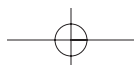
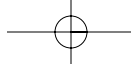




Maritime New England

W. Jeffrey Bolster, Section Editor





Section-opening image: Lobster boat and traps, Port Clyde, Maine, 1973

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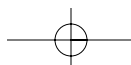
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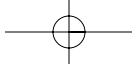
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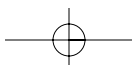
INTRODUCTION

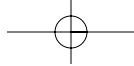
Shipping and commercial fishing have fallen on hard times in New England today, but no region remains so thoroughly associated with the sea. Old piers have collapsed into murky green waters, ignored unless condominiums or marinas rise in their stead. But New Bedford whaleships are eternal thanks to *Moby-Dick*, and the monumental clipper ship *Flying Cloud* remains in the record books thanks to the genius of a Boston shipwright named Donald McKay. Like roof walks atop Nantucket houses, those icons speak to a Yankee people defined by seafaring. So does contemporary culture: Sebastian Junger's *Perfect Storm* (1997) became a best-seller and later a Hollywood blockbuster (2000). The chilling account of the loss of a Cape Ann, Mass., swordfishing boat in 1991, it capitalized on Gloucester's centuries of intimacy with the cruelly indifferent sea.

Centuries ago profits from fish and ships were the sheet anchor of New England society, the salvation of a folk whose stony soil and utopian Puritan faith were insufficient to support them. Today every coastal town boasts sites or shops that evoke historic seafaring. Replica ships are all the rage. A version of John Paul Jones's sloop *Providence* (made of fiberglass) sails from the city of that name. Mystic Seaport in Connecticut launched the "Freedom Schooner" *Amistad* in 2000, celebrating African Americans' liberation struggle. Tall ship festivals like Sail Boston 1992 and Sail Boston 2000 attract hundreds of thousands of visitors. Maritime museums are thriving in New England, if shipping companies are not, and maritime legacies clearly grip modern imaginations.

The historic Yankees (white, black, and Native American) who made their living in the sea's embrace, alternating between fear and boredom, might be puzzled by this shift from maritime work to maritime memories. The 17th-, 18th-, and early-19th-century cultures to which they belonged had less room for openly commercial celebrations of heritage. Yet it was the toil of those seafarers that laid the foundation for a myth of maritime New England that would endure long beyond the age of sail. Since 1925 a bronze helmsman in oilskins has gazed stoically from a Gloucester pedestal inscribed, "They that go down to the sea in ships." The statue, a memorial to fishermen lost at sea, is a testament to centuries of New Englanders' seafaring and to the cultivation of certain memories (at the expense of others) about the past and the place.

Maritime New England thus means many things. It is certainly a definable coastal region, a geographic place that looks and feels like no other. For a handful of people it still describes occupation and locale, as it once did for many. Maritime New England is also a mythic ideal, a nostalgic form of historical thinking that selectively





imagines the past. That myth began as a challenge to modernism and a signature of New England's historical uniqueness. It persists today as a marker of localism and a commodity for sale in many forms. Television programs about lighthouses, for instance, emphasize sturdy self-reliance and timeless simplicity, as do Maine tourism brochures advertising Camden's vacation cruise schooners. Residents and visitors alike have trafficked for generations in representations of pipe-smoking old salts and serenely enduring fishing villages. Such images have become staples of New England's tourist industry. Found in expensive art galleries and on restaurant placemats, they now smack of the quintessential Yankee, and more than one lobsterman, harbor pilot, or fair-weather yachtsman has styled himself in response to those cues.

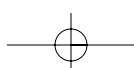
Of course, the image of stalwart sailors sells precisely because there is truth at its core. Consumers recognize that all mariners, whether historic or contemporary, faced elemental challenges. Relying on strength and skill to return safely from the hostile environment beyond the horizon, they become larger than life, no matter how their particular seafaring experience was socially constructed with class or race, and regardless of whether they sailed in clipper ships or tugboats.

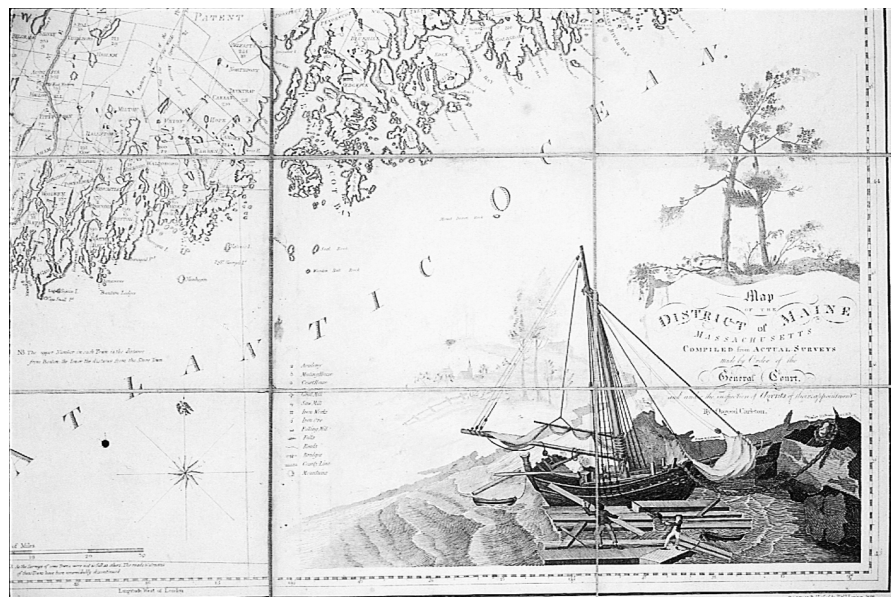
To understand maritime New England one needs to know something of the actual history of ships, seaport families, and sailors, including contemporary ones. But it also requires comprehending the refashioning of maritime culture that began more than a century ago in response to modernism's discontents. Genteel preservationists and tourist promoters asserted that New England had a "rich maritime heritage." Sometimes that became a code for suspending attention to complicated and contested histories, reducing them instead to simple essences. Today many historians and curators are actively working to present a more inclusive rendition of the maritime past, recognizing that it is an extraordinarily bold canvas, with room for the contradictions and internal tensions that define any epic story.

New England is not essentially a maritime society anymore, even though small ports like New Haven, Conn., and Portsmouth, N.H., still handle some cargo. Portland, Maine, was the most active port in New England in 2000, but in terms of tonnage handled, it ranked only 25th in the nation. Boston ranked 35th that year, sinking dramatically from its second place in 1900. Tractor-trailer trucks using the federal highway system and the port of New York turned Boston into a backwater. Ironically, active vessel operations do not matter to maritime heritage advocates. As cultural homogeneity threatens local distinctiveness nationwide, New Englanders and visitors alike hang on to the region's maritime heritage as a marker of place, a symbol of accomplishment, and a bulwark against the tides of change.

REGIONALISM

From the spruce-clad islands and granite headlands of Passamaquoddy Bay, where the borders of Maine and New Brunswick converge on the Bay of Fundy, the coast of New England trends west-southwest to the New York state border. Bisected by Cape Cod's bold flexed arm, the New England coast actually has at least three distinctive shorelines.



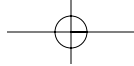


Cartouche from an 1802 map of Maine

From Quoddy Head to Cape Elizabeth (near Portland) stretches the serrated edge of Maine, whose rockbound peninsulas and spruce-studded islands are jewels in a cold gray sea. It is a spectacular and somber seascape at the dawnland of America, a place of unforgiving ledges and racing tides, where the living still comes hard and where, east of Schoodic Point, gannets, terns, and seals outnumber people. An active lobster fishery still thrives along that coast.

From Cape Elizabeth westward to Cape Cod and Nantucket, Mass., the coast is lower, flatter, sandier, and more populated. The mile-thick glacier that sculpted the Maine coast and the interior of New Hampshire and Massachusetts began to melt 13,000 years ago, depositing a terminal moraine of sand that became Georges Bank, Cape Cod, and Long Island. The Cape's sands can be more forgiving to errant mariners than Maine's rocks, but the currents are less predictable, and the fog just as thick. Thousands of ships have perished on that great sandy elbow and its off-lying shoals, including the *Argo Merchant*, a Liberian tanker whose 7.5 million gallons of oil created ecological havoc during the winter of 1976–77. The Cape is a bold marker in other ways, too. Ocean water is noticeably warmer south of Cape Cod and home to different species of fish and birds.

From Westerly, R.I., to Greenwich, Conn., the coast of New England changes yet again, becoming protected from the ocean's fury. Connecticut's shoreline is entirely within Long Island Sound, an inland arm of the sea more than 100 miles long. Home of the Electric Boat submarine construction facility in Groton, Conn., the Sound has long provided an inland passage for coasters navigating to and from New York City. The sheltered nature of the Sound means that its currents are often gentler, its tides are less extreme, and pollution is more concentrated. Nearly one of every 10 Americans lives within 50 miles of the Sound, and it has borne the brunt of overdevelopment and estuarine loss. Until quite recently, Long Island Sound boasted a pro-



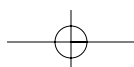
ductive lobster fishery. But in 1999 the lobster population crashed catastrophically, possibly from the pesticides used to kill mosquitoes carrying the West Nile virus. This is only the latest in a long series of environmental problems. Soundkeeper and other conservation groups are increasingly active, and environmentally friendly legislation has begun to stem Long Island Sound's degradation. Ironically, the recreational boaters for whom clean waters are so important have a noticeable impact on the Sound, for one of the largest pleasure fleets in the nation cruises its summer waters.

Maritime New England obviously encompasses a wide range of ecosystems and communities. Norwalk, Conn., is a far cry culturally (and several days' sail) from Jonesport, Maine. As a result of this physical and cultural variation, place has always mattered a great deal in how New Englanders have used the sea, thought about it, and imagined themselves in relation to it. Before the age of automobiles these variations were accentuated. Long Island Sound oystermen, Nantucket whalers, Boston steamboat captains, and shipbuilders in Bath, Maine, all spoke a language of the sea, but with different vernaculars. They lived and worked in worlds apart, with different tools, assumptions, rhythms, and skills. Cultural homogeneity is more the norm today, even if some people in Jonesport retain locally based customs and aspirations that vary considerably from those of Norwalkers.

Jonesporters, all 1,500 of them, work on the water or know people who do, and proudly bill their town as home of "The World's Fastest Lobsterboat Races." Norwalk, in the vanguard of the maritime heritage movement, sports the Norwalk Seaport Association and its annual Oyster Festival, as well as the Maritime Aquarium. Yet its 80,000 residents are much less personally involved in making a living on the water than citizens in Jonesport. Over the centuries maritime New England spawned not only hundreds of indigenous small craft—including Friendship sloops, Cape Cod catboats, Piscataqua gundalows, and Swampscott dories—but a host of ways of making a living from the sea that varied with time and place.

THE GENESIS OF A MARITIME CULTURE

In the beginning, there were fish. The apparently limitless timber and innumerable fine harbors were a secondary blessing. Cod lured 17th-century men to New England as surely as gold later lured forty-niners to California. For centuries cod were so abundant that it seemed incomprehensible that they could ever be exhausted. Easy to catch, and easy to preserve in an age that knew no refrigeration, cod became a staple, a commodity, and a way of life. Cod made untold fortunes and innumerable widows, and it shaped regional cuisines in New England, the West Indies, and Iberia. For centuries codfishing was the mainstay of maritime New England. Long after whalers, clipper ships, and night-boat steamers had come and gone from the waterfront, codfishing remained, a changing same. Yet by the 1990s a combination of pinpoint navigational precision, wide-mouthed polyester nets, and politicians' mismanagement had spelled doom for both fish and fishermen. The destruction of the New England fisheries was an ecological disaster and a cultural tragedy of the first magnitude.



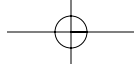
The fishery began briskly, but Europeans were by no means the first mariners on the coast. Giovanni da Verrazano commented in 1524 that native people in Narragansett Bay “make their barges from the trunk of a single tree hollowed out in which 14–15 men will go comfortably.” Natives routinely traveled to islands 10 or more miles offshore, such as Block Island or Monhegan Island, where they fished or harpooned whales. This clearly required sea sense. English mariners marveled at some native craft for their extraordinarily light construction and versatility. “Their boats,” wrote Martin Pring in 1603, “were in proportion like a Wherrie of the River Thames, seventeen foot long and foure foot broad, and made of the Barke of a Birch-tree . . . almost incredible in regard of the largeness and capacitie thereof.”

Although they lacked the tools and skills to build plank-on-frame vessels, native fishers appropriated European fishermen’s boats almost from the first moment of contact and quickly learned to operate them. In the spring of 1602, long before permanent English settlement in New England, John Brereton and his shipmates “came to an anker” in southern Maine, “where sixe Indians, in a Baske-shallop with mast and saile, an iron grapple, and a kettle of copper, came boldly aboard us.” The last significant marine attack by natives against the English in southern New England occurred in 1634, a few years before the Pequot War (1636–37), but eastern natives in Maine, New Brunswick, and Nova Scotia successfully harassed coasters and fishermen until the 1720s. Long before “cowboys and Indians” came to define the American West, “fishermen and Indians” were the norm on the coast of New England.

The first European fishermen in the region established seasonal outposts on Damariscove Island, Monhegan, and the Isles of Shoals. By 1650, however, newly settled merchants had organized labor for a successful resident fishery. By 1675 there were reportedly 440 boats and at least 1,000 men fishing the coast between Boston and the Kennebec River, producing 6 million pounds of dried salt cod annually. The best fish went to Catholic markets in Europe. The lowest grade, “refuse fish,” went to Caribbean sugar islands as food for slaves. Their descendants still savor it. Harry Belafonte invoked Jamaicans’ enduring taste for salt cod when he sang “Ackee rice, salt fish are nice” in his platinum hit “Banana Boat,” known as “Day-O.”

For two centuries New England fishermen jigged for cod with handlines. They split and salted the fish, later air-drying it ashore before export. The drying racks, called fish flakes, occupied a prominent place in every coastal town. Acres of white fish distinguished the landscape of New Castle, N.H., Marblehead, Mass., and Gloucester, just as ripening cotton defined the Mississippi Delta.

Men initially fished in locally built Chebacco boats and pinky schooners, and shipbuilding developed alongside fishing as a premier regional industry. Until the age of iron and steel ships, New England had extraordinary advantages in ship construction. Oak for framing, white pine for spars, and other ship timber was abundant, as were sites with gently sloping beaches and deep water—ideal for wooden ship construction. Shipwrights in Bath, Portsmouth, Boston, Mystic, and many other towns built wooden ships from the mid-1600s to the early 1900s. South Berwick, Maine, for instance, once launched mighty square-riggers that roamed the world. Today it is a tiny town at the head of the Salmon Falls River. Salmon no

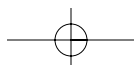


longer run to the falls, and the river has silted from erosion so that now only outboard motorboats can navigate it. Moreover, a low highway bridge blocks access to the sea. Nothing remains there or in a host of other shipbuilding towns that reveals them as the Silicon Valley of their age. But they were. Inexpensive ships were the backbone of a mighty merchant marine, and New England vessels made shipping a leading sector of the American economy from the colonial era to the 1850s.

The myth of maritime New England thus rests on indisputable foundations. Shipping was king. Along with land sales, customs duties provided the federal government's chief revenue source in the early republic, from 1790 to the 1830s. America's first millionaire, Elias Haskett Derby (1739–99) of Salem, Mass., accrued his fortune in the East Indian spice trade. In many ways, the wooden ships and iron men from that era have every right to grab modern imaginations. They represent technological innovation, first-class entrepreneurship, and persistence in the face of adversity. And maritime work employed more New England men than any other occupation except farming well into the 19th century.

Yankee seamen in the 18th and 19th centuries were also the most cosmopolitan people in America, despite New Englanders' reputations as stiff and unbending descendants of the Puritans. Sailors flew their flags in China, the Indonesian Spice Islands, and throughout the South Pacific. They sailed so regularly to places like the Canadian Maritimes (Nova Scotia, New Brunswick, and Newfoundland) and to the Cape Verde Islands off Africa that many Cape Verdeans and "provincials" (as the Canadians were then called) became New Englanders. Thousands of Yankee mariners redefined "home" against the places they had been and decorated their homes with exotic souvenirs. Merchants and captains, like those who founded Salem's East India Marine Society in 1797 (today, the Peabody Essex Museum), cultivated reputations based on seafaring's mystique, as did ordinary seamen. Voyaging's psychological impact was profound, both for men who went to sea and for women who remained at home. The whaling wives of Nantucket and New Bedford, Mass., whose husbands left for years, coped in a variety of ways. Some developed habits of initiative and self-reliance; others developed a habit for laudanum.

Antiquarians' and preservationists' version of New England's maritime past, however, long misrepresented much of the story. Not only did these advocates suspend attention to their conscious refashioning of history as a commodity, but they ignored essential themes and participants. For instance, nearly one-fifth of the sailors aboard New England cargo ships in the early 19th century were black men. Black hands sheeted home white sails from the beginning of settlement to the 20th century. On the eve of the War of 1812, black New Englanders were seven times as likely to go to sea as white New Englanders (on a per capita basis), because shipping was one of the few occupations open to them. Every black family in the region had friends or kin who followed the sea. And although New England may have become a hotbed of abolitionism during the generation before the Civil War, maritime New England long maintained a marriage of convenience with slavery. Captains and merchants profited handsomely by transporting sugar, tobacco, rice, and cotton produced by slaves. Many old seaports' colonial and Federal mansions preserved today were built from profits earned in this marriage of shipping and slavery.



Late-19th- and early-20th-century maritime preservationists, for the most part, were genteel whites from “leading families” who emphasized financially successful shipowners, dashing captains, and improvements in ship design. Yankee seafaring in the age of sail provided marvelous raw material for refashioning as heritage. Its elemental struggle with nature, its distance from hearth and home, and its possibilities for Olympian profiteering all contributed to a compelling myth carefully pruned of competing narratives. Yet sea life was rampant with inequities and physical brutality. Differences abounded among sailors supposedly “all in the same boat.” That metaphor tidily ignored the strains of class, gender, and race that actually defined seafaring.

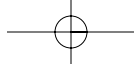
REFASHIONING MARITIME CULTURE

By the middle of the 19th century ambitious fishermen were tempting fate offshore on Georges Bank. A nursery for fish, its unpredictable nor'easters and shoals made it a graveyard for sailors. And from about 1845 to 1880, New England fishing schooners lacked the stability of earlier—and later—models. Fatalities soared. In 1862, 162 Gloucester fishermen drowned; in 1873, 181 men; in 1879, 249 men. For fishing village families, maritime culture was a culture of grief, characterized by prolonged absences, untimely deaths, loneliness, and poverty.

Most fishermen before 1900 were American-born, although Irishmen swelled their ranks during the 19th century, as did “provincials” from the Canadian Maritime Provinces. Around 1900 Italian fishermen became a presence in the Boston fisheries. Several immigrant groups, each with a long fishing heritage, became established locally throughout the 20th century: Portuguese in New Bedford and Cape Cod’s Provincetown, Newfoundlanders in Boston, Italians in Gloucester, and Scandinavians in New Bedford.

Most fishermen, like gamblers, found occasionally heady paydays chronically offset by instability and poverty. And fishermen’s situations worsened with time. Eighteenth-century fishermen in Essex County owned some land and livestock. By the mid-19th century, however, fishermen there owned little but their fishing gear. By 1840 only 3 percent of Gloucester fishermen even owned the boats they sailed. Many Yankee fishermen had become proletarians.

