populations and industries, the filling in of salt marshes, as well as natural disasters like the hurricane of 1938 devastated the oyster beds.

In 1948, the last sailing oyster sloop was launched. It was christened "Hope", in the hope of a brighter future for the oyster industry. Built of oak that had fallen in a severe storm, it had an unusual design of rounded planked sides above the waterline and a v-shaped bottom. For twenty years, she was used to hand dredge, using a chain bag and rear net to harvest the natural beds. Her gaff rig made it easier for her to turn into the wind and stop. Today, "Hope" lives on as the last relic of the bygone era of sailing oyster boats, quietly berthed at The Maritime Aquarium in Norwalk.

Despite the hope for revival, by 1972, the total harvest for Connecticut was only 32,468 bushels. Many oyster establishments closed. The few that remained worked that much harder. By working extra long days, switching to clamming when oystering was limited, reinvesting into the business and buying up smaller companies, oystermen like Norwalk's brothers Hillard Bloom and Norman Bloom created a dramatic comeback.

By 1994, the Connecticut harvest was back up to about 900,000 bushels. But this productivity came to a standstill when the beds were hit with two parasites in the late 1990's which devastated the crop. Some oyster companies switched to clamming at that time, which uses a different dredge. A clamming dredge blows out powerful jets of water as it is dragged along the bottom, forcing the buried clams up out of the sediment and into the dredge.

Many shellfishing companies today rely on harvesting both clams and oysters. According to David Carey of the Connecticut Board of Aquaculture, the last few years have been excellent, with the hard clam harvest holding steady for five years, while oyster harvests have climbed significantly.

Most oyster gourmards have no idea how much work and attention to detail is required over a three-to-four year period before a treasured oyster ends up in a raw bar or in a favorite recipe.

Today, oyster companies employ a variety of techniques that entail an astonishing amount of labor and attention to detail. Oysters spawn in the warm waters of July and August. Fertilized eggs grow into free-swimming larvae that settle and attach to the bottom of Long Island Sound. Often, oystermen gather old, clean shells that they store on land or in underwater beds and lay these shells over certain grounds to create good setting beds. The oysters are transferred several times over the next few years, to position them in optimal growing beds. During seasons of ample harvest, some oysters may be moved to deeper, colder waters to slow their growth, extending the years of good harvest. When conditions were not favorable for the natural setting of young oysters, Jeff Northrop of Westport, a fifth generation oysterman of Allen and Nash lineage, met the challenge of ten years of poor natural setting by purchasing spat and growing the young oysters in his own cages off of docks until they were ready to transplant into shellfish beds.

Another way of achieving sustainability is by developing a hatchery, an amazingly laborious and time-consuming process of artificially propagating and growing of oysters. Marine biologists have helped Hillard Bloom Shellfish of Norwalk develop a promising hatchery program that works. Varieties of algae are grown in floor-to-ceiling cylinders and then piped through a highway of tubes to indoor breeding and growing tanks. Brood oysters are meticulously selected and placed in single layers in bins where the water temperature is gradually increased to a level that tricks them into spawning.

The sperm and eggs are skimmed off and placed in a pool with a particular ratio of sperm to egg. Extra sperm is frozen and saved for future use. The fertilized eggs develop into free-swimming larvae. Several weeks later, the larvae are put into setting tanks where they attach to cultch. When the temperature of the Norwalk River reaches 41 degrees, the spat (young oysters) are sorted and the more mature ones are moved to outside tanks, where they are bathed with algae-rich water pumped directly from the river. Eventually, they are placed in layered trays latched together, and roped off the docks until they are one and a half inches. At this point they can be moved to the wild oyster beds where again they may be transferred several more times before they can be harvested.

**Watch for the next article in the Raking It In series: how shellfishing is regulated and managed.**

*Rindy Higgins, a commissioner of a local shellfish commission and trustee of a conservation association in Massachusetts, was a marine educator for more than 20 years at The Maritime Aquarium. Her “Raking It In” series discusses the benefits and challenges, techniques, ecology, and cultural heritage of shellfishing in Westport waters.*