

# Shipbuilding

by Jennifer Stone Gaines

Around the shores of Cape Cod, wherever there is a deep cove or inlet open to the sea, there have probably been boatbuilders working at some time in the past. The first were certainly the Wampanoags, who hollowed out huge logs at the water's edge by burning and scraping. These canoes were remarkably seaworthy, carrying their occupants near shore and even across treacherous Woods Hole Passage to summer on the Elizabeth Islands. Early colonists brought small shallops from England and acquired canoes by trading goods with the natives. Within a year of settlement most colonists realized they needed larger, more seaworthy, vessels to trade along the coast, and requested boatbuilders to come from England to take up residence in the colonies. The first documented boat built on Cape Cod by colonists was a 40 foot long pinnace, constructed at the Aptuxet Trading Post to carry goods for the Plymouth Colony from Buzzards Bay and beyond.

Gradually boats were adapted for local conditions. The early shallops evolved into specialized fishing boats. Seventeen to eighteen feet long, double ended with two masts, sprit rigged with loose footed sails, they could easily be sailed or rowed by one man and a boy. They were launched from the beach on "ladders," a prototype marine railway. As late as 1856 these boats were being built all around the shores

of Vineyard Sound and were known as "Noman's Boats," proof they could sail the often difficult patch of open ocean around the island called Nomans Land southwest of Martha's Vineyard. Other small fishing boats were developed that had a small deck forward, an adaptation that protected the fishermen who fished in the autumn and winter. Very few facilities were needed to build these boats: a flat piece of dry land with a gentle slope into a harbor with a firm shelving bottom, a ready supply of lumber, and a knowledgeable builder and his tools.



Shipbuilding Plaque by Sarah Peters. Photograph by Jacki Forbes.

During the 1700s larger vessels were built to trade along the coast, captained and crewed by local men. By the Revolution, the industry had grown so that Thomas Paine in his 1775 treatise *Common Sense*

stated, "Shipbuilding is America's greatest pride." Until 1790 the preferred vessel seems to have been a 40-50 foot sloop with a shoal draft. After 1790, several local yards built ships over 100 feet long, but all could still be launched in fairly shallow water. One 65 foot coasting schooner built in 1832 boasted of drawing only 10 inches empty and 24 inches loaded.

Remnants of these yards and their piers are still visible in several harbors around our coast. One relic shipyard is in Quisset Harbor about 100 yards southwest of the present Quisset Harbor Boatyard.

## Shipbuilding

*Comments by Sarah Peters*

Shipbuilding was the last plaque designed. There were many fascinating subjects related to Falmouth's shipbuilding industry that I looked into. The original design depicted the *Status Ante Bellum* being pulled down Shore Street by many team of oxen. The *Status Ante Bellum* had been built in 1816 by Elijah Swift on his own property (where the plaques are installed today), as a reaction to an invasion during the war of 1812. This was the first ship built in Falmouth, hence the date on the plaque. Future ships were built in Woods Hole.

The final design is of Bar Neck Wharf. A burly man wields an adze, chipping away at a piece of live oak. Live oaking was another important industry in Falmouth. I wanted to include it in the Shipbuilding design because they were closely related. In the early 19th century, ships left Falmouth full of men who sailed to South Carolina to harvest live oak timber. The timber was especially desirable and suited for building sailing ships. It retained its shape and incredible strength as it aged. The trees were cut with various parts of ships in mind. The knees, for instance, were cut where the branches grew from the trunk, creating a single bent piece that would normally have to be constructed from two pieces of timber. Once cut and roughly shaped, the live oak was shipped to shipyards.

Woods Hole boat builder, Bill Cooper, was instrumental in demonstrating how the adze was swung. He showed me the potato chip shaped wood chips that resulted (which children would have collected for firewood at the shipyard) and the angle at which the wood was struck. He and Paul Ferris Smith also pointed me toward the remarkably detailed drawings of illustrator and historian Sam Manning, which I relied upon heavily for my research.

In the background you can see Braddock Gifford's Blacksmith Shop. A team of oxen cart in a huge piece of timber suspended and balanced perfectly from an axle between two enormous wheels. These wheels were between eight and 12 feet tall, and the oxen were carefully trained to work together. To the left is the saw pit, located near the current Eel Pond bridge approximately where the Community Hall stands today. The timber was placed on boards over the pit. One man would stand on the timber, and his partner would stand in the pit (under the dock). They operated the saw with the top man pulling up, bottom man pulling down, to cut long planks.

At low tide, you can see parts of the old stone dock jutting out into the harbor. This site produced the brigs *Victory* and *Enterprise*, the bark *Union*, and the sloop *Susannah*, among others.