During the Colonial Revival, which swept New England from the 1870s to about 1930, artists and writers reinvented fishermen. Many middle-class whites of Anglo-Saxon descent were uncomfortable with American society after the Civil War. Belching smokestacks, clattering factories, and Catholic immigrants besieged their world. If Bridgeport, Conn., Lowell, Mass., and Providence were already lost to this assault (which, of course, middle-class New Englanders had helped to create) life down east promised redemption. “Down east” meant the coast of Maine, which sailors knew was east from Boston, not north, and which, as every sailor also knew, was downwind with the prevailing westerlies. There, along the primeval coast, a race of hardy Anglo-Saxons apparently still followed the sea under sail, earning their bread as had their fathers. During the 1880s Winslow Homer began to produce influential watercolors evoking what “summer people” felt about fishermen. Homer

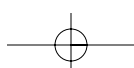
1050 **Maritime New England**

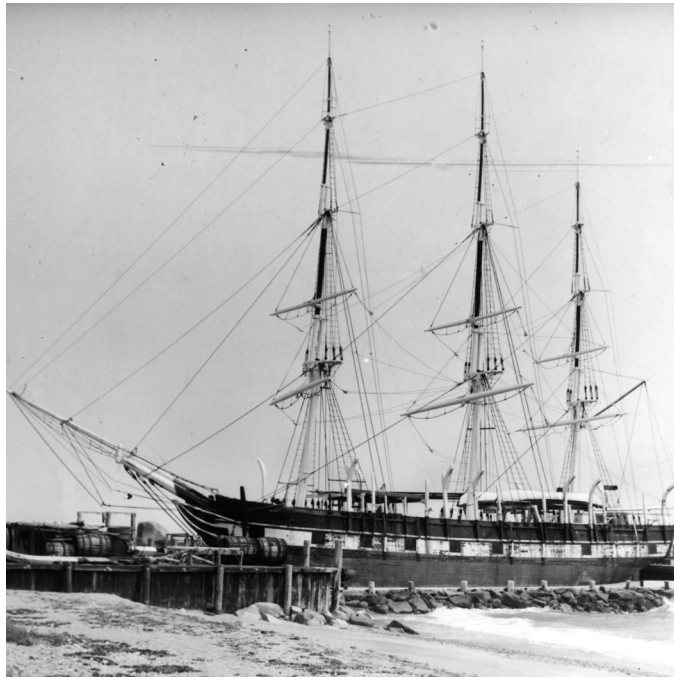
envisioned maritime New England as a heroic environment, emphasizing the masculine pioneering virtues of trial by nature.

Writers and painters in artists' colonies from Rocky Neck, Mass., to Monhegan Island ignored the poverty and tenuousness of fisherfolk's lives and the sordid aspects of deep-sea sail. Harvard historian Samuel Eliot Morison capitalized on this romanticism in 1921 when he published *The Maritime History of Massachusetts*. Morison wistfully ascribed Massachusetts's "moods" to "rugged faith" and to a struggle with "the ocean [which] knows no favorites"; and he claimed that those moods could be "traced in the national character of America." This sentiment bolstered a regional maritime preservation movement during the Great Depression. Connecticut's Marine Historical Association (later renamed Mystic Seaport) was founded in 1929, the Salem (Mass.) Maritime National Historic Site in 1938, and Maine's Kennebec Marine Museum in 1936. They all provided a priceless service by saving vessels and objects from New England's maritime past.

For the most part, however, the inspiration behind those institutions was blind to class strife, race, and environmental degradation. Yet large-scale capitalistic enterprise came to the maritime industries at precisely the time that sentimental artists were redefining the image of Yankee mariners. Fish dealers in Boston, who understood the benefits of vertical integration, formed the New England Fish Exchange in 1898 to control vessels, piers, and marketing, thus "stabilizing" the business. Fishermen saw "stabilization" as price control. To this day fishermen do not earn a wage but rather a share of the catch. And for more than a century they have complained of bribery, pilferage, and price-fixing that defraud them of their hard-won earnings. "Fishing is the rottenest goddam business in the world," is how one union man on the Boston waterfront put it in the 1970s; "everybody's out to screw you." Etching that sentiment next to the scriptural verse on the base of the Gloucester fishermen's memorial might have been blasphemous, but it would have balanced an appreciation of the awesomeness of the sea with a critique of capitalism's excesses. Fishermen lived with both.

New England's coastwise trade boomed between the Civil War and World War I. The era of the Colonial Revival, this was also an era of great economic expansion and inequality known as the Gilded Age. A growing population and industrializing economy demanded more shipping, and every harbor bristled with schooners' masts and steamers' stacks. Federal law had barred foreign competition in the coastwise trade since 1817, so all were American ships operated by American sailors. In the year 1835, for example, 3,879 coasting vessels arrived in Boston; by 1900 the number (including tugs and barges) had risen to 10,436. The queens of this fleet were unquestionably the white passenger steamers that ran down east from Boston to ports in Maine. A similar fleet, dominated by the famous Fall River Line, ran between New York City and ports in Connecticut and Rhode Island. Although the Fall River Line was notable for its regularity, safety, and elegance, the steamboating era was marred by several notorious catastrophes. A famous November storm in 1898 became known as "the *Portland* storm" after the steamer *Portland* sank, taking all 176 passengers and crew to the bottom.



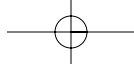


The whaleship Charles W. Morgan in 1934 during Harry Neyland and Colonel Edward H. R. Greene's operation of it as a museum in South Dartmouth, Mass.

Jaunty coastal steamers, whose black stacks and belching coal smoke contrasted so sharply with glistening white hulls and superstructures, allowed New Englanders to travel comfortably between Maine and New York, and on to such distant destinations as Philadelphia, Baltimore, and Savannah, Ga. They also had the potential for vast profits in an era whose hallmarks were trusts and tycoons. In 1901 Charles Morse, a native of Bath, combined the Portland Steam Packet Company with several other Boston-based steamboat lines to form the Eastern Steamship Company. Morse was not content to dominate New England shipping: he sought to control coastal shipping from Maine to Texas, and for a time he was referred to as “the Admiral of the Atlantic Coast.” Steamboats were big business.

But these same flamboyant years were a dark age for American shipping overall. American shipbuilders never competed successfully in the construction of steam-powered metal ships for international commerce, and the New England shipping industry began a precipitous downward slide after the Civil War. Only the sailing coasters hung on. Big specialized multimasted schooners were built for the coal trade, running from Chesapeake Bay and Delaware Bay to New England ports. Four-masters, five-masters, and six-masters, like those of the famous Palmer fleet, remained a common sight through the 1930s. Carrying energy, they were analogous to the oil tankers frequenting New England ports today. But the future of shipping was not with sail.

Tramp steamers with foreign flags dominated New England seaports' international commerce at this time. During the several decades before World War I, tramps brought raw wool from Australia and England for the textile mills of Massachusetts, and wool became Boston's largest import. Cotton also arrived by ship, as



did hides and animal skins for Massachusetts tanneries. Meanwhile, a steady stream of immigrants arrived by sea. During the last decades of the 19th century, 30,000 to 50,000 arrived in Boston each year, with the greatest number—more than 100,000 annually—arriving on the eve of World War I. Many of the region's future citizens got their first glimpse of New England from the waterfront.

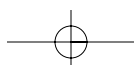
Until the late 20th century, life aboard ship (except for passenger vessels) was almost entirely a man's world. Wives of coasting captains, however, sometimes moved aboard ship with their husbands, as did adventurous whaling wives. Dorothea Balano's diary, published in 1979 as *The Log of the Skipper's Wife*, reveals one brilliant, earthy, and independent woman's struggle to cope with a hidebound masculine society. "I can't turn to anyone for understanding, let alone help," she wrote after one run-in with her husband aboard the four-masted schooner *R. W. Hopkins*, "because all the creatures on board are completely and absolutely in his power." The experiences of seafaring women have recently received considerable attention from scholars, as has the study of gender as a fundamental component of seafaring. Such work suggests that there is still much to learn about New England's maritime past, and that our understanding of it has the potential to be refashioned yet again.

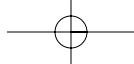
CONTEMPORARY MARITIME CULTURE

Coastal shipping companies faced serious problems when they attempted to resume operations after World War II, and they never recovered from the competition with newly empowered truckers. During the second half of the 20th century the interstate highway system's cars and trucks dominated New England as surely as had steamboats and schooners in a previous age. A handful of tugs and coastal tankers are all that remain of a once-vast coastal fleet. International shipping in American vessels, despite a brief rebound after each World War, is virtually moribund. Once-busy harbors are ghostly.

Modern ships from abroad arrive at highly automated terminals like the container port in Charlestown, Mass., or the oil terminal in Searsport, Maine. Port calls are fleeting. Cargo handling is containerized, and no longer tinged with exotic hints, as when off-loaded casks and bales were piled on piers. Understated as modern maritime activity is, it remains central to New England's economy. Yet none of the ships that arrive with bananas in Bridgeport, road salt in Portsmouth, or automobiles in Boston are manned by New Englanders or fly the American flag. American merchant ships carry only a fraction of the United States trade, and most graduates from the state maritime academies in Castine, Maine, and Wareham, Mass., do not find seafaring jobs.

Shipyards are defunct, too. The only large ships still built in New England in 2003 were naval vessels: destroyers at Bath Iron Works and submarines at Electric Boat. Smaller commercial vessels such as tugs and ferries used in American waters (which by federal law must be American built) are still constructed in small numbers at a few yards like Washburn and Dougherty in East Boothbay, Maine. Even yacht building is not nearly as prominent as it once was, although firms like Shannon Yachts in





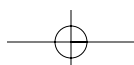
Bristol, R. I., maintain that tradition. Many of the mass-produced fiberglass boats found in New England marinas today were manufactured elsewhere and delivered by truck. While a few builders like Hinckley Yachts in Southwest Harbor, Maine, successfully shifted from building wooden yachts to producing fiberglass ones, most of New England's eminent wooden yacht construction yards failed during the 20th century.

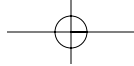
Recreational boating is nevertheless expanding. The percentage of sailboats continues to decrease, perhaps a reflection of Americans' fast-paced lifestyle. Pearson Yachts in Warren, R. I., long known for building quality sailboats, now builds and sells only a fast, 38-foot power cruiser. Meanwhile, luxury yachts are on the rise, as are easy-to-purchase and easy-to-operate boats like sea kayaks and outboards. Other changes loom. As recently as 40 years ago recreational boating was securely in the hands of enthusiasts who looked to tradition as their guide. They shared with commercial seafarers the idea, and some of the skills, of "the lore of the sea." Humility and time-honored practice were at the heart of good seamanship. Boaters today are not nearly as enamored of tradition. Raised with global positioning navigation systems and a sense of entitlement from horsepower to spare, most contemporary boaters do not see themselves as part of an ongoing maritime tradition.

One maritime tradition that ended abruptly in New England in 1983 was the America's Cup races that had been held off Newport, R.I., for more than half a century. The America's Cup, first awarded in 1851, is the oldest trophy in international sporting and is considered by sailors to be the holy grail of sailboat racing. Named for the rakish schooner yacht *America*, which sailed across the Atlantic and beat 15 of Britain's finest racers in 1851, the race and its ornate silver cup have inspired a century and a half of intense competition and technological refinement.

Perhaps no single family has played a more important role in the America's Cup than the Herreshoffs from Bristol. Nathanael Greene Herreshoff, the "Wizard of Bristol," built several Cup defenders, including *Reliance*, a monstrous sloop that carried 16,160 square feet of sail, and *Resolute*, which defeated Sir Thomas Lipton's *Shamrock IV* in 1914. During the 1930s, 1940s, and early 1950s, J-boats like *Endeavor* competed for the Cup. Huge and expensive, the J-class was replaced in 1958 with 12-meter yachts, whose teams nevertheless spend tens of millions of dollars either to defend or to challenge for the Cup. The New York Yacht Club successfully defended the Cup 24 times over a span of 132 years, much of that time on racecourses off Newport. But in 1983 the unthinkable happened: an Australian challenger, *Australia II*, defeated the American defender, *Liberty*. Since then the America's Cup has been held by an Australian syndicate, by a New Zealand syndicate, by the San Diego Yacht Club, and most recently by the Swiss syndicate that campaigned *Alinghi* to victory in 2003. For New Englanders, who had come to associate its defense with the Newport yachting scene, the change of venue meant the end of a long tradition.

Other changes have been even more catastrophic for the coast of New England. After factory trawlers from the Soviet Union, the United Kingdom, and elsewhere had precipitously overfished New England waters during the 1960s and 1970s, Congress passed the Magnuson Act in 1976. Guaranteeing Americans sovereignty up to





1054 Maritime New England

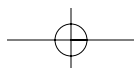
200 miles offshore, it drove away foreign fishing vessels. Then, in a classic case of setting the fox to guard the henhouse, the federal government allowed the fishing industry to regulate harvests of cod, haddock, scallops, yellowtail flounder, and other valuable species. The American fleet increased exponentially—and the end came quickly. In 1993, after almost two decades of colossal mismanagement, the New England Regional Fishery Management Council was forced to close most of Georges Bank to commercial fishing. Later, sections of the Gulf of Maine were closed. By the mid-1990s New England, once synonymous with America's best fishing, was the poster child for its most ineffective fisheries management. A 500-year run was over on what should have been an eternally renewable resource. An ecosystem, an economy, and a way of life were in tatters.

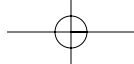
The mythical image of the fisherman, however, appears more resilient. During the 1990s, as New England fishing staggered on the verge of collapse and as fishermen were scandalously discarding tons of “by-catch” (less valuable species), AT&T, Rite Aid, and the makers of TheraFlu cough suppressant all ran television advertising that featured fishermen as heroic, vigorous, and dependable—the sort of people one could trust when deciding which products to purchase. In some ways, Madison Avenue's image of fishermen had become more valuable than fish.

Maritime New England is not all history. Despite the litany of decline, shipbuilders, ship operators, and fishermen continue to innovate, restricted as they are to niche markets. Hodgson Brothers in East Boothbay, a town with centuries of shipbuilding history, built several of the world's largest and most luxurious WEST SYSTEM (wood epoxy saturation technique) yachts during the late 1990s. They have orders for more. The Mashantucket Pequot reservation in Connecticut, best known for Foxwoods Casino, built a high-speed passenger catamaran in the 1990s to carry gamblers from New York City to Foxwoods, a route formerly popularized by



Factory workers putting fish away, 1977





Fall River Line steamboats. Commercial fishermen, meanwhile, targeted “under-utilized” species in the 1990s, pioneering sea urchin and slime eel fisheries for Asian markets.

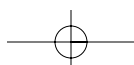
Traditional and modern maritime skills are alive. Tall ship sailors today have genuine skills, even though they sail on replica vessels. Expert wooden boatbuilders and sailmakers still ply their craft, as attested by the classified advertising in every issue of *WoodenBoat* magazine, published in Brooklin, Maine. These workers are not curiosities or recluses from modernity but craftspeople making a living in New England’s contemporary economy. The fishery as a whole may be dying, but every fisher who unties his or her boat confronts the sea’s challenge, even though modern technology has reduced some of the risk. People today could do much worse than look for role models among long-gone and present-day mariners, even as they cultivate awareness of how certain myths regarding maritime New England were constructed.

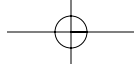
THE PAST, PRESENT, AND FUTURE OF MARITIME NEW ENGLAND

New Bedford combines the past, present, and future of maritime New England as well as any place. It was once the nation’s preeminent whaling port, and later one of the top three fishing ports. New Bedford’s waterfront is not nearly as busy today. Even the Seafarers International Union, the largest North American union representing unlicensed American mariners, moved its only union hall in New England from a tiny storefront in New Bedford to Boston in 2004. Nevertheless, the Waterfront Historic Area League, whose acronym is WHALE, had a much larger presence than the SIU. Today in New Bedford the sale of associations with whaling overshadows possibilities for making a living aboard ship. Heritage tourism prevails.

New Bedford is distinct in other ways. Whaleships brought numerous Cape Verdeans to the region, and “ownership” of the maritime past is shared between descendants of old-time white Yankees, whose preservationist ancestors founded the New Bedford Whaling Museum, and black Americans, many of whom are of Cape Verdean descent. In 1915 city fathers commissioned a bronze statue of a whaleman to ornament City Hall. Bela Pratt, the sculptor, asked for introductions to harpooners who might model for him. The city was full of men who had darted whales, but most were of African descent. Pratt rejected all of them, wanting, he said, an “Ahab type.” Pratt got his man, and the city got its statue, which still stands. That racially selective vision of the maritime past endured until 1987, when advocates of a multicultural approach to public history demanded an alternative monument. A statue of Lewis Temple, the 19th-century African American shipsmith from New Bedford whose Temple toggle-iron harpoon revolutionized hand whaling, now stands in bronze next to Pratt’s harpooner.

No port in New England has done more to promote its maritime heritage than New Bedford. The Whaling Museum supports modern scholarship and encourages accessibility to its fabulous collections. New Bedford’s historic tall ship is the *Ernestina*, ex-*Effie M. Morrissey*, whose unique history connects with many con-





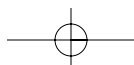
stituencies. Built at Essex, Mass., in 1894, *Ernestina* is the oldest remaining Grand Banks fishing schooner. It also carried freight in Newfoundland, explored the Arctic for the Museum of Natural History, and, as a Cape Verdean packet, was the last sailing ship to bring immigrants to America. Truly an anachronism, the ship made its last transatlantic voyage under sail (without an engine) carrying immigrants in 1964. Now owned by the Commonwealth of Massachusetts, *Ernestina* is a Sailing School Vessel actively operated to expose students to traditional seamanship and to the multicultural nature of New England's shipping. Long may it sail!

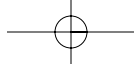
In ways now unimaginable, ships and harbors once dominated virtually every coastal New England town's economy, imagination, and sense of place. Robert Salmon's bold oil painting *Boston Harbor from Castle Island* (1839) and Fitz Hugh Lane's luminous *Gloucester Harbor* (1848) convey something of that lost world.

Sea-gazing Yankees today use the coasts more for leisure than work, and they regard coastal environments with an unprecedented ethic of conservation. As the population grows, however, the volume of cargo moving through New England's ports will increase, including the oil that threatens the environment with every shipwreck. Meanwhile, the number of workers per capita directly involved in marine transportation will decline because of automation. Future New Englanders may see a rejuvenated fishery, in which habitat-damaging otter trawls have been outlawed and in which individual fishers (or companies) manage specific fishery zones. This would end the free-for-all approach to seafood resources that characterized fishing for too long with disastrous results.

For centuries the sea symbolized timelessness and a threat to the humans who ventured there. Today the tables are turned. The sea appears fragile and vulnerable in the face of human arrogance. It is still a frontier for science, profit, and individual development, but it is also a trust calling for stewardship. New Englanders were once at the forefront of fishing, shipping, shipbuilding, and maritime preservation. Today the region's oceanographers, artists, activists, and mariners are leading the crusade to save our seas.

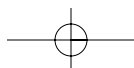
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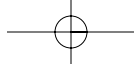




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W. Jeffrey Bolster





Atlantic Slave Trade Rhode Island's "Guinea trade" in African slaves dominated New England's slave trading during most of the 18th century. In relation to that of Britain, France, or Portugal, Rhode Island's trade in slaves was small, both in terms of the number of voyages and the size of slave ships. From 1725 to 1808, when the trade was abolished, Rhode Island merchants had bought an estimated 106,000 slaves, while traders in Great Britain, for example, had purchased approximately 2.5 million slaves. The smaller size of Rhode Island's ships made both buying and selling slaves easier on the open market (while making the "middle passage" even more miserable for the slaves than it was on European ships), and the high demand for New England rum made for a successful slave-trading operation for much of the 18th century.

Established in the first decades of the 18th century, the Rhode Island slave trade immediately conformed to a classic triangle of trade. Ships left New England bound for West Africa to trade cargoes of rum for slaves, whom they traded in the Caribbean for molasses, which was then delivered to Newport and Bristol and distilled into rum. The difficulties of farming along the coast of southeastern New England made for few resources to trade, but molasses from the Caribbean trade, distilled into rum, gave Rhode Island merchants a valuable commodity. The triangle trade was the most lucrative option for Rhode Island merchants. "Viewed from this perspective," writes historian Jay Coughtry, "the slave trade was simply the most profitable method of selling rum, Rhode Island's most important export." It has been estimated that by 1750, 90 distilleries were in operation in Massachusetts and Rhode Island. Whereas European ships frequently carried cargoes of cloth, guns, and iron to trade for slaves, Rhode Island's "rummen" displaced French brandy and held a monopoly on spirits in the West African trade.

Even as they traded in slaves and alcohol, New Englanders who pursued this trade spread to Africa and the Caribbean the reputation of the taciturn and sober Yankee. European slave traders saw New England slave-ship captains as "an industrious honest people, who despise the gaudy toys of the foolish for things more substantial and necessary for the life of man."

Most slaves in New England labored as domestic help, and the historian Joanne Pope Melish argues that such labor allowed white males to leave home and farm duties and enter mercantile and professional occupations, contributing to the transition from a household-based living to a market economy. Of these slaves, a few prospered under tremendous handicaps. John Quamino, who was brought

to Rhode Island from the Gold Coast in 1754, became a prominent member of the colony's black community and purchased his freedom in 1774 with lottery winnings. To buy his wife out of slavery, Quamino shipped on a privateer during the American Revolution. He was killed in its first battle.

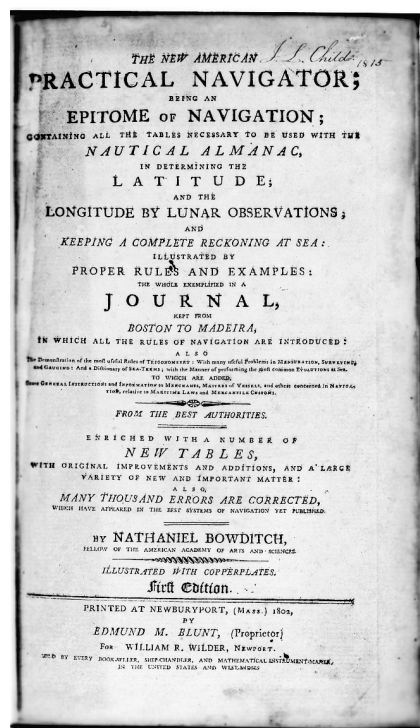
Newport had been the leader in American slave trading during the first half of the 1700s, but the British occupation during the Revolutionary War ruined many of its merchants, and the center of slave trading moved to Bristol, where it flourished for the rest of the century. Rhode Island had turned toward the slave trade after 1725 as the colony moved away from agriculture. The illegal trade that developed once the slave trade was abolished in 1808 formed in centers far south of Bristol. By then, Rhode Island's economy had begun to turn back to the land, toward the factory, fitfully exchanging the profits of manufacturing for those of trade in slaves.

Jay Coughtry, *The Notorious Triangle: Rhode Island and the African Slave Trade, 1700-1807* (1981); Philip Curtin, *The Atlantic Slave Trade: A Census* (1969); Joanne Pope Melish, *Disowning Slavery* (1998); James Pope-Hennessy, *Sins of the Fathers: A Study of the Atlantic Slave Traders, 1441-1807* (1968).

Louis Mazzari

Bowditch, Nathaniel (1773-1838) Mathematician, astronomer, mariner. Nathaniel Bowditch belonged to the generation of American Enlightenment thinkers who established the scientific and philosophical reputation of the new republic as, led by homegrown New England inventors and entrepreneurs, the United States entered the Industrial Revolution.

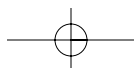
Born to a coaster captain and his wife in a rented house in Salem, Mass., Bowditch moved to nearby Danvers after his father's schooner foundered in the Caribbean. In a Danvers dame school he received his first formal instruction in reading, writing, and possibly arithmetic. In 1779 the family returned to Salem, and his father became a cooper. There Nathaniel entered Master Watson's school, where he confounded the teacher by solving a problem put before him for the purpose of proving that he was too young to study math. Bowditch left his studies in 1783 to help in the cooperage, his father having developed a strong affection for another famous product of New England, rum. While working for his father, Bowditch studied bookkeeping and was then apprenticed in 1785 to a succession of ship chandlers. Although his apprenticeships ended with his majority in 1794, Bowditch spent these years educating himself at the local philosophical library, which thanks to a public-minded Yankee privateer contained the *Philosophical Transactions* of the Royal Society of

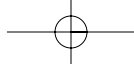


Title page, Nathaniel Bowditch, *The New American Practical Navigator* (1802)

London, one of Europe's oldest scientific organizations. Here Bowditch taught himself enough Latin to read Sir Isaac Newton's *Principia*, in which he found an error. He also acquired reading knowledge of Greek, French, Spanish, Portuguese, and German and began to read European scientific literature. Using knowledge thus gleaned, he compiled in 1788 an almanac for the year 1790 and created various scientific instruments for his own amusement. In 1794, at age 21, he began working as an assistant surveyor, taking over the business three years later.

Meanwhile, Bowditch had begun the voyages that would establish his fame. Five times between 1795 and 1803 he sailed to Europe and the West Indies—first as clerk, then as supercargo, and finally as master and supercargo. His interest in navigation derived from his mathematical work rather than vice versa, and on his fifth voyage he apparently left most navigation to his mate. In 1799 he began editing John Hamilton Moore's popular *New Practical Navigator* (1794), in which he eventually found more than 8,000 errors. That same year he was elected to the American Academy of Arts and Sciences in recognition of his mathematical work. By 1802 he had published his own *New American Practical Navigator*, which was endorsed by the East India Marine Society of Salem. That August, Harvard College recognized his work by giving him an honorary master's degree. Later he became a





Harvard overseer and fellow of the Harvard Corporation. In 1800 Bowditch acquired a copy of Pierre Laplace's *Mécanique céleste* and began an annotated translation of the four volumes then extant, a project that occupied him almost until his death. His added notes doubled the size of the original work.

Returning from his fifth voyage on Christmas Day 1803, Bowditch sailed his ship into fogbound Salem Harbor at night. This feat earned him a place among the heroes of the early republic. Previously known to philosophers, he now was famous among mariners; having studied under him made a sailor's career.

Bowditch spent the following years publishing aids to navigation. He surveyed the harbors of Salem, Beverly, and Manchester, Mass., from 1804 to 1806 and then brought out sailing directions for entering those harbors and Marblehead. A frequent contributor to the *Memoirs of the American Academy of Arts and Sciences*, he also published papers on astronomy and methods of measuring.

Soon after coming ashore, he became president of the Essex Fire and Marine Insurance Company. In 1823 he accepted positions as actuary of the Massachusetts Hospital Life Insurance Company and president of the Commercial Insurance Company in Boston, where he moved in 1826. Although a man of the Enlightenment, he was also a man of his time. He refused mortgage applications from women on the grounds that he could never foreclose on them. He also refused to possess the works of Lord Byron because of their immorality. Physically, he was also a man of his time: Bowditch suffered from tuberculosis.

Bowditch died in 1838 at home in Boston. By then his *New American Practical Navigator* had become so universally popular that on news of his death some European vessels lowered their flags along with the Americans. His *Navigator* remains the vade mecum of mariners and is still used in instruction at the U.S. Naval Academy and the U.S. Coast Guard Academy.

Harold Bowditch, *Nathaniel Bowditch* (1945); Nathaniel I. Bowditch, *Memoir of Nathaniel Bowditch*, 3d ed. (1884).

William B. Leavenworth

Cape Cod Canal The Cape Cod Canal is one of New England's best-known landmarks thanks to both its distinctive design and its status as the gateway to Cape Cod. As early as 1623, Governor William Bradford of Plymouth Colony and Myles Standish, his military leader, proposed that a watercourse be dug across the upper Cape from Cape Cod Bay to Buzzards Bay. A succession of committees studied the idea for almost 300 years.

Many groups were granted charters for construction, but no canal materialized until the 20th century.

During the last decade of the 19th century about 30,000 vessels, ranging in size from small fishing boats to battleships, rounded Cape Cod. Fog, shallow water, riptides, swift currents, and ice made the passage particularly hazardous. In fact, between 1875 and 1914 some 750 vessels were wrecked and more than 150 lives and countless dollars lost in the ocean graveyard off Cape Cod. At the turn of the 20th century one magazine writer described the area as "the most dangerous coast in winter to be found on the map of the United States."

The canal remained for decades only an idea because its reason for being was not to make money but to save lives. Washington began to show interest in the project in 1881, however, when military officials began to believe that a canal would be useful in time of war. Government money funded a number of starts, all of which were subsequently abandoned. A serious effort began in March 1884, and about 7,000 feet were dug before the project languished again. In 1909 construction recommenced under the auspices of the Boston, Cape Cod and New York Canal Company, with workers this time carving channels from the eastern and western ends of the isthmus. By 1910–11 they had completed a railroad bridge and two highway bridges over the canal site. The presence of many large glacial boulders, which had to be broken up with dynamite, slowed their progress, however. Finally, with great fanfare, the Cape Cod Canal opened to one-way traffic in a 15-foot-deep channel on July 29, 1914.

It was evident even on opening day that the canal needed substantial improvement. The depth of the channel was soon augmented to 25 feet, after which traffic increased steadily. The U.S. government took over canal operations in 1918, after a German U-boat sank a coal barge in nearby waters. In 1928 the canal was entrusted to the U.S. Army Corps of Engineers, who have remained in charge to this day.

The 1930s brought more improvements. The highway and railroad bridges over the canal were replaced. The design of the new railroad bridge reflected a prevailing belief among bridge builders at the time that one could improve on the stark ugliness of naked beams. Thus the new design featured two towers capped by steel abstractions meant to represent lighthouses. The bridge, known as a vertical-lift type, was completed in 1935. At that time the channel was widened to 500 feet, thus becoming the world's widest artificial waterway; it was also further deepened to 32 feet, which allowed two-way traffic. Once the

approaches were dredged, the total waterway attained its present length of 17.5 miles.

All of this work was completed just as World War II broke out. By the peak war year of 1944 almost 19 million tons of cargo were passing through Cape Cod Canal. Fifty years later slightly more than 6,000 vessels, two-thirds of them tugs and barges, were using the canal to carry almost 14 million tons of cargo through the canal annually, proof of the waterway's continuing commercial value in peacetime. Since the 2001 terrorist attacks information on canal traffic has been classified.

For the thousands of yearly visitors to the Cape, the canal is more than a commercial waterway. Its bridges mean that one has arrived. The twin towers of each highway bridge can be seen long before the canal comes into view, and children vie to be the one who spots them first. Few drivers look forward to the legendary traffic jams leading to the bridges with the same sense of anticipation, however.

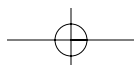
At summer's start the canal serves as both the real and the symbolic divide between the workaday world and Cape days by the sea, where mornings slip into lunch, beach clothes are the norm, and nights are for relaxing. At summer's end the bridges and canal signal time's rapid passage and something that is coming to a close, as carloads of summer folk toss pennies in the water below for good luck.

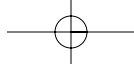
Robert H. Farson, *The Cape Cod Canal* (1977); U.S. Army Corps of Engineers, *Waterborne Commerce of the United States*, pt. 1: *Waterways and Harbors: Atlantic Coast*, 1994 (1995).

Thomas R. Lewis

Charles W. Morgan The most tangible piece of New England's whaling heritage is preserved in Mystic, Conn. Nearly 500,000 visitors each year walk the decks of the *Charles W. Morgan*, the last surviving American whaleship. Visitors to the old vessel contemplate the exploitation of human beings and other living creatures, the challenge and promise of cultural diversity, the value of preserving our natural resources, and the shared human experience at sea and ashore that the *Charles W. Morgan* evokes.

Though an icon from New England's maritime past, the *Morgan* is very much alive in the present. Whaling during the 19th century was a distinctly Yankee venture, and whaleships from Yankee ports sought their prey on all the oceans of the world. At the height of the industry's success in 1846, there were 737 American whaling vessels, only two of which did not hail from southern New England or the adjacent waters of Long Island Sound. Whaling under sail was almost exclusively a New England industry, for the fleets of foreign nations were paltry by comparison.





One of the many images mythologized in New England's popular culture is that of the sturdy whaler. For many Americans in the mid-20th century, a Gregory Peck-like Ahab became the model of a Yankee skipper. Whaling itself is also closely linked to the character of place often ascribed to New England. As brutal and exploitative as the whaling industry may have been, whalers from ports like New Bedford and Nantucket, Mass.—and their enterprising wives—are still admired for tenacity and self-reliance.

Visitors to Mystic Seaport may view the quarters that the captain's wife and children inhabited, compare those accommodations to the common sailor's forecabin, and clamber down into the hold, where thousands of barrels of oil were stowed over the years. Schoolchildren and adults alike may grasp the ship's wheel and help hoist a sail. They come face to face with whaleboats, tryworks, harpoons, and barrels, all implements from an era in which whales were flensed and processed for their oil and baleen aboard floating factories like the *Morgan*.

The *Morgan* was built in 1841 in New Bedford, whaling capital of the world (and the *Morgan's* homeport for most of its active career). Generations of expertise had gone into the vessel's design and construction. It worked the seas for 80 years, until 1921. The ship's career ended only a few short years before traditional whaling was abandoned altogether. For thousands of whalers it had been at once workplace, home, jail, and ticket to adventure. For hundreds of investors it had been a profitable capital asset.

The whaling industry always recruited crews from varied racial and ethnic groups. American Indians and African Americans worked shoulder to shoulder with white Yankees and men from abroad. In many cases foreign workers arrived in southern New England aboard whaleships, having joined the crews in their native land. On reaching Massachusetts, Connecticut, and Rhode Island, these newcomers created communities alongside those of the established residents. The diversity of New England's populace was enriched throughout the 19th century as Azorean and Cape Verdean whalers, and eventually their families, arrived in ports all along the region's southern coast. The *Charles W. Morgan* is material evidence of how a pre-eminent New England industry used (and abused) a very mixed workforce and changed the ethnic makeup of New England forever.

Initially, there was nothing particularly unusual about the ship: the *Charles W. Morgan* was a quintessential Yankee whaler built as the industry approached its zenith. What is unique about the vessel, however, is its second

career, whose length will soon exceed its first. The *Morgan's* second lease on life began in South Dartmouth, Mass., in 1925, when New Bedford artist Harry Neyland and Colonel Edward H. R. Greene, a wealthy whaling heir, first turned the old whaler into a museum ship. They wished to celebrate New England's maritime heritage, then seen as slipping away in the face of industrialization and urbanization. For men like Neyland and Greene, and many of their contemporaries, the Yankee character consisted of such admirable elements as courage, fortitude, and self-reliance, all represented by sailing whaleships. Traits such as these were understood as having helped the Pilgrims make a home for themselves in a forbidding wilderness, bolstering the patriots of 1776, and sustaining Yankee farming and mill families thereafter. At the beginning of the *Morgan's* life as a museum, those aspects of whaling received more emphasis in the ship's interpretation than did the ecological, multicultural, and exploitative aspects of whaling.

Over time the representation of New England has evolved. Changing perceptions of the region and of America's place in a rapidly changing world have been mirrored in the role played by the old whaleship as a tourist attraction and educational resource.

The *Morgan* was moved to Mystic Seaport in November 1941. During the 1950s and 1960s Mystic Seaport expanded rapidly, as hundreds of thousands of visitors each year sought out the ship and the village museum that had grown around it. At the height of the Cold War era, schoolchildren were shown a film entitled *Origins of Freedom*. Within the cabins and forecabin of the *Morgan*, the film said, could be found one of the seedbeds of American independence, for it was on Yankee-built and Yankee-run ships like it that our forebears discovered the meaning of freedom. Built to withstand the sea, capture whales, and make a profit, the *Morgan*, like many other patriotic icons during those uncertain years, mirrored the politics of the day.

By the late 1960s the old whaler was in need of extensive restoration. The *Morgan* had been embedded in gravel and sand since its arrival in Mystic. In 1941 its long-term survival had already been in question. Wooden ships need to float to breathe. In 1970 the museum devised a plan to ensure the vessel's future, a plan that changed the character of the old whaler. To meet the needs of the *Charles W. Morgan* and the other ships in its fleet, Mystic Seaport built its own preservation shipyard. This yard, the only one of its kind in the world today, established Mystic Seaport as a world leader in maritime historic preservation. In the decades since the *Morgan's* restoration in the new

shipyard, scores of other museums have sought out Mystic Seaport for guidance concerning historic preservation, interpretation, and programming. Designated a National Historic Landmark in 1977, the old whaleship has served as the catalyst for maritime preservation efforts both at home and abroad.

Richard Ellis, *Men and Whales* (1991); John F. Leavitt, *The Charles W. Morgan* (1973).

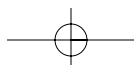
Glenn Gordinier

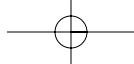
Clamming and Oystering Since prehistoric times people around the world have enjoyed the gastronomic delights of oysters and clams. In New England alone, for a century or more clamming and oystering have been a multimillion dollar industry. These tasty, highly nutritious shellfish possess qualities—perhaps exaggerated—expressed by the catch phrase “Eat clams, live longer; eat oysters, love longer.” Clams themselves can live between 25 and 30 years in the sandy or muddy areas between high- and low-water marks and in shallow waters beyond, either on or, more usually, several inches below the mud or sand; oysters, which live on the surface of the bottom, have a life expectancy of up to 46 years. Under ideal conditions, such as in a hatchery, oysters and clams during their spawning periods can produce larvae offspring numbering in the millions.

A relatively small number of oyster species exist worldwide, though only one species is commercially harvested in New England, the *Crassostrea virginica*, or Atlantic oyster. There are about 12,000 clam species known around the world, although only four grow and are consumed in New England. These are commonly called the hard clam (quahog), soft clam (steamer), surf clam, and razor clam; the razor is not generally harvested in New England while the surf clam is more popular in New York and the South.

Native Americans used hard clams for food and bartering. During the colonial period the purple area on the inside shell of the hard clam was fashioned into beads called wampum, or “Indian money.” From this use scientists gave the hard clam the Latin name *mercenaria* (“money,” in rather free translation). Other, more descriptive words for the hard clam refer to its size. From largest to the smallest they are the quahog or chowder clam ($3\frac{3}{4}$ in. or larger), the cherrystone ($2\frac{3}{8}$ in. to 3 in.), the topneck ($2\frac{2}{3}$ in.), and the little neck ($1\frac{7}{8}$ in. to 2 in.). The last three are usually eaten raw on the half shell.

Although oysters and clams today can be eaten fried, steamed, or incorporated into stews and chowders, or gussied up with toppings to make clams casino and oysters Rockefeller, one of the most popular ways to eat





them is still the way the Native Americans probably ate them—raw. Oysters and clams “on the half shell” require nothing more than a knife (or rock) to prepare, although many people add cocktail sauce, whose basic ingredients are ketchup, horseradish, and lemon juice.

The history of the oyster and clam fisheries follows a similar path in each of the coastal New England states, although in each state the industries retained distinct characteristics. The Indians and early settlers considered clams and oysters a limitless bounty; in some communities oysters and other seafood were a staple. Local inhabitants simply had to wade out into the shallows and pick up the clams and oysters as easily as they might pick wildflowers or berries in the fields.

As the coastal and inland populations increased, so did the demand for these shellfish. At this point watermen began to specialize in harvesting and selling clams and oysters to those near the shore and farther inland. By the mid-1700s it had become apparent that the oyster and clam beds were nearing extinction, and state and local authorities passed laws and restrictions on the harvest of the shellfish.