To the north is West Falmouth (formerly Hog Island) Harbor. Here the Swift brothers, sons of the blacksmith Abiel Swift, ran a shipyard just north of the present Chapoquoit Road. Looking carefully today, you can see the squared off stone pier where huge ships were tied after launch. Eleven large ships were built here, including the whaler *William Penn*, built

by itinerant master shipwright Abner Hinckley. The Swifts not only built ships, but ran a chandlery to supply all ships that came into the harbor. On the main road in West Falmouth village they also ran a store selling products the ships brought in. The primary cargoes carried out of West Falmouth were wool, sheep, and cordwood. The hurricane of 1815 wreaked havoc in the harbor, destroying all the salt-works and washing the high dunes of Chapoquoit Beach into the harbor creating, in one tumultuous day, a very shallow cove.

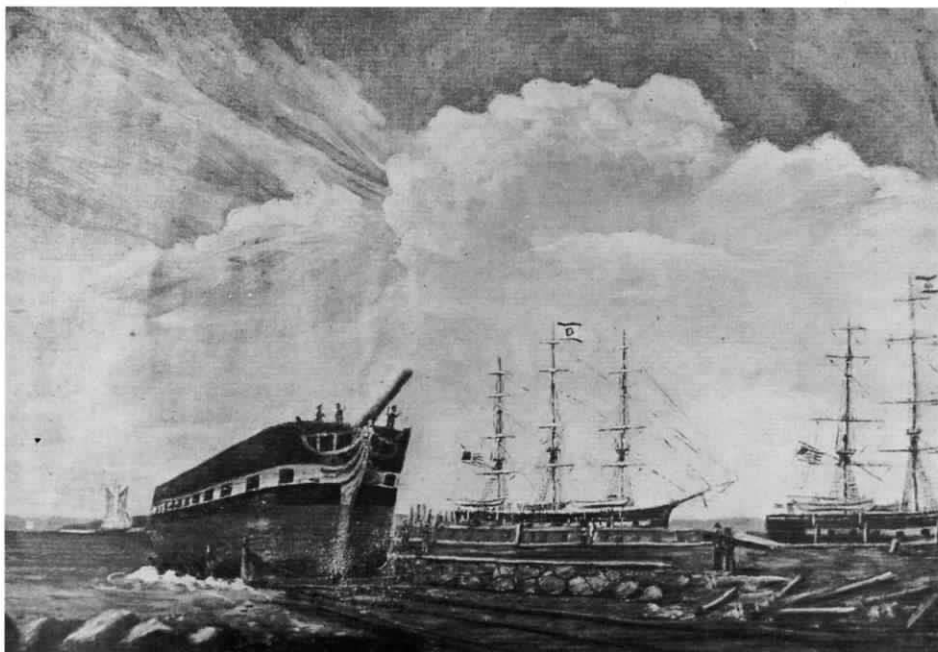
At the north shore of Falmouth was Cataumet Harbor, now known separately as Megansett and Squeteague Harbors. There was an active pier for coasting vessels in Megansett near the present town pier, but the major shipbuilding was farther into the harbor at the Lawrence landings on either side of the town line. The southern landing owned by Robert Lawrence was preferred for loading heavy cargo because there was deeper water, 6-8 feet at low tide. From there, a road ran straight off to the east as far as Marstons Mills, providing an easier way for cordwood and other trade items to be brought to the dock. Ship building was concentrated at the northern yard owned by Jonathan Lawrence. By 1790 various members of the Lawrence, Hinds, Parker, Handy and Lovell families lived on the Lawrence homestead and built ships, including *Ocean*, a brig 83 feet long and 23 feet wide. Lawrence Handy, shipwright, built *Rebecca*, the longest at 120 feet. Many of the family

members were sailors, captains and crew. By 1800, Captain William Handy was building ships just to the north in Pocasset (now Red Brook) Harbor. Handy built big ships: brigs and ships, and also smaller sloops which were often named for daughters and daughters-in-law, such as *Polly* and *Nancy*.

Among the few documents telling of the coasting trade is an account book discovered in the old Shubael Nye homestead on Old Main Road in North Falmouth. The book records the business of the Nye family from 1768 to 1871, a business that was run sequentially by three generations of the Nye family. In this account book, the destination of the vessels was sometimes labelled merely "Sent to the Eastward," probably meaning Nantucket, the great mercantile hub of the day. There barrels of pork, lumber and cordwood were traded for such neces-



Remnants of the old stone dock in Quisset Harbor where vessels were launched in the early 1800s still show well at low tide. To the left is "Hurricane Hall," former residence of Deacon Thomas Fish and his descendants through Maria Yale Fish and Arthur Metcalf Morse and their son Arthur Metcalf Morse, Jr. To the right is "The Homestead," former residence of Stephen W. Carey, Jr. and later his daughter Cornelia Lee Carey. The shipbuilding company was formed in Quisset in 1802. Deacon Fish served as its first agent for ten years until the War of 1812. Photograph by Janet Chalmers, 2006.