Many of these early shellfish laws remain essentially the same today with variations to fit local conditions. Most common are the closed season, daily catch limits, and town residence restrictions. The closed season law prohibits oystering, and in some places clamming, during the warm spawning months. From this law came the dictum that oysters should not be eaten in a month with the letter *r* in it. But even these and other laws were inadequate to maintain a good supply of shellfish, and shellfishermen began importing oysters and even clams. Oystermen in the 19th century imported oysters from Virginia to New Haven, Conn., and Wellfleet, Mass. But it was shellfish farming, cultivation, and, in the 20th century, hatcheries in which seed oysters and clams were reared for transplantation to their natural habitat that saved the industry.

Until the early 20th century, shellfish laws and regulations were imposed to maintain a supply of shellfish to meet the demand—to protect the oyster and clam from the consumer. Little was done to protect the consumer from the shellfish. Outbreaks of typhoid fever and gastrointestinal disorders brought on by eating bad shellfish appeared at Wesleyan University in 1894, in Atlantic City, N.J., in 1902, and elsewhere in 1924 and 1925. These outbreaks led to efforts by federal, state, and local authorities, scientists, and the fishermen themselves to find a way to make shellfish safer.

Practically every facet of shellfish production, from the beds to the consumer, is now controlled by federal, state, and local laws.

The National Shellfish Sanitation Program (NSSP) was established in 1925 to ensure that shellfish harvested in or imported to the United States were safe for human consumption. The NSSP is now administered by the Food and Drug Administration, which annually evaluates the states' shellfish programs to make sure they comply with the NSSP Model Ordinance. For example, all shellfish waters are frequently tested for purity. In fact, the federal regulations require higher purity standards of harvesting waters for oysters and clams for human consumption than are the standard for swimming areas.

Clams and oysters can be found in suitable ground near all the New England coastal states, but they are not equally viable commercially in these states. Maine had high oyster populations before and during the colonial period at Damariscotta, for instance, where the famous oyster-shell midden left by the Indians enabled archaeologists to explore the living habits of these early inhabitants. But there is little commercial harvesting of oysters in Maine today. The state now specializes in the mussel and soft-shell fisheries. Maine is ranked first in the nation in marine aquaculture production, which includes haddock, halibut, cod, salmon, scallops, mussels, clams, and oysters, but the last two represent a small percentage of the total.

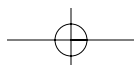
New Hampshire's short (about 18 miles long) coastline is not conducive to a major commercial clam or oyster industry, although such fisheries did exist in the 1800s. Still, residents in Portsmouth and elsewhere can obtain clam and oyster licenses that allow them to harvest a designated amount of these shellfish in their own waters for their own use as well as to sell them to local restaurants.

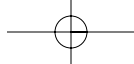
Massachusetts, particularly Cape Cod, was known as a producer of oysters in the early 1900s and even before. During the decades since then, oystering has had its ups and downs, and today the fishery is not what it was in its heyday. Nevertheless, oysters are still harvested in Wellfleet and Barnstable. Quahogs are now the principal shellfish crop of Massachusetts, and Chatham and Wellfleet are the largest producers. Quahogs are also harvested in Martha's Vineyard, Nantucket Sound, and Buzzards Bay. Many of these quahogs come from hatchery seed. Several of the Massachusetts coastline towns north of Cape Cod produce soft-shell clams rather than quahogs. Recreational and commercial clammers in Ipswich, among other towns, harvest soft-shell clams for family use or sell them locally. The only soft-shell company in Ipswich sells its catch to a wider market. The sea or surf clam fishery was viable up to the 1990s, but currently these clams are not being harvested.

For 100 years the oyster was king in Rhode Island. Huge oyster companies with their big steamers and gasoline-powered boats dominated the industry. The peak year of Rhode Island's oyster production was 1910; after that set failures, hurricanes, and other factors put the industry into a dramatic decline from which it never recovered. (Oyster populations followed a similar decline in Massachusetts and Connecticut.) The oyster industry in Rhode Island picked up a little around 2000, but it is essentially small, as is the soft-shell clamming industry. Today the only significant commercial shell fishery in Rhode Island is hard-shell or quahog clamming. The clammers are independent fishers who work on the “free bottom” throughout Narragansett Bay. No companies are involved in the fishery for, with the exception of a few leases for aquaculture, there is no leasing of clam beds in the state. There is also a certain amount of surf clamming near the mouth of the Narragansett Bay.

Connecticut has been for more than 100 years the foremost oyster producer in New England. According to the National Marine Fisheries Service, Connecticut has ranked first, second, or third in the United States from about 1988 to 1996 as the producer of the most oysters; it is always ranked first for the most valuable oysters measured in dollar value per bushel. The oyster business, however, has suffered crop failures in the last few years due mostly to the oyster diseases MSX and Dermo. Most of the shellfish companies have started to increase their clamming fisheries, previously only a supplement to their oyster business. Clamming was so successful that in 2001 Connecticut harvested more hard clams than any other state on the East Coast. In 2004 the prospects for the future looked promising.

Over the centuries a number of methods for harvesting clams and oysters have been tried. Among the methods used to harvest quahogs commercially and recreationally in New England are treading (practiced by the Indians and still in use recreationally), forks, raking (using short rakes, bull rakes, or the now-obsolete basket rakes), tongs, sail dredges, scuba divers, and rocking chair dredges (first developed for use in Narragansett Bay in 1945–46 and then employed in Massachusetts and Connecticut) and their replacement, hydraulic dredges, which are used commercially today. A variety of oar- or sail-powered boats were used; today clammers also use trailerable motor boats and larger diesel-powered craft. Like clams, oysters were harvested with tongs, rakes, and dredges. Oyster boats have ranged from early dugout canoes, simple rowboats, sailing sharpies, catboats, sloops, schooners, steamboats, to today's powered scows and large diesel-powered boats.





Throughout the centuries clams and oysters have held an important place in the culture of New England, especially in the form of the clambake and clam chowder, part of the New England heritage from the time of the Indians. Ernest Ingersoll's 1887 words still hold true for New Englanders: "A 'clam-bake' expresses the sum of all human happiness to the Rhode Islander, and to gather all his relatives and friends on the sea-shore, bake the roistering clam in dried seaweed, and eat it with other good things, fills his cup of joy!"

D. C. Belding, *A Report upon the Quaboug and Oyster Fisheries of Massachusetts* . . . (1912); George Brown Goode, *The Fisheries and Fishery Industries of the United State* (1887); Ernest Ingersoll, *The History and Present Conditions of the Fishery Industries* (1881); John M. Kochiss, *Oystering from New York to Boston* (1974); Clyde L. MacKenzie, Jr., Allan Morrison, David L. Taylor, Victor G. Burrell, Jr., William S. Arnold, Armando T. Wakida-Kusunoki, "Quahogs in Eastern North America: Part 1, Biology, Ecology, and Historical Uses" *Marine Fisheries Review* 64, no. 2 (2002); MacKenzie, Morrison, Taylor, Burrell, Arnold, Wakida-Kusunoki, "Quahogs in Eastern North America: Part 2, History by Province and State," *Marine Fisheries Review* 64, no. 3 (2002).

John M. Kochiss

Clipper Ships and the China Trade

In 1786 the Salem ship *Grand Turk* arrived at Canton (Guangzhou), introducing New England to a trade that would be integral to its economy for the next 100 years. The legacy of this trade survives in the commercial adroitness, technological ingenuity, and international perspective so central to New England culture. With the dissolution of the land-based Silk Route across Asia, European mariners rounded the Cape of Good Hope to trade directly with merchants in South and East Asia. The trade was driven primarily by Western demand for Chinese tea, silk, and porcelain. In 1757 the Chinese restricted foreign traders to an enclave outside the city of Guangzhou on the Pearl River.

The Chinese desired few commodities from the United States. Thus in the early 19th century New England mariners favored the route around Cape Horn and across the Pacific Ocean, which allowed them to acquire such natural products as Hawaiian and Marquesas Islands sandalwood, sea otter pelts from the northwest coast of North America, and sea cucumber from the Fiji Islands, all of which the Chinese desired. With many New England trading stations established at the sources of these natural resources, the China trade became the initial impetus for much of the strong American influence in Pacific regions that lasted well into the 20th century. As many Pacific trade resources became depleted, Americans followed the European practice of



The clipper ship John Cushing in Hong Kong harbor, ca. 1860

importing opium illegally. In an alternative to the trans-Pacific route, Americans purchased opium in Turkey and sold it illicitly along the coast outside Guangzhou. A British war with China from 1839 to 1842 resulted in the opening of several other ports to facilitate export of increasing quantities of tea.

The perishability of tea and the traders' desire to avoid shipping during monsoon season promoted the development of swift ships, or "clippers," designed to carry their cargo to market with the greatest possible speed. In its generic form, the word *clipper* describes ships that were designed for maximum speed rather than for cargo capacity. The 19th-century full-rigged merchant ships that became known as true clippers had visually distinctive attributes such as a sharply raked stem, aft-raking masts, and a narrow bow that expanded outward above the water line. The sloping counterstern extended over the water to increase capacity. Boston and other New England shipwrights excelled at constructing these graceful vessels, which carried such expressive names as *Romance of the Seas* and *Meteor*.

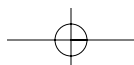
The demand for fast clippers increased with the repeal of the British Navigation Acts in 1849; American ships could now import tea directly to England. Gold rushes in California (1849) and Australia (1850) and the transatlantic packet lines all increased demands for fast ships capable of carrying people and cargo in quantity. The short life spans and high operating costs of these ships, however, permitted their use only for highly lucrative cargo. True clipper ships were an ephemeral phenomenon: none were built after 1855. But long after the decline in importance of America's

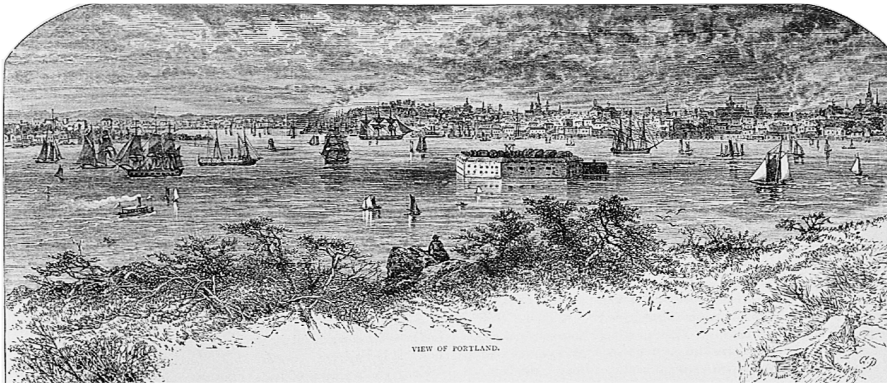
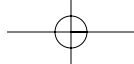
China trade, Chinese export goods continue to adorn the homes of wealthy New Englanders.

Dorothy Schurman Hawes, *To the Farthest Gulf: The Story of the American China Trade* (1990); Phyllis Forbes Kerr, *Letters from China: The Canton-Boston Correspondence of Robert Bennet Forbes, 1838-1840* (1996); David MacGregor, *British and American Clippers: A Comparison of Their Design, Construction and Performance in the 1850s* (1993); Ernest R. May and John K. Fairbank, eds., *America's China Trade in Historical Perspective: The Chinese and American Performance* (1986).

Daniel Finamore

Coastal Defense New Englanders have always played a major role in determining the coastal defense policies of the United States, and antiquated forts are still visible in many of the region's harbors. The British blockade during the War of 1812 was particularly disabling to New England's merchants. It was largely through their influence that the U.S. Navy included battleships of the sailing era in its pre-Civil War budgets. American naval doctrine, however, shortsightedly perceived these behemoths mainly as blockade busters: the big ships would sally from blockaded ports to disperse enemy squadrons at the doorstep. Rarely used, these wooden giants were kept in a state of permanent storage, available for duty but not consuming scarce navy funds. The ships of the line were often used as floating barracks and training ships, and they also served as prestigious commands for very senior captains. After the Civil War, the vessels were quickly converted into floating warehouses. The last of these relics, the USS *New*





Fortifications in Portland, Maine, 1881

Hampshire, was scrapped in 1898 after serving many years at Portsmouth (N.H.) Navy Yard under the name *Granite State*.

Unlike many countries, the United States has relied equally for coastal defense upon the army, which was responsible for the country's land-based defenses of maritime frontiers. Although coastal defense forts and batteries were a constant part of American military budgets, they were generally kept in active storage, rather than fully manned, until after the Spanish-American War, when the United States began to maintain full-time coastal defense. For the first time, state militias (now known as the National Guard) had a specific role to play. Guard units were trained and equipped as coastal artillery units and were expected to expand regular garrisons in times of war. Often, they were assigned to patrol unfortified stretches of the coast. The pre-World War II New Hampshire, Maine, and Rhode Island National Guards were essentially coastal artillery brigades.

Before World War II, New England coastal artillery fortifications were concentrated at Portland, Maine; Portsmouth, N.H.; Boston and New Bedford, Mass.; and Narragansett Bay, R.I. Antisubmarine nets, mines, and patrols were concentrated in Portland, base of the North Atlantic navy operations, and in Portsmouth, home of the Portsmouth Navy Yard (renamed in 1945 the Portsmouth Naval Shipyard). When it became obvious during and after World War II that American coasts needed to be defended by shore-based patrol aircraft and warships, soldiers were stripped from coastal artillery garrisons and converted to either field or anti-aircraft artillery. Fort Constitution in Portsmouth Harbor, no longer the modern symbol of coastal defense, was replaced by the Brunswick (Maine) Naval Air Station, with its complement of Cold War naval antisubmarine-warfare aircraft squadrons. Substantial World War II artillery bunkers remain off the coast of Portland on the

Casco Bay Islands and near the outlet of the Piscataqua River below Portsmouth.

Although coastal defense is commonly perceived as a national responsibility, some states have attempted to maintain coastal defense capabilities on their own. During the Civil War, Massachusetts (along with New York and Pennsylvania) set up autonomous artillery and infantry forces for coastal defense. These were quickly absorbed, however, into the Union Army. In the later 19th century, several states, including Massachusetts, Connecticut, Rhode Island, and Maine, maintained naval militias. The high cost of maintaining old, obsolete, and worn-out warships, however, soon ended that practice.

The realities of World War II coastal defense had faded from the public mind by the 1960s when a popular Hollywood film, Norman Jewison's *The Russians Are Coming! The Russians Are Coming!* (1966), presented comic New Englanders responding to a supposed invasion when a Russian submarine is grounded off the coast of a small Maine island. Today, many historic coastal defense fortifications, whether from the 19th or the early 20th century, have been converted into parks for public seaside access, and the real job of coastal defense rests with satellites and aircraft far beyond the horizon.

Raymond A. Brighton, *They Came to Fish: A Brief Look at Portsmouth's 350 Years of History* (1994); Howard I. Chapelle, *The History of the American Sailing Navy* (1949); Fred T. Jane, *Jane's Fighting Ships, 1914* (1969); New Hampshire Department of Resources and Economic Development, *State Coastal Properties* (1983).

Scott E. Green

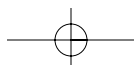
Cod Of the many natural resources that define New England, few have been as prominent as the North Atlantic cod. From the Massachusetts cape that bears its name to the coastal communities built upon its bounty, cod (*Gadus morhua*) has provided New England

with prosperity, notoriety, and sustenance. On Georges Bank, the Grand Banks, and many other smaller banks in the Gulf of Maine, codfish inhabited marine communities rich in nutrients, zooplankton, and phytoplankton. A large, predatory groundfish, cod thrived in these productive waters, once numbering in the millions and dominating fish stocks in the Northwest Atlantic for centuries. Native Americans pursued inshore fisheries with bone hooks, and shell middens from 5,000 to 400 years ago furnish evidence that cod once averaged greater than 3 feet in length and were the most dominant species caught by coastal inhabitants.

Beginning in the 16th century, Europeans were drawn to the massive cod populations in New England's coastal waters. In 1616 Captain John Smith's *Description of New England* portrayed an abundance of cod in the region such that "a man may take with a hooke or line what he will." Indeed, the development of cod fisheries in New England was one of the many great promises the region held for settlers. In the 17th century cod caught with hooks and lines from small inshore vessels were dried, salted, and then exported across the Atlantic to markets throughout Europe. As systems of capital and markets grew, so, too, did New England fisheries. By the end of the American colonial era, large oceangoing schooners were landing more and more cod for a well-established international market. By 1775, with a workforce of 4,000 men, Massachusetts alone was producing more than 250,000 barrels of fish yearly. As evidence of the economic preeminence and sacred nature of the cod in Massachusetts, a gilded wooden carving of the fish was hung in the old statehouse in 1784 and was later moved to the new statehouse on Beacon Hill.

In the 19th century rail transportation enabled the development of domestic markets for fresh fish, transforming the New England fisheries economy. Shifting from handlines to longlines set by men in dories, the fisheries of the mid-19th century focused on cod and other groundfish to supply these markets. Technological advances in the early 20th century produced the otter trawl, and the ecological impacts on cod populations escalated exponentially. Otter trawls allowed cod and other species of all sizes and ages to be caught and landed or discarded as by-catch. In the 1920s came the first drastic decrease in cod size and breeding stock, an event whose impact continued to ripple through the Northwest Atlantic's marine ecosystems for the rest of the 20th century.

International fleets of factory trawlers began fishing the Northwest Atlantic in the 1950s, not just for cod but for any species worth catching. The production capacity and





A cod has hung in the Massachusetts State House since 1784

trawling capability of these industrial trawlers was unprecedented. In 1976 the Magnuson Fishery Conservation and Management Act redefined the mission of the National Marine Fisheries Service and created a conservation zone extending 200 miles off the U.S. coast that excluded all foreign fishing vessels. Instead of managing and protecting fish stocks, however, the act allowed domestic fishing vessels to complete the overfishing that foreign vessels had begun. When Georges Bank and the Grand Banks were closed to commercial fishing in the early 1990s, cod were greatly depleted. With biomass levels well below what they had been 100 years or even 50 years earlier, cod were unable to perform their roles in ecosystems. The fate of cod in New England's waters thus remains tenuous at best. Although reports have indicated an increase in the number and size of codfish in the region, it is readily apparent that cod may never again support fisheries like those that brought New England so much economic and cultural wealth.

Harold A. Innis, *The Cod Fisheries: The History of an International Economy* (1978); Mark Kurlansky, *Cod: A Biography of the Fish That Changed the World* (1997); Robert S. Steneck and James T. Carlton, "Human Alterations in Marine Communities: Students Beware!" in *Marine Community Ecology*, ed. Mark D. Bertness, Steven D. Gaines, and Mark E. Hay (2001); Daniel Vickers, *Farmers and Fishermen: Two*

Centuries of Work in Essex County, Massachusetts, 1630-1850 (1994).

Andrew N. Case

Cuffe, Paul (1759-1817) Sea captain and entrepreneur. Paul Cuffe, son of a former slave, Coffe Slocum from Akan-speaking West Africa, and Ruth Moses from a local Wampanoag community, was born on Cuttyhunk Island in Buzzards Bay within the Massachusetts Bay Colony. Within a few years the family settled among the native community in the town of Chilmark on Martha's Vineyard. Cuffe later pointedly described living apart "from the main," suggesting dimensions of the family's initial separation from New England's mainstream colonial Anglo-Puritan culture.

The family moved in 1766 to the mainland, where Cuffe found ready employment in the lucrative and culturally encompassing whaling industry of Dartmouth, Mass. Subsequent struggles for the intrepid mariner during the Revolution originated both from dangerous encounters at sea and from threatening social forces ashore. The former included imprisonment with his Yankee crew by the British in New York as well as repeated setbacks and beatings by reputed pirates as he dodged the British blockade on commercial runs from the mainland to Nantucket Island. He was also incarcerated with his brother John for tax eva-

sion after the two and other "Poor Despised blacks" had twice petitioned the Massachusetts General Court on grounds of taxation without representation.

Whether as a disruptive political activist or as a perpetual social outsider, Cuffe survived profitably among the homogeneous white community of Westport, Mass. He owned 200 acres of land, including his farm and a shipyard, where he constructed seven oceangoing vessels in partnership with his Native American brother-in-law Michael Wainer and two sons-in-law who were former slaves. Over opposition he built Cuffe's [*sic*] School, the town's first community school. He joined the Westport Meeting of the Society of Friends in 1808 and, within the year, established Cuffe and Howards, a New Bedford, Mass., mercantile enterprise. Always identified in the media as a captain of black crews, he commanded or ordered vessels into coastal trade from Maine to Louisiana, transatlantic commerce from Portugal to the Baltic Sea, and whaling off Africa and South America.

This black merchant who navigated from Anglocentric New England repeatedly exceeded and astonished competitors. Cuffe reaped large profits over the objections of recalcitrant residents of Vienna, Md., an eastern-shore slaveholding community, and survived months awaiting departure for the Baltic from the Southern slaving entrepôt of Savannah, Ga. Despite approaching British-American hostilities, Cuffe embarked in 1811 for Britain's West African colony of Sierra Leone and then for England, but his Federalist leanings had their price. To extricate an inbound British cargo from customs, he had to call on President James Madison; during the War of 1812 the Republican-dominated Congress denied the Yankee Cuffe a trading license to Sierra Leone.

Precautions against America's malignant racism and institutionalized slavery shaped Cuffe's decision making to the very end. Life in the New Bedford maritime community seemed more accommodating to people of color than it was elsewhere, but social ostracism plagued Cuffe there, as it would Frederick Douglass years later. Identification as an African, prospects of legitimate commerce, and antislavery motives drew him to focus on Sierra Leone, the sole West African asylum for freed slaves and disenchanted African Americans inclined to emigrate. As a pioneering Pan-African, Cuffe envisioned a triangular commercial scheme linking three continents. In 1816 he embarked with 38 passengers and a cargo of \$5,000, only to lose it and more upon arrival.

Notwithstanding the costly philanthropy of underwriting emigration, Cuffe concluded

that blacks might better “rise to be a people” in Africa than in white slaveholding America. Even local Friends, although opponents of slaveholding, interred the black Friend apart from his white coreligionists on his death in September 1817—or, more accurately, apart from regional as well as national mainstream culture.

Arthur Diamond, *Paul Cuffe, Merchant and Abolitionist* (1989); Sheldon H. Harris, *Paul Cuffe: Black America and the African Return* (1972); George Arnold Salvador, *Paul Cuffe, the Black Yankee, 1759–1817* (1969); Lamont D. Thomas, *Rise to Be a People: A Biography of Paul Cuffe* (1986), retitled *Paul Cuffe: Black Entrepreneur and Pan-Africanist* (1988).

Lamont D. Thomas

Dana, Richard Henry, Jr. (1815–82)

Author and lawyer. Richard Henry Dana, Jr., was the son of the poet and editor Richard Henry Dana, whose interests in law and literature he inherited. Whether his skill in writing was hereditary or learned, his *Two Years before the Mast* (1840) is remarkable chiefly for the style through which the point of view of a “common sailor” is presented. No common sailor himself, Dana was a rusticated Brahmin who shipped as a green hand on the *Pilgrim* in 1834, bound for California. He returned on the *Alert* in 1836 to continue his studies, interrupted initially by illness, at Harvard College.

The appearance of *Two Years before the Mast* made Dana known outside Boston and Cambridge, where he was already recognized as the promising scion of a solid if somewhat romantic lineage. He bolstered his incipient law practice the following year by publishing *The Seaman's Friend*, a manual of the rights and duties of merchant sailors, mates, and masters. Despite the publication of numerous other books, a distinguished legal career, and various political endeavors, Dana is remembered chiefly for *Two Years before the Mast*, which has never been out of print.

This classic narrative provides gripping depictions of storms at sea, of the hard labor of sailors loading hides in California for use in New England's shoe industry, and of the mixed society of Americans, Russians, Spaniards, and Indians in frontier California. But towering above all else is the figure of Frank Thompson, the monomaniacal captain who bullies and flogs his crew. (Thompson was the inspiration for Herman Melville's Captain Ahab.) Through Thompson's floggings and unquestioned power, Dana linked the plight of the common sailor to that of the slave. Even as the life of the sea receded in importance to New England's economy by 1900, *Two Years before the Mast* remained a popular means of identifying New Englanders' heritage as a seafaring people. When Dana added an appendix

to the work recounting changes that had taken place in California, such as the establishment of the thriving city of San Francisco where there had been only a trading post in 1834, he captured the nostalgia of New Englanders and Americans for an era of seafaring adventure gone by.

Dana aptly embodies the struggle in the New England mind between the conservative desire for order and the liberal championing of the disadvantaged. Passages in *Two Years before the Mast* that reflect the horror and indignity of flogging are balanced by the coolness of the discussion of punishment in *The Seaman's Friend*. In 1851, when the latter work was revised after the abolition of flogging, Dana specifically defended the use of force “to secure the instant performance of duty.” Perhaps the change (if it is one) in Dana is best illustrated by his response to the *Somers* affair in 1842. Called upon to comment on the justice or injustice of Alexander Slidell Mackenzie's action in hanging of three of his men for intended mutiny, Dana sided firmly and vociferously with the commander. Perhaps ironically, the Boston conservative William Sturgis became the most articulate of Mackenzie's attackers in New England, and the exchange of letters between the two disputants (published in the *Boston Courier* in 1843) marked the complexity of the Brahmin Dana's response to the tragedy.

The heart of Dana's philosophy seems to be the importance of law to the preservation and advance of civilization. Ridiculed by D. H. Lawrence for his attempt to idealize brute labor, Dana emerges consistently as a champion not of individual classes but of civilization itself—in its highest New England form. Thus his reproof of flogging in *Two Years before the Mast*, along with his later aggressive support of abolition and his defense of the runaway slave Anthony Burns, emanated from the sensibilities that rendered him fit to be a member of Boston society. Those same sensibilities warned Dana that were he further brutalized on the coast of California, he would have no choice but to be, in his terms, “a sailor for the rest of my days.”

Charles Francis Adams, *Richard Henry Dana: A Biography* (1968 [1890]); D. H. Lawrence, *Studies in Classic American Literature* (1977 [1923]); Robert F. Lucid, ed., *The Journal of Richard Henry Dana, Jr.* (1968); Philip McFarland, *Sea Dangers: The Affair of the “Somers”* (1985).

Robert Durwood Madison

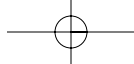
Disasters The New England coast is renowned for its natural beauty, and the adjacent cruising grounds enjoy a worldwide reputation among sailors. Unfortunately, the same geographic features that attract tourists and

amateur sailors in summer make New England waters very dangerous for shipping. From Cape Cod south, the inshore waters are shoal, with shifting sandbars. North of Cape Cod, and increasing with the latitude, are thousands of ledges and half-tide rocks. Around all these bars and ledges sweep tidal currents that vary constantly, some of them at times strong enough to pull navigational buoys out of sight under the surface. Combined with the treacherous waters are weather conditions that in an hour may vary from flat calm to a gale, and from miles of clear visibility to a horizon of less than 100 feet in fog. It is not surprising, therefore, that maritime disasters have claimed thousands of vessels and tens of thousands of lives since the first European explorers coasted the shore in the 16th century.

The Pilgrims who settled Plymouth found the grave of a shipwrecked European among Native American habitations. English fishermen who frequented the Maine coast in the first decades of the 17th century rescued survivors of a French shipwreck. Death in a maritime disaster was as common an occurrence in New England's age of sail as is death in a plane or car crash today. Many maritime disasters profoundly affected the vessel's and crew's community of origin, as well as the merchants who had financed the voyage. Early in the 17th century the new settlement at New Haven, Conn., shipped an entire year's product in a vessel that was never heard from again; the city never became a significant port. Disasters also affected the communities where the wreckage and bodies came ashore; in the older cemeteries of nearly every coastal community in New England is at least one monument marking the common grave of unidentified, unclaimed shipwreck victims. In particularly treacherous areas, salvage constituted an important part of the local economy.

Perhaps the earliest recorded New England shipwreck was that of the *Angel Gabriel* in a 1635 hurricane; this ship had just arrived at Pemaquid, Maine, when it sank in the harbor. In the 18th and 19th centuries, disasters were carefully recorded in local newspapers and, with the advent of mariners' societies such as the Seamen's Bethel, were compiled and recorded monthly. *The Sailor's Magazine* of March 1842 has nearly three pages of such losses, including this typical example: “Schooner *Azora*, Lemont, of Bath, Maine, for Edgartown, endeavouring to make the mouth of the Kennebec, evening of 1st Jan. wind fresh, struck on the Whale's Back, near Pond Island, whence she drifted onto Salter's Island, and went to pieces. Capt. L. and crew were all lost, excepting two men—one coloured.”

With the advent of the U.S. Lifesaving Ser-



vice, authorized by Congress in 1878, and of a well-maintained system of navigational aids (buoys and lights), the number of shipwrecks decreased dramatically. It was reduced further by the advent of steam power in the 19th century and reliable diesel power and electronic communications in the 20th century. Modern navigation and communication, however, did not prevent the loss of the Italian luxury liner *Andrea Doria* in a collision with the Swedish-American liner *Stockholm* in heavy fog off Nantucket, Mass., on July 25, 1956. This was, in fact, a classic case of “radar assisted collision”; the incident was still being taught in merchant marine academies’ collision avoidance courses as recently as 2002. When the *Andrea Doria* collided with the *Stockholm*, all 52 fatalities resulted from the impact of the collision—not drowning—and the survivors were successfully transferred to the *Isle de France*, another liner that happened to be nearby at the time.

Thankfully, the era of great maritime disasters with substantial loss of life is probably behind us, although during the late 20th century the government abandoned selected buoys and electronic navigational aids in a cost-cutting program. Vessels still sink, and several mariners—mostly fishermen—are lost in New England waters almost every year. New England is not likely to experience again the disappearance in a storm of a fully laden passenger ferry like the *City of Portland*, which sank on Stellwagen Bank on November 26, 1898, or the sinking of a ferry loaded with circus animals, as in Penobscot Bay in the 19th century.

Today’s maritime disasters cause more harm to the environment than to sailors or passengers. For instance, when the Norwegian tanker *Tamano* grounded near Hussey Shoal in Portland, Maine, in the summer of 1972, 100,000 gallons of heavy petroleum spilled into the waters of Portland harbor. When the Liberian tanker *Argo Merchant* ran aground southeast of Nantucket in 1976, the resulting oil slick spread for almost 100 miles. Since the Oil Pollution Act of 1990, Congress has required all ports handling oil to have the necessary equipment and plans to mitigate spills, and in certain locales, such as the Piscataqua River, local partnerships of oil-handling facilities have created spill-response teams. Still, the threat of oil spills in harbors and on exposed beaches and ledges is daunting. New Englanders today know that when a vessel founders or runs onto a ledge, the crew is likely to be saved, and the victims will be the flora and fauna destroyed by leaking oil or other toxic chemicals, giving a whole new meaning to the term “maritime disaster.”

John Perry Fish, *Unfinished Voyages: A Chronology of Shipwrecks in the Northeastern United States* (1989);

The Mariner’s Chronicle, Containing Narratives of the Most Remarkable Disasters at Sea (1834); William P. Quinn, *Shipwrecks around Maine* (1983); Quinn, *Shipwrecks around New England* (1979).

William B. Leavenworth

Fishing Fish have fascinated the inhabitants of North America’s eastern corner since long before European explorers first spotted teeming multitudes of cod in the cold waters off Newfoundland. Coastal people along the Gulf of Maine and Bay of Fundy are believed to have practiced a marine subsistence strategy as long ago as 9500–6000 B.C. Swordfish remains and other artifacts found in sites associated with the Red Paint people suggest that fishing was one aspect of the Maritime Archaic Tradition. Changes in sea level over the centuries have hampered a full investigation, because many of the suspected sites are currently submerged; scallop draggers, divers, and marine scientists, however, have uncovered numerous artifacts.

Reports of the remarkable abundance of fish identified in 1497 during John Cabot’s voyage drew fishermen from Portugal, Spain, the Basque country, France, and England’s West Country to fish the Grand Banks during the next 10 years. John Smith wrote in 1614 that fewer than two dozen men were able to hook 60,000 fish in a month off the Isles of Shoals. Not until 1621, however, was a permanent fishing settlement founded on the Avalon Peninsula of Newfoundland.

Gloucester, Mass., was settled in 1625 when rival fishing companies from Dorchester and Gloucester, England, sent crew, salt makers, and shipbuilders to compete for coastal, Georges Bank, and Grand Banks fish. As fishermen explored the region, they soon found a variety of rich grounds; Browns Bank, Stellwagen Bank, Jefferies Ledge, Cashes Ledge, and other areas were swimming with mackerel, herring, redfish, cod, halibut, haddock, and lobsters, not to mention a bounty of whales.

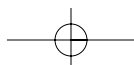
Marblehead, Mass., founded a few years later, became North America’s largest fishing port by the mid-18th century, but by the 1840s Gloucester had become New England’s leading fishing port. Renowned for its beautiful two-masted schooners, Gloucester and its fishing industry were immortalized in such books as James Connolly’s *Gloucestermen* (1930), revealed in stories about legendary figures such as Howard Blackburn, and depicted in the oil paintings of Fitz Hugh Lane. Before the Civil War, Newfoundlanders, Danes, Swedes, and Portuguese were active in the Gloucester fisheries. By the early 1900s Italian fishermen had joined the fleet, and Sicilian fishermen arrived later. Finns first came to quarry granite, but stayed for lobstering.

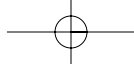
For the first several centuries of New England fishing, most fish were salted and dried for long shelf life. During the 1920s, however, a Gloucester native, Clarence Birdseye, developed a “quick freezing” technique to freeze fish for home storage, eventually helping the Gorton Company develop the frozen fish products so popular today. Despite difficulties associated with strict regulations and recent downturns in the stocks of cod, haddock, and yellowtail flounder, Gloucester remains an active port. Its trawler-fleet crews are predominantly Sicilian American, while gillnetters and hook fishermen tend to be of mixed “Yankee” stock.

Boston was built on a maritime economy that included fishing, shipbuilding, and commerce. During the colonial era, fish were among the four most valuable exports from the British American colonies, and Boston was the heart of New England’s commercial network. Boston pioneered in later years, as well; early in the 1900s the Italian fishing fleet of Boston adopted the new otter and beam trawls towed by powered vessels. Ultimately this technology would revolutionize the fishery. Onshore processors filleted the fresh fish for consumers and demand increased. The fresh fish business peaked in Boston during the 1930s, when 300 million pounds were landed annually at the Fish Pier.

New Bedford, Mass., was founded in 1652 when 36 settlers purchased land from the Wampanoag Indians, though it was almost destroyed 23 years later during King Philip’s War (1675–76). In the 19th century, New Bedford became the whaling capital of the world. As late as 1857 there were 429 registered whaling vessels in New Bedford and only 271 registered elsewhere in the United States. But the discovery of petroleum in 1859 replaced the demand for sperm oil, and whaling quickly declined. After an interlude of about 40 years when the textile industry dominated in New Bedford, maritime interests returned to the fore. With its catch of deep sea scallops and yellowtail flounder, New Bedford generally ranks among the top 10 ports in the nation for the value of its landed seafood. In 2002 the value of landings was \$169 million, first in the nation. Although participants in the harvesting sector of New Bedford’s fishing industry include immigrants from Norway, Sweden, Portugal, Poland, Newfoundland, Cambodia, and Vietnam, Norwegians have traditionally dominated the ownership of scallop vessels, whereas Portuguese have dominated the trawl fleet.

Portland, Maine, is a more recent entry on the rolls of New England’s significant fishing ports. Though Portland, originally named Falmouth, was settled less than a decade after Gloucester in 1632, it was destroyed in an at-





Weighing and stacking fish in Gloucester, Mass., 1991

tack by French and Indian forces in 1703 and again by the British in 1775. Reestablished as Portland, its shipping grew rapidly after the Revolutionary War. Fishing has long been a part of Portland's economic diversity, and the city has been an important transshipment point for fish and lobster from elsewhere in Maine. Portland made an immense contribution to New England's fishing industry in 1986 by introducing the first display auction on the East Coast. Before this, New England's fishing industry had relied on a dealer-driven, sight unseen, daily auction of fish. For years, Boston's Fish Exchange set the prices for the whole region. The system favored dealers and resulted in abuse of fair trading practices. The success of Portland's display auction has led to efforts to replicate it in Gloucester and New Bedford.

Rhode Island's economy was never dominated by fishing. Nevertheless, a commercial fishery out of Newport and Sakonnet Point originated in the 17th century. Indeed, Sakonnet Point still has a fish trap that is said to have been in continuous operation for 300 years. The Upper Narragansett Bay ports of Warren and Bristol hosted an important oyster fishery until the 1940s, and the shellfish industry remains actively engaged in clam fishing in the bay. As Newport became more fashionable and the waterfront turned to supporting recreational pursuits, Point Judith (Galilee) became the center of oceanic fishing. Point Judith benefits from its geographic location at the nexus of northern and southern fish

species. Groundfish, bluefish, scup, squid, butterfish, mackerel, and herring are all sought by local fishermen. A fishermen's cooperative at Point Judith has been a highly successful marketing platform from its founding in 1948. The town remains a significant port in the region, with landings by value ranking it 16th in the nation in 2003.

The old dory fishermen working hooks and lines from sailing vessels and romanticized in books and film have been replaced by fishermen wielding polyester nets or longlines a mile in length. Armed with hydraulics and high-tech electronics, they pursue fish on diesel-powered boats built of steel or fiberglass. Changes in technology, gear, prey, markets, and costs have all been faced with varying degrees of success. Nevertheless, some aspects of the fishing life have changed little.

New England's fishing fleet is predominantly owner-operated. Until recently, fishing was a family tradition with fathers and sons or uncles and nephews often fishing together. Women commonly served as "shore captains," performing a variety of essential jobs such as bookkeeping, ordering supplies, contacting gear manufacturers, and lobbying for improvements in fisheries management, in addition to running their household and rearing children. While today many fishing families are encouraging children to stay in school to increase their opportunities for alternative career choices, some have found that their children return to fishing after trying different jobs. Though the practice is still relatively rare,

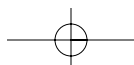
more and more women fish and refer to themselves as fishermen. Regardless of their position, whether owner, captain, or crewmember, most fishermen love the work and value their independence.

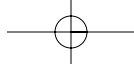
The typical 20th-century pattern for vessels that fished offshore, on Georges Bank, for example, was to take seven- to 14-day trips, then stay home for three or four days to unload, make repairs, mend nets, resupply, and see families before departing for another trip. The size of the crews varied from an ideal six on the average offshore groundfish boat to 10 or 11 on scallop boats. Day boats, typically with a four-man crew, would leave the dock at 4:30 or 5:00 A.M. and return anywhere from 2:30 to 7:00 P.M.

Although the largest fishing vessels tend to congregate in ports that have the infrastructure to support high volumes of fish, New England's small ports are critical components of the industry. New Hampshire's few miles of shoreline, combined with the Piscataqua River, support a small but active fishing fleet in Portsmouth, Seabrook, Rye, and Newington. The rocky coast of Maine east of Portland supports hundreds of lobster fishermen as well as groundfishermen, herring fishermen, and shrimp fishermen. Cape Cod, from Sandwich to Provincetown, boasts a wealth of fishing communities that contribute to the regional economy and attract visitors with their working waterfronts.