The whaler *Commodore Morris* was built and launched in Woods Hole in 1841 from the Bar Neck Wharf. Owned by Oliver Swift, her first captain was Charles Downs. Painting by Franklin Lewis Gifford. Courtesy Woods Hole Public Library.

sities as turpentine, cotton cloth, indigo for dyeing, gloves, pails, shoes, rice, sugar, molasses, nails, and rum. Nye kept the sloop *Susannah* safely under wraps after the battles of Lexington and Concord, but shortly after the signing of the Declaration of Independence, Captain Lemuel Eldred of North Falmouth sailed her out. By October of 1776, he had made numerous trips carrying sheep, wool and wood to treeless Nantucket. On one trip she carried a full load of 17½ cords of wood.

The Revolution was hard for ship owners and builders as the British patrolled our waters looking for prizes. The War of 1812 almost entirely shut down the industry; ship owners feared the British would either commandeer their vessels or burn them on the ways. Most sailors stuck close to shore to evade the British embargo. In June 1814 four Falmouth schooners

sailed across the Bay to hide in Wareham harbor. When the British ship *Nimrod* came to Cataumet Harbor looking for Falmouth vessels, she bombarded the town then sailed across to Wareham, where she burned all the Falmouth vessels and set fire to eight Wareham ships as well as their cotton factory. Legend says that as *Nimrod* turned and sailed south down Buzzards Bay, she ran aground on a shoal. To escape by lightening their vessel until she could float free,

the British threw even their cannons overboard. Today, one of those cannons rests at the Falmouth Historical Society.

One stubborn Falmouth man refused to let the British stop him. Elijah Swift built his 50 ton vessel *Status Ante Bellum* well away from sight of the water in his own yard on Main Street (near the present Library lawn). He laid the keel in 1813 and launched her by hauling her down Shore Street with a team of 50 yoke of oxen from farms from miles around, providing quite an inspiring and defiant sight.

After the war there was a great resurgence in ship building and entrepreneurship in general. By 1829 there were approximately 10,000 vessels passing through Vineyard Sound annually.

With all the ship building going on in New England, and the coastal trade that led the ships down to North Carolina and on to Florida and the West Indies, it is not surprising that word spread of the amazing qualities of live oak for shipbuilding. This evergreen oak, native to the southeastern U.S., produces an extremely hard wood reputed to be the best for shipbuilding, surpassing even teak in strength and durability. Huge loads of wood were sent north to build war ships, including the *U.S.S. Constitution*. As live oak became scarce the shipwrights narrowed their sights to using the wood only for "knees," the supports between hull and deck. During Hurricane Katrina in 2005, hundreds of live oak trees were blown down in the lowlands surrounding the Gulf of Mexico. Thanks to resourceful and historically minded woodworkers, the lumber is being shipped north to be used in the restoration of the whaleship *Charles W. Morgan* at Mystic Seaport.

The Bar Neck Wharf Company was founded in Woods Hole in 1828 by Falmouth's Swift family. Again, one family built the ships and controlled their trade. Early on, the Swifts were involved in the live oak trade, organizing seasonal trips south to gather the wood, employing more than fifty men

winter after winter in the hard conditions of live oak harvesting: fevers, mosquitoes, snakes, alligators and sandy or swampy land to carry logs across. The Swifts eventually harvested mainly in Florida, and docks they built on the coastal rivers to facilitate loading of lumber remained until the huge development of Florida in the late 1900s. Some of the wood they harvested was sent back to Woods Hole to be used in the construction of their whale ships. At least four large deep draft whale ships were built at Bar Neck from 1828 to 1841.