In 1976, U.S. sovereignty was extended from the traditional 12 miles from shore to 200 miles. Until then, the distant water fleets of modern factory trawlers belonging to Poland, the Soviet Union, Germany, Spain, and several other countries plied the rich fishing grounds of the Northwest Atlantic, dwarfing American fishermen's vessels and catch. With the passage of the Fisheries Conservation and Management Act of 1976, commonly known as the Magnuson Act, eight regional fisheries management councils were established and given the responsibility of managing U.S. fisheries for sustainability and economic value. With the oversight of the secretary of commerce and the National Marine Fisheries Service, and with advice from scientists and industry participants, the councils have designed fishery management plans for more than a quarter of a century.

During the early flush of enthusiasm for the takeover of fishing by domestic boats, Congress created programs that provided incentives for investment in the industry. A capital construction fund and loan guarantee program have since been criticized as having enabled the domestic harvesting sector to overcapitalized, and thus overfish, stocks that were already vulnerable from years of heavy fishing by foreign boats.





The first efforts of the New England Regional Fishery Management Council to control fishing were quotas imposed in 1977. Serious problems with enforcement ensued, and the next plan instituted larger minimum mesh sizes and closed areas, among other restrictions. A blow to the industry came in 1984 when the International Court of Justice resolved a boundary dispute between the United States and Canada. That decision placed the haddock- and scallop-rich portion of Georges Bank's northeast peak in Canadian waters. Various management plans have struggled ineffectively to conserve fish without ruining the industry. After years of strict regulations, however, the fishing industry may begin to reap the benefits of its sacrifice. Collaborative research projects are drawing on fishermen's broad ecological knowledge and regional scientific expertise. The ultimate goal, of course, is sustainable and economically viable fisheries.

Margaret E. Dewar, *Industry in Trouble: The Federal Government and the New England Fisheries* (1983); Sebastian Junger, *The Perfect Storm: A True Story of Men against the Sea* (1997); Mark Kurlansky, *Cod: A Biography of the Fish That Changed the World* (1997); Raymond McFarland, *A History of the New England Fisheries, with Maps* (1911).

Madeleine Hall-Arber

Fishing Schooners For more than 250 years schooner-rigged watercraft fished from New England ports. In spite of their common name, fishing schooners have displayed as many differences as similarities, whether regarding their size, their configuration, the uses to which they were put, or their place in popular culture. The principal similarity was in the rigging. No matter what the shape of the hull, any vessel used for fishing that had two (or, rarely, three) masts and sails fore and aft, the larger one located on the after (main) mast, was called a fishing schooner.

In New England the fishing schooner gained prominence early in the 18th century, with the move from alongshore to more distant-water fishing. Small fore-and-aft-rigged vessels collectively known as shallots were superseded in the developing Massachusetts fishing ports of Marblehead and Gloucester by oceangoing vessels that could frequent the fishing grounds as far east as Newfoundland. The large Marblehead fishing schooners of the 18th and early 19th centuries, with their raised quarterdecks, looked much like North American and northern European cargo schooners of the times and frequently served that purpose, carrying processed fish to the Caribbean or Europe in winter. More economical and easier to manage than a square-rigged vessel, the fore-and-aft-rigged schooner was particularly suitable

for sailing home from the fishing grounds against the prevailing westerly winds.

After the New England fishing fleet was decimated during the American Revolution, a second tradition of boat design emerged in the area of Essex County and Gloucester, Mass. There the small, schooner-rigged Chebacco boat, or "dog-body," carved out a niche for itself fishing the nearer grounds. For ease of construction and safety in "following seas"—that is, traveling in the same direction as the waves—the Chebacco boat had a sharp stern rather than the usual wide-transom stern. This seaworthy style of hull was retained in the larger pinky schooner that became typical for the coastal region from Massachusetts up into Maine through the 1830s.

Although Massachusetts designs have been considered most characteristic of the New England fishing schooner, Connecticut and Maine had their own distinct traditions. The small, fine-lined, seaworthy schooners of eastern Connecticut frequently featured water-filled wet wells in which fishermen kept their catch alive and commonly sailed as far south as Havana, Cuba, in winter to serve urban markets. Maine fishing schooners often carried cargo in winter, so they tended to be larger and more full-bodied than their typical Massachusetts counterparts.

Through the 19th century Massachusetts designers responded to outside influences. With the expansion of the mackerel and halibut fisheries in the 1840s, a new class of New England fishing schooner with a wide deck, shallow hull, and tall, raked masts was derived from Chesapeake Bay models. Noted for their speed but unstable in extreme conditions, these so-called sharpshooter and larger clipper schooners prevailed through the 1870s, even as schooners began to carry dories for the newly adopted trawl-line method of fishing.

The need for stable, seaworthy fishing schooners became more apparent as crews began to fish for cod and haddock year-round to meet market demands for fresh fish in the 1870s. Appalling losses among the shallow-draft vessels, with 29 ships and 249 New England fishermen lost in 1879 alone, proclaimed the need for craft better suited to winter conditions in the North Atlantic.

Immigrant Irish fishermen in Boston established a contrasting tradition in the 1850s, bringing their deep-draft, schooner-rigged Galway hookers to New England waters. The speed and stability of these vessels began to influence fishing-schooner design in the region in the 1880s; yacht designers, too, had an impact, including Edward Burgess in the 1880s and 1890s and Bowdoin B. Crowninshield early in the 20th century.

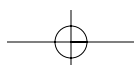
As the offshore fishing industry became

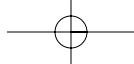
concentrated in a few large ports, a syndicated form of schooner ownership superseded the earlier communal approach. At the same time, fishermen increasingly became migrant, and were often immigrant laborers. As in the earliest ventures, Massachusetts fishermen were paid a share of the proceeds of the voyage rather than a wage. Under these conditions the reputation of a schooner and its captain became increasingly important in attracting competent crews. Rudyard Kipling's novel *Captains Courageous* (1896) and the stories of James B. Connolly suggest the emotional attachment of fishermen to their vessels as both home and workplace. These stories have also contributed to the popular impression that fishing schooners were characteristic of New England.

Among the shipbuilders, fishing captains, and professional naval architects who created influential fishing-schooner designs, the most prolific was the Boston fish dealer Thomas F. McManus, son of an immigrant Irish sailmaker. Between 1892 and the mid-1920s, more than 400 New England and Canadian fishing schooners were built to McManus designs. In his search to combine speed, capacity, stability, and safety, McManus altered the profile of fishing schooners and even eliminated the bowsprit from the so-called knockabout model, so that fishermen would not have to work on an exposed spar to take in sail during stormy weather.

With the adoption of auxiliary motor power after 1900, then the introduction of otter-trawl (net) fishing after 1905, the schooner, with its many-hooked longline trawls set from dories, was facing extinction just as the vessel's design was reaching its apex. By 1920, when most working schooners had been equipped with engines and were using smaller sails, New England and Canadian fishing ports had begun to celebrate their traditional skills, which were becoming obsolete. The *Halifax Herald* North Atlantic Fishermen's International Trophy lent a formal, nationalistic aura to the schooner racing that fishermen had long enjoyed. Competitors first sailed in conventional schooners, but the races soon spawned the construction of exaggerated models, culminating in the Canadian *Bluenose* and American *Gertrude L. Thebaud*, which came to symbolize fishing schooners in the popular imagination.

Even as these schooners built for speed were attracting international attention, the shift to power and small, compact schooner-rigged draggers proclaimed the end of the conventional fishing schooner. The subsequent eastern rig dragger was configured much like a schooner and carried a small rig despite its engine and fishing net. Although the last New England fishing schooner ceased





working in the early 1950s, the eastern rig dragger carried the tradition through the 1970s, when it, too, was superseded by a new type of vessel, the stern trawler.

William A. Baker, "Fishing under Sail in the North Atlantic," in *The Atlantic World of Robert G. Albion*, ed. Benjamin W. Labaree (1975); Howard I. Chapelle, *The American Fishing Schooners, 1825-1935* (1973); W. M. P. Dunne, *Thomas F. McManus and the American Fishing Schooners: An Irish-American Success Story* (1994); Wayne M. O'Leary, "The Antebellum Maine Fishing Schooner and the Factors Influencing Its Design and Construction," *American Neptune* 44 (1984); Dana A. Story, *The Shipbuilders of Essex: A Chronicle of Yankee Endeavor* (1995).

Andrew W. German

Friendship Sloops For more than a century the gracefully distinctive sailboats known as Friendship sloops have been a common sight along the coast of Maine. While many wooden Friendships, some more than half a century old, still proudly ply the seas, today's models are usually made of fiberglass. Operated by recreational sailors rather than lobstermen, the sloops provide an evocative link to Maine's maritime past.

Designed to be sailed by one person, the all-purpose sloops got their name from the village of Friendship, Maine, about 75 miles northeast of Portland on Muscongus Bay, whose inhabitants have been fishing and lobstering for more than two centuries. According to the noted naval architect and marine historian Howard Chapelle, the Friendship sloop resembles the centerboard sloops of the 1850s known as Muscongus Bay boats. Most early Friendship sloops were 26 feet long with an 8-foot beam and, if centerboard, a 2¹/₄-foot draft when the board was raised. The sloops were usually gaff-rigged with a single headsail and featured a 26-foot mast and boom, a 15-foot gaff, and an 8-foot bowsprit.

A deep-keel version of these clipper-bowed sloops later became popular, its design chiefly influenced by the boatbuilding Morse family in Friendship and later Thomaston, Maine. These vessels were so well balanced that they could be used year-round for both fishing and lobstering.

Wilbur Morse created an offshore version of the Friendship sloop around 1890. With gravel and stones located lower in the hull for ballast, it became an even more seaworthy craft than its forebear. Chapelle wrote that Morse designed the sloops with "great beam, rather flat floors, hard bilges and wide heavy quarters," which enabled them to sail well in heavy weather under mainsail alone.

A forward cuddy, or small cabin, provided a compact but comfortable space for a shipmate cookstove. The boat had an ample tumble-home, or curvature, and an elliptical transom.

The most distinctive features of the Friendship sloop are its graceful clipper bow and cutwater, the forepart of a ship's stem, and its handsomely carved trail boards, on which the builder stamps his name.

During the 20th century Friendship sloops became popular with recreational sailors, and builders like Jarvis Newman of Southwest Harbor, Maine, began to make them out of fiberglass. Equipped with an ample cockpit and improved, larger cabin, the new boats are comfortable cruisers. Friendship sloop owners congregate annually for a cruise from Friendship south to Merrymeeting Bay and back on up the coast to Rockland, Maine. As of 2000 the Friendship Sloop Society, founded in 1961, had 268 known sloops in its registry. The group publishes an annual yearbook, *Friendship Sloop Days*.

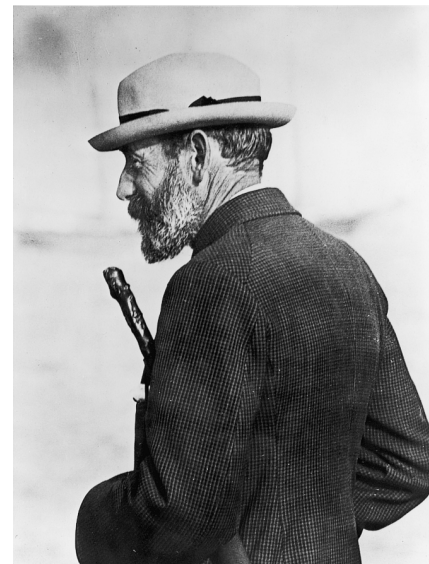
One of the finest examples of a restored Friendship sloop is the *Estella A*, which can be viewed at southern Connecticut's Mystic Seaport. Antique Friendship sloops are also on display at the Maine Watercraft Museum in Thomaston.

Howard I. Chapelle, *American Sailing Craft* (1936); Roger F. Duncan, *Eastward: A Marine Cruise in a Friendship Sloop* (1995 [1976]); Herald A. Jones, ed., *It's a Friendship* (1965); Hope Herman Wurmfeld, *Boatbuilder* (1988).

Renny A. Stackpole

Herreshoff Brothers The Herreshoff name has been connected with yachting for so many years that it is impossible to think of the sport without considering the enduring influence of the boats and yachting products that were built at the Herreshoff Manufacturing Company of Bristol, R.I. The Herreshoff brothers and their successors revolutionized yacht design and led the way to better and faster craft during the years of the company's existence, from 1863 to 1945. Always leaders in yachting, the two brothers, John Brown Herreshoff (1841-1915) and Nathanael Greene Herreshoff (1848-1938), combined Yankee genius and ingenuity to make theirs one of America's foremost yacht and boatbuilding businesses.

John B. Herreshoff, born with defective eyesight, became totally blind at age 15 as the result of an accident. His strong will and determination to continue working despite the handicap ultimately led to his interest in building small craft. During the Civil War, John established a boat construction business employing several workmen, and soon gained a reputation for fast and excellent craft. John relied on his younger brother, Nathanael, to design the vessels. From a preliminary sketch, Nat would fashion a half-model from soft pine using innate technical skill and infallible



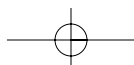
Nathanael Greene Herreshoff, 1899

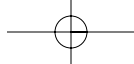
engineering insight. Offsets were then taken from the model using an instrument of his own invention. From these offsets, the yachts were built. In 1878 John prevailed on Nathanael, who had studied engineering at the Massachusetts Institute of Technology, to leave his employment at the Corliss Steam Engine Company in Providence and join him as a partner in the Herreshoff Manufacturing Company.

With John as president and Nathanael as designer and superintendent, the boatyard prospered. More buildings were constructed, and the mostly open-air shipyard was transformed into a first-class manufacturing facility where the work of building boats was accomplished both efficiently and well. In addition to the waterfront construction shops, the complex included buildings where boilers, steam engines, castings and forgings, and even sails and upholstery were produced.

Before the 1890s, the Herreshoff brothers concentrated mainly on power craft, especially fine yachts, and naval torpedo boats. Construction of sailing yachts began with the success of *Gloriana* in the 46-Footer Class in 1891 and subsequent orders for yachts built to defend the America's Cup, yachting's most coveted prize. The Herreshoff Company defended the America's Cup six times with yachts designed by Nathanael G. Herreshoff (*Vigilant*, 1893; *Defender*, 1895; *Columbia*, 1899 and 1901; *Reliance*, 1903; *Resolute*, 1920). After Nathanael's retirement, the company built the next two defenders: *Enterprise*, 1930, and *Rainbow*, 1934.

The death of John Herreshoff in 1915 signaled a new era for the business. Unable to find a suitable replacement for his brother, and





under pressure from the trustees of John's estate to liquidate their holdings in the company, Nathanael decided to sell his stock in the company in 1917. The holdings sold quickly, most of it bought by a group of yachtsmen connected with the Cup defender *Resolute*. In 1919 the company gained considerable fame as the builders of the flying ship NC-4, the first plane to fly the Atlantic Ocean.

In 1924 the company was put up for auction, with most of the holdings going to Rudolf F. Haffenreffer and his sons, Carl W. Haffenreffer and Rudolf F. Haffenreffer III. The company was improved and the yard remained in business for over 20 additional years. During World War II, 100 wooden vessels were built for the military (two 130-foot YMS minesweepers, eight 71-foot Vosper PT boats, four 97-foot minesweepers, 22 103-foot coastal transports, 20 71-foot U.S. Navy PT boats, eight 85-foot U.S. Army Air Force Rescue boats, and 36 63-foot army-navy rescue boats). With the completion of the war contracts, the company was closed in 1945.

Among the many accomplishments of the Herreshoff Manufacturing Company have been the profound effect of Nathanael Herreshoff's talent and creativity on the development of yacht design and construction. Some of his accomplishments that are still in use include light wooden-hull construction, the web frame and longitudinal system of framing a metal vessel, the crosscut sail, light hollow-steel spars with scientific rigging, and overhangs on sailing yachts to allow longer lines and greater stability. He designed the first full-size successful fin-keel yacht and was one of the principal developers of the bulb keel. The type of sail track and sail slides in common use today were his invention, and he introduced into this country screw fastenings for planking wooden hulls. Herreshoff designs of cleats, winches, anchors, and propellers established new and higher standards still evident today in the marine industry. Modern yachting sustains the traditions of excellence embodied in the design, construction, and performance of the yachts of the Herreshoff brothers and those who succeeded them.

Maynard Bray and Carlton J. Pinheiro, *Herreshoff of Bristol* (1989); Constance Buel Burnett, *Let the Best Boat Win: The Story of America's Greatest Yacht Designer* (1957); L. Francis Herreshoff, *Capt. Nat Herreshoff: The Wizard of Bristol* (1953).

Carlton J. Pinheiro

Lake Champlain Located primarily in the northeastern United States, the nearly 500-square-mile Lake Champlain extends southward from lower Quebec Province in Canada, forming part of the Vermont–New York border, to present-day Whitehall, N.Y.

Samuel de Champlain, explorer of New France (present-day Canada), came to see the “large lake filled with beautiful islands” that his Algonquian friends had described to him. The lake was in the land of their enemy, the Iroquois. He arrived there in July 1609 with 60 fighters traveling in 24 canoes. Meeting the Iroquois for traditional battle, Champlain introduced them to the deadly ways of gunpowder, explosively inflicting his culture upon theirs. It was the beginning of a century and a half of European battles for control of the valley that now carries Champlain's name.

As New France and New England encroached on each other, Lake Champlain's strategic importance increased. Forts sprang up. Violent raids were launched. Armies composed of Europeans, provincials, and Native Americans fought to gain control of the waterway, a contest ultimately won by the British, who built important fortifications at Crown Point and Fort Ticonderoga near the southern end of the lake. Ethan Allen's surprise capture of Fort Ticonderoga on May 10, 1775, provided cannons for George Washington's assault on British troops occupying Boston. Control of the strategic lake was an early focus of the American Revolution during the days when Benedict Arnold was the best field commander of the American forces. It was also the focus during the War of 1812, when Lieutenant Thomas Macdonough became commodore of a fleet that defeated the British navy at the Battle of Plattsburg. The lake's military significance then diminished, while its importance as a shipping channel rose.

After the Revolution the Champlain Valley experienced a rapid annual increase in migration from southern New England to Vermont. As the years passed the New York territory, less hospitable to farmers but boasting large deposits of iron ore and thick forests of timber, also attracted settlers. Lake Champlain provided immigrating travelers with a highway into the region. Later, when connected to other great inland water systems by canal, the lake served as a conduit to the West. As the 19th century advanced, it was also a means of access for French Canadian and Irish immigrants entering the United States via Montreal. Some stayed in the Champlain Valley, while others passed through on their way to more distant destinations.

Steamboats, sailboats, canal boats with whole families living on board, schooner-rigged scows, sail- and horse-powered ferryboats, breakwaters, and lighthouses all added to the richness of maritime life. The lake connected Vermont and New York communities facing one another across the water, whose members frequently attended church together

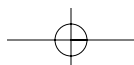
and in many cases chose marriage partners from the opposite shore. Railroads and automobiles transformed the lake again, this time recreationally, into a place where people went to escape the heat of the city, to fish, to explore historic sites, and to bask in the lake's natural grandeur.

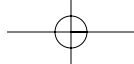
Strikingly beautiful, rich in natural and historic resources, Lake Champlain and the surrounding valley are a complex and fascinating area. Aware that they collectively share the Lake Champlain basin, Vermont, New York, and Quebec work to coordinate regional idiosyncrasies with a view to preserving the lake for future generations. Since the 1980s it has come to light that Lake Champlain contains beneath its surface the best-preserved collection of wooden shipwrecks in North America. Exciting archaeological discoveries such as these open a window onto past economies, technology, and human activities.