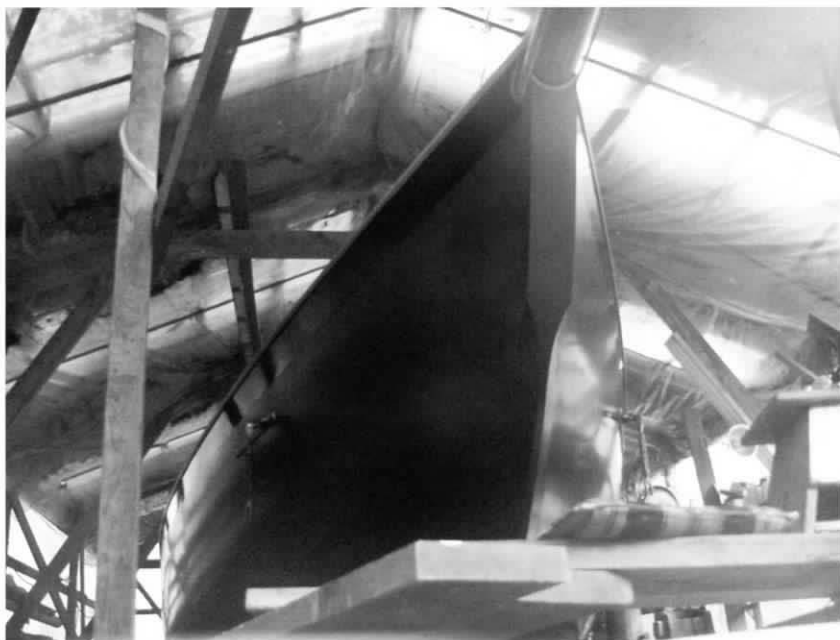


The Woods Hole Historical Museum's Boat Restoration program works every Saturday morning to restore and build wooden boats. The Beetle Cat shown here was the first one to be worked on. Courtesy WHHM.

On the site of present-day Edwards Boatyard in Waquoit was White's Landing where a number of coasting vessels were built, as well as the whaler *Popmunnett* in 1836, with Abner Hinckley as master shipwright. On the west shore of Metoxit, was Peter's Wharf, owned by

Captain Peter Lewis. As with other builders, he owned the ships, store, and chandlery. In contrast to the others, he traded frequently with the many Wampanoags who arrived at his wharf in their canoes. He also traded regularly with Nantucket and Martha's Vineyard. From 1852 to about 1882, a regular packet ran between Waquoit, New Bedford, Nantucket, and Martha's Vineyard. Mail from the islands was transshipped to Sandwich, usually by stage. Lumber and firewood was the most common cargo bound out.





David Martin created a temporary shed in which to build his 36 foot schooner, *Lucena B*. Photograph by Jacki Forbes.



The bowsprit pokes through the plastic sheeting of the shed in which David Martin built *Lucena B*. Photograph by Jacki Forbes.

Farther down Cape, in the decade after the whale ships were built in the deep water port of Woods Hole, eight huge and beautiful clipper ships were built in Dennis by the Shiverick brothers (whose father had come from Falmouth). These were launched in the shallow waters of Sesuit Creek. They were launched as light as possible, then jury rigged to sail downwind to Boston to be rigged. Many of these ships went on to break speed records for trips to London, San Francisco and the Orient.

As summer visitors began to flock to Cape Cod in the 1870s and 1880s, the waters began to fill with large steam driven ferries from as far away as New York City. The ferries also acted as the delivery vehicles of their time, delivering goods along their route. Small craft which had been work boats were hired out to take hotel guests sailing for pleasure. Again local boat builders adapted to change and provided the right boat for the new time and use. By the end of the 1800s harbors in Buzzards Bay became famous for the beautiful, locally designed and built catboats. The Crosby yard in Osterville also specialized in catboats and maintained its high reputation for more than a century. The Eldred yard in Quissett built and rented out rowboats and hired out both captain and catboat to Quissett Harbor House guests. No more were large commercial vessels built in little yards; the main thrust was building boats for the leisure trade.

Since its creation in 1908, Falmouth Inner Harbor has had active boat yards. The early fiberglass Knockabouts were built there in the 1960s in the Frost yard. Now MacDougall's and Falmouth Marine dominate. Most of their business these days, as with most local boatyards, is in repair and maintenance. In Waquoit, Edwards Boat Yard bustled under the guidance of Einar Edwards, followed by the Swains.



*Lucena B.*, dressed for her launching, motors past Falmouth Harbor breakwater with David Martin and friends enjoying her maiden voyage to Woods Hole. Photograph by Jacki Forbes.

Now the second generation of Swains takes care of their customers' boats. Red Brook Harbor is a busy place with Kingman Marine and the renowned Parker's Boatyard.

As shores fill with residences, as land values escalate and as towing capabilities of trucks and trailers increase, most boat building has moved inland. Bill Cooper was perhaps the first to start this trend, establishing his landlocked boat shop in Sippewissett. Others still active commercially are Damian McLaughlin, who builds large and elegant cold-molded yachts in the woods of Hatchville, and Peter Bumpus who has built steel work boats in an abandoned gravel pit in West Falmouth. Sprinkled across the Cape are excellent amateur boatbuilders. One is David Martin in Woods Hole who has completed, after a dozen years of intense labor interrupted by building his own house, a beautiful 37 foot Alden-designed schooner in a temporary shed in his backyard. Nowadays, large scale commercial shipbuilding has left Cape Cod, but surely boatbuilding in some form will always be with us, for we are still a seafaring people.