Russell P. Bellico, *Sails and Steam in the Mountains* (1992); Harrison Bird, *Navies in the Mountains: The Battles on the Waters of Lake Champlain and Lake George, 1609–1814* (1962); Walter Hill Crockett, *A History of Lake Champlain: The Record of Three Centuries, 1609–1909* (1909); Ralph Nading Hill, *Lake Champlain: Key to Liberty* (1995 [1976]).

Arthur B. Cohn

Lifesaving Service The Lifesaving Service grew out of private organizations and salvagers that helped mariners in trouble at sea. But these ad hoc wreckers and privately funded lifesaving organizations provided limited and often treacherous service. Mariners knew that they needed professionally trained and equipped lifesavers who would be available when emergencies came. In 1807 the Massachusetts Humane Society, the most important private lifesaving organization in New England, erected a hut in Cohasset to provide lifesaving services for Cape Cod. From this hut grew a system of houses of refuge—buildings with supplies for shipwreck victims such as food, blankets, medical supplies, and firewood—and lifeboat stations. At the same time, revenue cutters—part of the U.S. Customs Official, of the Treasury Department—began patrolling the ocean in the winter months, searching for vessels in distress. In 1848 Congress passed the Newell Act, authorizing \$10,000 to build and equip stations along the New Jersey coast. By 1854 there were 137 lifeboat stations stretching from Cape Cod down Long Island and the coast of New Jersey to the Outer Banks of North Carolina. The act also authorized houses of refuge and trained lifesavers. Small boat stations or lifesaving stations provided with rescue equipment and trained personnel were put on the alert to perform rescues.





The Point Allerton (Mass.) Lifesaving Station was founded in 1889 with the legendary lifesaver Joshua James as keeper. Although at 63 James was 18 years over the service age limit, the restriction was waived in view of his unparalleled record. James served as keeper for 13 years; he and his crew saved 540 lives, losing none of their own. Today the restored station houses the Hull Lifesaving Museum.

In 1871 the Treasury Department hired a civilian, Sumner Kimball of Maine, to run the Revenue Marine. As bureau chief Kimball worked at developing the lifesaving service. In 1878 Congress created the U.S. Lifesaving Service (USLSS) as a separate bureau within the Treasury Department, and Kimball moved over to run it. In 1915 Congress merged the USLSS with the Revenue Cutter Service (as the Revenue Marine was now called) to create the U.S. Coast Guard. Kimball, who had built the USLSS into one of the most efficient agencies in the government, retired after the merger.

During his tenure with the USLSS, Kimball had involved architects in the design of boathouses, stables for the horses who pulled the lifesaving boats from the station to the water, and living quarters that were functional, comfortable, and distinctive. Boat designers developed self-righting, self-bailing lifeboats. An army ordnance officer, David Lyle, developed a gun that could fire the line for the breeches buoy, used to get passengers off foundering ships: after the surfmen and the shipwreck victims had rigged the breeches buoy, a canvas seat was attached to a pulley by which the victims rode ashore to safety. Kimball's bureau published first-aid manuals and manuals for training lifesaving crews. Newspapers and magazines began publishing accounts of the exploits of the "storm warriors," whose motto was "You have to go out, but you don't have to come back," and Congress authorized two medals, the gold and silver lifesaving medals.

In 1890 the government maintained 11 lifesaving stations in Maine, 21 stations in Massachusetts, and 38 stations in Rhode Island and Long Island, the barrier island for Connecticut. These 70 stations were part of a national system of 233 lifesaving stations. In the three New England districts, the lifesavers responded to 132 disasters, involving 1,214 people, of whom only seven were lost, and preserved more than \$1.2 million in vessels and cargo. Also in 1890 the stations on Cape Cod received telephone service, connecting the 10 stations between Race Point (near Provincetown) and Monomoy Island, off the elbow, and allowing the stations to call on one another for reinforcements.

By 1920 the U.S. Coast Guard operated 58 stations on the New England coast. In addition the service began experimenting with using aircraft for search-and-rescue missions, and in 1927 the Coast Guard established an air station on Ten Pound Island off Gloucester, Mass. In 1935 the air station moved to Salem, Mass. At both locations the crews learned to perform search-and-rescue operations with amphibious aircraft and flying boats. They experimented with radio communication systems, for ocean rescue depended on the newly invented wireless. In addition, the amphibian airplane opened a new aspect of rescue: transporting ill or injured merchant mariners from ship to hospital. In 1933 the Coast Guard maintained 240 Coast Guard or lifesaving stations and the secretary of the treasury awarded 5 gold and 16 silver lifesaving medals.

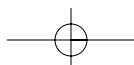
In the 1940s the Coast Guard Aviation

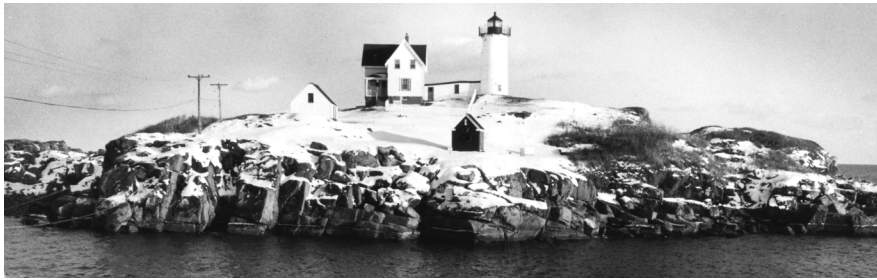
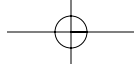
branch began experimenting with helicopters, first produced by Sikorsky Aircraft in Stratford, Conn., under the direction of the inventor Igor Sikorsky. The helicopter changed search-and-rescue operations. Rescue crews no longer needed to send a boat to people in distress. Instead, a cutter could act as a platform from which helicopters took off and returned; people at sea could be rescued directly by the hovering aircraft. Today three classes of Coast Guard cutters carry helicopters: the 378-foot high-endurance cutter, the 270-foot medium-endurance cutter, and the 210-foot medium-endurance cutter. New England, known to the Coast Guard as First District, has five 270-foot cutters and one 210-foot cutter, whose home port is Boston. The Coast Guard station still provides immediate response to emergencies, and the Coast Guard maintains more than 20 small-boat stations and crews in New England. The station crews use various small boats, including the new 47-foot patrol boats. Often an 87-foot patrol boat is nearby to assist; in addition, five 110-foot patrol boats work the waters off New England. The Coast Guard Air Station near Woods Hole, Mass., provides HU-25 Falcon Jets and HU-60J Jayhawk helicopters. If more aircraft are needed the Coast Guard can call on the Air Station at Brooklyn, N.Y. Every day the U.S. Coast Guard receives more than 100 distress calls. Every day, it lives up to its motto, "Semper Paratus" (Always Ready). The distinctive red roof of the stations and the orange racing stripe on the boats and cutters bring comfort to mariners and recreational boaters alike.

Annual Report of the Operations of the United States Life-Saving Service for the Fiscal Year Ending June 30, 1890 (1892); "The Life-Savers of America and England," Harper's Weekly (January 21, 1888); Arthur Percy, U.S. Coast Guard Aircraft since 1916 (1991); "The Storm Fighters," Coast Guard Magazine (February 1932).

Cindee Herrick

Lighthouses New England lighthouses have served as essential aids to navigation since Boston Light, the first permanent lighthouse in North America, was completed on Brewster's Island in 1716. Seven of the 12 colonial lighthouses guarded New England harbors and shoals, as did 10 of the first 14 built by the new republic. Although lighthouses were constructed on the initiative of local communities, responsibility for staffing and maintaining them transferred to the U.S. Lighthouse Establishment in 1789. Lighthouses tamed rugged coastlines, signifying the human triumph over treacherous seas. Between 1838 and 1851 the Maine Lighthouse Establishment engineer Alexander Parris erected six





Nubble Light House, Cape Neddick, York, Maine, 1989

new granite towers along that state's coast, proclaiming Maine's increasing commercial maturity, growing population, and eagerness to assume its share of responsibility for maritime traffic.

By 1850, however, complaints about the condition, reliability, and visibility of New England lighthouses warranted congressional investigation. The Brant Point Light on Nantucket Island, Mass., for example, had long been nicknamed the "bug light" by seamen, because it burned so dimly. Control passed to the U.S. Lighthouse Board, which moved to adopt modern equipment, including the Fresnel lens; standardize building practices; professionalize personnel; and coordinate the nation's 345 lighthouses and other navigational aids. This change coincided with the heyday of the clipper ship and golden age of American sail.

The self-sufficient lighthouses occupied isolated promontories, fingerlike peninsulas, barren islands, and submerged rocks generally removed from other habitations. Although some combined tower and dwelling, many others rose above a small complex of buildings. The keeper's residence stood apart from the lighthouse or connected to it via a passageway like those that often linked farm buildings in rural New England; bell houses, boat-houses, fog-signal buildings, oil-storage sheds, cisterns, and barns were erected where land permitted. Families often accompanied the lighthouse keeper on station and frequently shared in the chores. Isolation was particularly hard on wives. Schooling children was also a problem, yet many learned to read and write. Abbie Burgess, for example, one of 10 children of a 19th-century Maine lighthouse keeper at Matinicus Rock, was home-schooled and tended lights herself for nearly 40 years.

The keeper maintained the light, the fog-signal apparatus, and the building complex. Danger seldom punctuated daily loneliness and monotony. Yet during severe storms some lighthouse keepers, such as Marcus Hanna of the Cape Elizabeth Light in Maine and Ida Lewis Wilson of Lime Rock Light in Newport Harbor, R.I., performed daring rescues of

shipwrecked seamen, earning the whole service a reputation for bravery. Minot's Ledge Light outside Boston Harbor, a wooden platform precariously set atop wrought-iron stilts rising almost directly out of the sea, washed away with its two male keepers in the Great Storm of 1851.

In July 1939 the U.S. Lighthouse Service merged with the U.S. Coast Guard. Electricity allowed for more thorough automation. The introduction of electronic navigation signals in 1940 gradually diminished the importance of visual aids, and, one by one, New England's lighthouses were automated. In 1989 Boston Light became—and thanks to legislation sponsored by Senator Edward Kennedy will forever remain—the only lighthouse in the country still manned, by a Coast Guard keeper. Today many of the surviving stations fall under the jurisdiction of the National Park Service.

The lighthouse has become a symbol of New England, appearing on license plates in Massachusetts and Connecticut, on restaurant facades, salt and pepper shakers, and innumerable souvenir items. Preservation efforts are under way in several states to save Fresnel lenses and other artifacts in museums, and the Southeast Light on Block Island, R.I., was moved 245 feet inland in 1994 to save it from toppling into the sea. New England's strong traditional connections to the sea long manifest in shipbuilding, trade, and fishing still seem tangible in these tall sentinels fixed on the littoral boundary between a safe haven and the wild sea.

Sarah C. Gleason, *Kindly Lights: A History of the Lighthouses of Southern New England* (1991); Bruce Roberts, *New England Lighthouses: Bay of Fundy to Long Island Sound* (1996); Constance Covill Small, *Lighthouse Keeper's Wife* (1986); Courtney Thompson, *Massachusetts Lighthouses: A Pictorial Guide* (1998).

Karen Alexander

Lobstering In the language of a lobsterman, "short" does not mean the sudden discovery that one is cash poor, though many are. The price of a decent lobster boat these days runs about \$75,000, and 1,000 traps cost an-

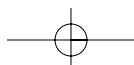
other \$30,000. Then the lobsterman must find a place to put them. Even if a young person entering the lobster industry can swing the cash, nearly every inch of fishable bottom already has a trap on it. Along New England's coast in 2003 there were more than 3.5 million traps, and strong territorial claims among established lobstermen to the best ocean bottom. The lobster industry does not exactly welcome newcomers, unless they come from lobstering families or have put in their time on an established boat.

New England lobstermen covet the life, of course—one of the few occupations, said New Hampshire lobsterman Ed Heaphy of Dover Point, "in which you can still control your own destiny." But these days that freedom is measured in very practical terms: Can a lobsterman set a line of traps without getting it tangled up in someone else's?

Ask longtime lobstermen like Heaphy, who has fished out of Dover Point for decades, what has changed most since they entered the business, and they will say that synthetics have made the lines, warp, and heads (netting on traps) last longer than the old sisal and manila. Then they will add that the proliferation of traps has changed the way they fish, forcing them to set more traps, since overcrowding means each one is set less strategically. It was not unusual in the late 1990s for a full-time lobsterman, a "highliner," to set more than 1,000 traps, each of which had to be hauled every other day and rebaited. Ten years earlier, half that many was the average. Trap limits, popular among fishermen, may or may not curtail this fishery's version of the arms race. Biologists don't think so.

Consider things from the lobster's perspective. Researchers say a just-legal-sized lobster living in coastal waters has a 90 percent chance of walking into a trap and ending up on someone's dinner table. And most of these lobsters have never had the opportunity to reproduce. "The real enigma of all this from a biological point of view," said one biologist, "is how the devil does the resource maintain itself?" The best way of protecting the species, say the scientists, is to increase the lobsters' reproductive potential by increasing the minimum size they must attain before they're taken.

That doesn't sit well with lobstermen, whose traps are already filled with so-called shorts. One New Hampshire study reported that lobstermen are forced to throw back as many as 80 percent of the lobsters they catch because they are below the legal minimum. Resistance to raising the minimum size stiffened even further in the face of record landings in the late 1990s, which made the dire warnings of biologists about the collapse of the fishery seem rather flimsy.



Might the New England lobster prove more resilient than the cod, that other symbol of the region's fishing tradition? The debate has persisted since at least 1880, when one prominent observer predicted the lobster's extermination because of overfishing. Like much else in New England, it's an argument with a long history. A lobster shortage would be hard for the coastal region's native peoples to imagine; apparently the creatures were so abundant in the precolonial period that one could pick them right up off the beach or simply wade a few feet into the surf and pluck them from the ocean floor.

The early European settlers thought the idea of eating lobsters distasteful and often used the crustaceans as fertilizer. It wasn't until well into the 18th century that New Yorkers, Bostonians, and other urbanites developed a fondness for lobster, a passion that led to the first reports of scarcity in the waters of New York Harbor. That situation was blamed not on overfishing but on the "incessant cannonading" of the Revolutionary War. As demand increased, the industry extended its reach up the coast to Connecticut, where lobster smacks, or wooden boats with large fish wells, brought live lobsters to urban markets. A 3-pounder sold for about three cents.

But the lobster industry's boom can be attributed to an unlikely cause: the invention of canned foods. The Scottish pioneered the technology of sealing foods in tin cans, and in 1842 the first cannery in the United States was established in Eastport, Maine. Lobster was one of the first foods canned in America. In 1843 a 1-pound tin, containing the meat from 3½ pounds of live lobster, sold for as little as five cents. The appetite for canned lobster grew to the point that by 1880 Maine alone was home to 23 canneries.

The canneries' demand for fresh lobster seriously stressed the fishery. One factory, for instance, might require the services of 50 to 60 lobstermen. The first laws regulating the lobster fishery were a direct result of the canneries' overexploitation of the resource. Some of the first lobster laws imposed a closed season, but today's regulations focus on promoting lobster reproduction. Do they work? If the success of fisheries regulation is measured by landings, then the industry seems healthy indeed. Lobster landings increased steadily in the last decade of the 20th century, though more efficient fishing practices may account for the rise. Biologists and some lobstermen still believe the fishery is overexploited, however. Landings have plummeted in Connecticut since 1999 and in southern Massachusetts and Rhode Island since 2000, although they have remained high in Maine, with a record 63.6 million pounds in 2002.

Lobster laws protecting undersized lobsters offer no solace to really big lobsters, most of which inhabit deep water at the continental shelf. How big is really big? Big George, who may have been the largest lobster ever caught, weighed in at 37½ pounds and spent the last six months of his life in a tank at Captain Scott's Fish Market in Sandwich, Mass. Big George was a popular local attraction, though he apparently hated men. "The only ones who could feed him were females," said Scott. "He especially liked my wife and daughters." After Big George died, Captain Scott donated the lobster to the Massachusetts Lobsterman Association, where he now travels to meetings mounted on a wooden plaque for all to see and marvel at, no matter their sex.

Bruce Ballenger, *The Lobster Almanac* (1988); Mike Brown, *The Great Lobster Chase: The Real Story of Maine Lobsters and the Men Who Catch Them* (1985); J. Stanley Cobb and Bruce F. Phillips, eds., *The Biology and Management of Lobsters*, 2 vols. (1980); Francis Hobart Herrick, *Natural History of the American Lobster* (1977 [1911]).

Bruce Ballenger

Malaga Island "Of old, muskets drove the Abenakis off the coast of Maine. Today money is driving away another race," observed the author and filmmaker Holman Day in the September 1909 issue of *Harper's Monthly*. At the turn of the 20th century, Day's was one of the few voices raised against the increasingly high-handed treatment of Maine's coastal poor, a group caught between the pressures of tourist development, well-intentioned social reformers, and society's growing belief that crime and poverty emanated from so-called retrograde families.

Day's worst fears were realized on July 1, 1912, when the governor and council of Maine ordered the destruction of the mixed-race settlement of Malaga Island, a political "no-man's-land" off Phippsburg, in Casco Bay

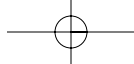
near the mouth of the New Meadows River. The 40 to 45 inhabitants were rounded up; a few were allowed to raft their dwellings to the mainland, while others were ordered to their town of origin and a number were sent to the new Maine School for the Feeble-Minded (now Pineland Hospital) in West Pownal. In a macabre effort to extinguish the colony for all time, the remaining buildings were torn down and burned, and the bones of the dead exhumed, placed in "five large caskets," and reburied at West Pownal.

Malaga was only one of the "pockets of social indigents" broken up by the state of Maine. However, the African roots of Malaga's inhabitants brought its story considerable publicity. Casco Bay had long been home to African settlers, including William Black, whose family pioneered Bailey (formerly Will's) Island in the 1720s. Indeed, the passage between Bailey and Orr's Island is still called Will's Gut. On July 6, 1794, Benjamin Darling, a former slave, bought Horse (now Harbor) Island. Located just below Malaga, Horse remained Darling family property until 1847. About this time, some Darlings became squatters on Malaga, a low-lying island measuring a half-mile long and a quarter-mile wide. Eventually, they were joined by families and individuals of Irish, Scotch-Irish, Portuguese, Yankee, and African background.

Probably never numbering more than 45, the islanders lived a quiet, hardscrabble existence as fisherfolk and subsistence farmers. It was on these people, and their kin on other islands, that Elijah Kellogg, the author of a number of popular books for boys, modeled his black characters in *The Young Deliverers of Pleasant Cove* (1871) and *The Cruise of the Casco* (1872). A rare glimpse inside the "colony of colored men" in the *Portland Daily Press* of July 18, 1862, reported that all the "hearty, healthy and intelligent" young men on the island were trying to enlist in the Union Army.



Boston Post-Card Company image of Malaga Island, Maine, ca. 1910



At least one islander, William Johnson, eventually served in the valorous 54th Massachusetts Regiment.

After the war, life on Malaga proceeded undisturbed until the 1890s. In that decade, the town of Phippsburg briefly assumed control of the island's "pauper families," and newspapers began to publish feature articles about the "degenerate colony" in the midst of a rapidly developing region. The reformer George Lane built a schoolhouse in 1903, and a Malaga Settlement Association was formed. Phippsburg eventually tried to claim that the town of Harpswell owned Malaga. In 1904 the state of Maine spent \$48 on Malaga. The following year the state assumed control of the island, which Phippsburg had abandoned, and by 1910 was spending \$1,170 annually to maintain it.

Donations of goods and money from civic groups served, in the course of time, to undermine the lean but functional fishing economy of Malaga. In the eyes of educators and officials the signs of poverty remained, and the state felt growing pressure to take action. The press had a field day, pejoratively identifying island resident and spokesman James McKenney, and later his son-in-law John "Jerry" Murphy, as "King of Malaga." Reformers came to believe that the children and some older people would be better off institutionalized. Many mainlanders simply wanted the aesthetic embarrassment of the poverty-stricken island erased, and politicians wanted the matter resolved quickly.

In 1911 tests for retardation were given, and an entire family along with one single woman were sent to the School for the Feeble-Minded. The state also found the legal absentee owner, bought the island, and placed it within the town of Phippsburg. Whatever the motives had been, the result was the complete destruction of the settlement. Some islanders were confined at West Pownal and one at the Soldier's Home in Togus. Others successfully transplanted themselves to the mainland, and one family, with no place to land their dwelling, tied it up to Bushy Island. Their misfortune and the death of one displaced woman in late 1914 finally led the press to question the entire relocation episode, but by then it was too late. Summer cottages, resorts, and marinas burgeoned throughout the area. Ironically, though, no one has ever built or lived on the island that the state forcibly depopulated. The only memorial to the generations of African American Malaga Islanders is a row of numbered white grave markers on the slope of a grassy hill in West Pownal.

William David Barry, "The Shameful Story of Malaga Island," *Down East* 27 (November 1980).

William David Barry

Marine Policy The story of marine policy in New England is inextricably bound to the region's history of economic development. Codfishing played an important role in the economic life of colonial New England, and salt cod became an important export. Codfishing remained important to some New Englanders well into the 20th century, and the 1994 closure of Georges Bank to commercial fishing had a devastating impact on many coastal communities. In Massachusetts, the wealth created by the famous whaling ships of Nantucket and New Bedford later financed the development of the great mills of New Bedford and Fall River. The development of the mill system, in turn, destroyed the habitat of the once-great Atlantic salmon, whose journey up New England's many rivers was fatally interrupted by the dams and turbines constructed to power the mills.

Before the development of regional road and rail systems, coastwise trade created the need for many small ports, typically located at the mouth of navigable rivers. Those desirable port locations became the development core of New England's largest cities and towns. The expanding population drawn to growing port regions in turn created the need for more land, resulting in massive land filling of harbor areas, particularly in Boston. The filling was done in what were known as "mosquito-ridden swamps" or "waste-lands"; today we call them wetlands and recognize their enormous role in the primary productivity of the coastal zone.

The population expansion in coastal communities created another problem: waste disposal. Historically, the easiest and most common solution was to send the waste to sea. Rivers took on new colors and smells as the great textile and paper mills dumped their waste products directly into the streams. When that water reached the coast, it was joined by the sewage effluent pumped into harbors and bays by expanding coastal communities.

Not surprisingly, coastal marine resources declined. The shellfish populations that remained in those developed areas became too polluted to harvest. With the growth of other forms of transportation, cities began to turn their backs on the sea, and the destruction of coastal waters was even easier to ignore.

Ironically, the latest economic engine to drive the New England economy—tourism and marine recreation—has created the stimulus to clean up the waterways and reorient coastal communities to the marine environment. The tremendous growth in recreational boating and fishing after World War II created a constituency that demanded better stewardship of the region's coastal resources.

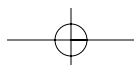
The federal Clean Water Act in 1970 began a process of cleanup that culminated in one of the region's largest construction projects ever: a state-of-the-art sewage treatment system for all of metropolitan Boston.

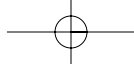
With water quality improving, the region's cities have reversed course and redeveloped decaying urban waterfronts into magnets for populations eager to "reconnect" to their maritime heritage. The supreme courts of Massachusetts, Vermont, and Rhode Island have all considered cases about the public's right to coastal lands—now filled—that no longer serve their intended purpose of enhancing maritime trade. The result is most dramatically seen in Boston, where the state coastal management agency requires that the first floor of buildings built on filled harbor-front lands must be used for "facilities of public accommodation." In Providence, the city's rivers (once covered by the world's widest bridge) have been reopened for public use, and its historic core has been marked by the development of Waterplace Park. Where the river once flowed red from the local slaughterhouses, canoes and kayaks can be rented to paddle past happily feeding ducks.

The marine policy of New England can thus be characterized roughly as the sum total of all the laws and practices affecting human interactions with the marine and coastal environment. In the colonial era, fishing, shipping, and defense drove the policy agenda. The industrial era of the 19th century added waste disposal as an important use, despite the rather obvious effect on fishing. Most recently, pressures on coastal waters have come from coastal land development, marine recreation, and the emerging aquaculture industry.

Even though all of the above uses frequently interact in the same small area (Narragansett Bay, for example), no single regulatory authority has jurisdiction over those activities. Instead, a bewildering array of local, state, and federal authorities act with often conflicting objectives.

A classic example is the subject of harbor management. The tremendous growth in the popularity of recreational boating in the 1980s placed an unprecedented strain on the capacity of many of New England's small harbors. Besides the obvious space shortage, negative environmental impacts and conflicts with other user groups were also frequently a problem. The policy "solution" was to develop a harbor management plan for each locale. Although the state owns all of the submerged lands within its harbor areas, it was willing to cede control and management authority to the local community if certain statewide standards were met. Simple in theory, harbor





management plans and ordinances have been hotly contested from Maine to Connecticut.

What are some of the problems that have been experienced? The local community faces spatial limits for the number of moorings it can license. Local political pressure mandates that the town reserve as many spots as possible for local residents. The state government, however, which must approve the program, will reject the proposal if sufficient access is not made available to residents of other communities. The federal government, through the Army Corps of Engineers, is concerned with the availability of safe anchorage for all vessels, foreign or domestic, making use of “federally navigable” waters. The appropriate balance is always difficult to achieve.

When a harbor is adjacent to a shellfish management area, other problems arise. The state Department of Health, which is charged with enforcing interstate shellfish sanitation standards, may restrict the density of boats moored nearby and require the installation of an expensive pump-out facility to empty ships’ holding tanks.

Paying for this—in addition to a harbor-master to manage all the details—requires harbor management fees placed on all users. Although, once again, local communities are tempted to charge exorbitant rates to nonresident mooring holders, both the state and federal governments prohibit such a move. The net result is a program that blends the interests of all three levels of government in an integrated harbor management policy.

In spite of the relative success of marine policy close to shore, the news has been less positive on the famed offshore fishing ground of Georges Bank. In December 1994, the National Marine Fisheries Service closed more than 6,000 square miles of prime offshore fishing area off the coast of Massachusetts after chronic overfishing depleted fish populations.

How could a policy failure of this magnitude have occurred? The law that established U.S. jurisdiction over the region’s fishing resources to 200 miles offshore—the Magnuson Act of 1976—delegated the management of fish stocks in the region to the newly created New England Regional Fishery Management Council. Two flaws in the drafting of that law made its failure almost inevitable. First, the biological management standard of maximum sustainable yield was abandoned in favor of a new standard called “optimum yield.” This new standard was initially based on maximum sustainable yield but then could be modified by “any relevant, social, economic, or ecological factor.” The second flaw in the law was closely tied to the first. Management decisions

were to be made by the fisheries council composed of individuals “knowledgeable and experienced in the fishing industry.” By design, the New England Council came to be dominated by the leaders of the New England fishing industry who were unable to make the hard, long-term decisions to limit fishing effectively—until the fishery virtually collapsed. The Magnuson Act was updated in 1996 by the Sustainable Fisheries Act, which addressed both of those problems and placed a new emphasis on conservation issues. Congress also provided millions of dollars to buy back fishing vessels and remove them from the fishery. With fewer vessels fishing a total of only a few months a year, stocks on Georges Bank have begun to recover. The area nevertheless remains years away from a full recovery. If and when that occurs, it seems likely that the fishing industry of tomorrow will be composed of a far smaller fleet of highly efficient vessels that have the ability to harvest a variety of species. By all accounts, the collapse of the New England fishery was a major policy failure made all the more depressing because the outcome was predicted for many years but ignored until it was too late.

The evolution of marine resources use has had an indelible impact on the culture of coastal New England. With hindsight, we can see that many historic policy choices were shortsighted and have had long-term negative effects. We cannot, however, judge the decisions of the past based on criteria we take for granted today. The history of New England’s marine policy merely reflects the complex, evolving relationship of its people to the sea. As the region’s economy grows from exploitative to information-based, respect for the marine environment will likewise evolve.

Darlene Boyle, *Weighing the Options: Identifying Harbour Use Goals* (1990); Peter Doeringer, Philip Moss, and David Terkla, *The New England Fishing Economy* (1986); Elmer Keen, *Ownership and Productivity of Marine Fishery Resources* (1988); Marine Law Institute, *Managing the Shoreline for Water Dependent Uses* (1988); Dennis W. Nixon, *Marine and Coastal Law* (1994).

Dennis W. Nixon

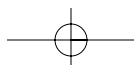
Maritime Past in the Present New England’s maritime past is the story of its people fishing the rich marine resources off the region’s shores, using the raw materials of its forests to build ships, and crewing the ships that carried trade goods to and from its ports where these industries flourished. This past lives on in fewer than two dozen preserved vessels and in a scattering of fine maritime museums that dot New England’s villages and port cities.

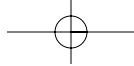


Gloucester (Mass.) fishermen’s memorial (1925)

Eighteenth-century maritime New England grew around the nationally important fishing, lumbering, and shipbuilding industries. In the 19th century—as New England became more industrialized and as local resources of fish and lumber and distant ocean resources of whales became less profitable—maritime industries, with the exception of shipbuilding, became only regionally important. As the industrial age waned in New England during the last half of the 20th century, tourism became increasingly important, and the maritime past became a marketable economic asset. As we ask what remains of New England’s maritime past, we might also ask how that past has been changed to preserve, present, and market it.

Half a dozen wooden commercial sailing vessels remain from the waning years of the 19th century and the first years of the 20th century. The *Charles W. Morgan*, which was sent in search of whale oil from 1841 to 1921, is the oldest wooden sailing commercial vessel still floating—though not sailing—in New England. It lies at Mystic Seaport, in Mystic, Conn. The one-time fishing vessel and later packet vessel *Ernestina*, built in 1894 as the *Effie M. Morrissey*, still sails out of New Bedford, Mass. The late-19th-century vessel the *Stephen Taber* still sails along the New England coast, carrying summer passengers in sheltered Maine waters. Three 20th-century fishing vessels remain on display—the *L. A. Dunton* (1921) at Mystic Seaport; the *Adventure* (1926), still sailing out of Gloucester, Mass.; and the *Sherman Zwicker* (1942), a Grand Banks schooner owned by the Grand Banks Schooner Museum and on display in





summer at Bath's Maine Maritime Museum. The former Maine coastal passenger and freight steamboat *Sabino* (1908) still steams out of Mystic Seaport. Maritime enthusiasts can view three replicas of earlier wooden sailing vessels: the *Mayflower II* at Plimoth Plantation in Plymouth, Mass.; the topsail sloop *Providence*, the first vessel commissioned into the U.S. Navy, sailing out of Providence; and the 18th-century replica of the British frigate HMS *Rose*, sailing out of Bridgeport, Conn.

Ten naval vessels on exhibit today are reminders that New England shipbuilders made a major contribution to America's naval, as well as mercantile, past. The vessels, all but one of which were built in New England, include the 18th-century frigate USS *Constitution* at the Charlestown Navy Yard (Boston) and seven warships of World War II vintage: the battleship *Massachusetts*, the destroyer *Joseph P. Kennedy, Jr.*, a submarine, and a patrol torpedo boat at the USS *Massachusetts* Memorial Commission, in Fall River, Mass.; a second destroyer, the *Cassin Young*, also at the Charlestown Navy Yard; and the cruiser *Salem* and diesel-powered submarine *Sailfish* at the Quincy, Mass., yard where they were built. The world's first nuclear-powered submarine, the *Nautilus*, built in Groton, Conn., in 1954 and now moored at the Nautilus Memorial and Submarine Force Museum in Groton, and the USS *Albacore*, a submarine with a radical new underwater body, built in the Portsmouth Naval Shipyard, now on view in Portsmouth, N.H., are reminders that New England shipbuilders remained on the cutting edge of technology in naval architecture and engineering well into the 20th century. New England ports also have been home to many naval vessels from the days of sail to the present.

Although most vessels of the past have been destroyed and the waterfronts at which they tied up have been filled in, the towns and cities where they were built, and from which people went to sea in them, remain. The syllables "port" or "haven" in the names of those places continue to evoke the region's maritime past: Bucksport, Searsport, Portland, Newburyport, Kennebunkport, Bridgeport, Vinalhaven, New Haven, and Fairhaven. So, too, many streets were named for their approximation to (Front, Fore, Commercial) or distance from (High, Pleasant, Church) the waterfront, the center of commerce at that time. The architecture of many homes in these ports attests to the wealth that their owners accumulated from mercantile and shipbuilding pursuits in an earlier era. Some of these "period" buildings now house fine maritime museums, and a few larger maritime museums have collections of fine "period" buildings.

Mystic Seaport is the most inclusive repository of New England's maritime past. The Dartmouth and Nantucket, Mass., Whaling Museums specialize in whaling history; the New Bedford Museum houses memorabilia of Long Island steamboats; the collections of the USS *Massachusetts* Memorial Commission, in Fall River and Quincy and the Charlestown Navy Yard appeal to the U.S. Navy World War II buff. The Maine Maritime Museum, the Penobscot Marine Museum in Bucksport, Maine, the Peabody Essex Museum of Salem, Mass., and the Lake Champlain Maritime Museum at Basin Harbor, Vt., concentrate on the maritime past of their respective locales.

Many maritime museums have come a long way in recent years, from offering fine artifacts and paintings of vessels behind glass in poorly lit display cases to providing the opportunity to board vessels of the past and stride their decks while listening to chantey men sing of seafarers' complaints and joys. Visitors can now meet and talk with role players in period costume. This "living" experience offers insight into the lives of the people who made America's maritime past. Some museums are also home to educational programs: Mystic Seaport has the Williams College–Mystic Seaport Program in Maritime Studies, for example. Others feature training in historical maritime skills that have been adapted to the present, such as boatbuilding and rigging.

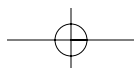
The United States is not a consciously maritime-oriented nation. Few educational institutions support an interest in, or study of, the maritime past. No university in the United States grants a doctorate in maritime history or maritime literature. Nevertheless, museum curators and individual faculty members in a few universities have helped recover, preserve, and reinterpret its maritime past. Knowledge of New England's maritime culture has been informed in recent years by their research. Using new information and new sources, and treating previous sources differently, scholars and curators have shown the region's maritime past "from the bottom up"—from the worker's view as well as from management's view. They have revealed that African Americans and men from the Azores and Cape Verde Islands contributed greatly to past maritime activity. Many women's journals and diaries have been uncovered and published, revealing the significant role of women in the maritime community. Some of the maritime museums reflect this new information and interpretation.

New England's maritime past also lives in the present, outside the universities and museums, in its icons. The three most visible images of New England's maritime past are the Portland Head Light, the statue of the

Gloucester fisherman, and the *Charles W. Morgan*. Maine's Portland Head Light stands as a bold symbol of security and stability. The statue of the Gloucester fisherman stands as a symbol of seafaring and of endurance and steadfastness against adversity. The *Charles W. Morgan*, around which Mystic Seaport was literally built, has come to stand for the past of seafaring men and women who went down to the sea in ships. These icons (along with other lighthouses, weather-beaten faces of salty mariners, and images of sailing vessels) grace calendars, note cards, and postcards. Billboards, television commercials, and other advertising media have also reproduced images of New England's maritime past to attract tourists and sell products. The *Charles W. Morgan*, for example, although used to advertise the principles of "strength, courage, . . . and the burning light of freedom," has also been used to advertise Hit Parade and Colony Hundreds cigarettes, State Line potato chips, and gasoline products for Mobile, Esso, and Atlantic Richfield. Portland Head light, too, has appeared in banking advertisements and ads for Kool cigarettes and gasoline. Commercialization and tourism clearly profit from associations with New England's maritime past.

What is preserved is often an "accident" of history. The *Sabino* still steams, primarily because in its last days as a working steamboat in a fleet of diesel-powered passenger vessels it was slow and small and hardly used, and, when used, not used hard. Such artifacts reveal the interests of the preserver and the presenter more than an authentic past. A clean look back to the past is often clouded by wishful thinking, sometimes by family interests, sometimes by artistic interests, sometimes by the interests of an entrepreneur or of a director or a board of trustees. Artifacts out of context do more to evoke a wistful sense of maritime heritage than provide an accurate sense of life in the past.

Editors of family memoirs have been known to use a "judicious" pen when presenting the diaries or letters of an ancestor for publication. Sometimes this is merely a matter of cleaning up language or editing out a family scandal, but sometimes the changes are more significant. Many authors have romanticized New England maritime life in their work, and not always with the reality of the times in mind. When we hear seafarers' songs sung by present-day chantey men, we are actually hearing a beat that once beat men to exhaustion. When the exhibit of an individual marine artist is introduced by the words, "His work captured the majesty of the square-rigged sailing ship," we must remember that



the word *majesty* is an owner's word, not a word spoken by a forecandle hand.

Museums have found it difficult to represent the past "as it was." Old vessels are often converted into tourist attractions by the addition of electric lighting and air conditioning. Visitors, therefore, find it difficult to imagine life in the forecandle of the *L. A. Dunton*, for instance. Today tourists see the varnished wood of a restored forecandle gleaming in electric lights. Yet the men who fished the boat remember a smoky, poorly lit, and poorly ventilated bunkroom, kitchen, and recreation room—a cramped space for a dozen men. The steamer *Sabino*, once a grimy working vessel covered with many layers of sooty, scaly, peeling white paint, has also been restored and is now immaculately clean, well varnished, and highly polished.

In the early 21st century, New England retains a connection with the sea. That connection is manifest in the fishing vessels that sail from Gloucester, New Bedford, Portland, Provincetown, Rockland, Maine; Point Judith, R.I.; and many smaller harbors. More and more, however, docks are being filled with pleasure boats. On adjacent piers, condominiums are replacing warehouses, fish-processing plants, and piles of fishing gear. Some working sail still remains; a summertime "dude schooner fleet" consisting of new and rebuilt vessels operates in the sailing cruise trade in Maine and Massachusetts waters. The only year-round vessels other than fishing vessels are ferries serving the islands of Maine, Massachusetts, and Rhode Island and crossing from Connecticut to Long Island. The two international ferries serving Maine and Nova Scotia operate only during the summer; many other New England ferries are seasonal as well.

A number of fine small shipyards launch excellent fishing vessels, ferries, and excursion boats, and other yards build yachts and pleasure boats. The discretionary dollar keeps a number of commercial vessels alive in recreational fishing and whale watching. Whales, once considered a natural resource, are now viewed as a natural wonder, and whale watching adds considerable tourist dollars annually to the local summer economies of New England. Many recreational beaches remain, and lobstermen continue to catch one of the few remaining natural resources in New England's inshore waters. Their boats still moor picturesquely in many coves and harbors now guarded by automated lighthouses.

The maritime past exists all around New Englanders. Their character has been formed at the intersection of that past and by continuing reactions to the sea at their doorstep. The

maritime present, on the noisy truck- and drug-infested waterfront, will tomorrow become the maritime past. The rust-streaked tanker that brought oil from Texas may turn into a well-loved vessel in a maritime museum of the future. For who in the 19th century would have thought that the *Charles W. Morgan*, an old whaling vessel—the equivalent of a present-day cross between an oil rig and the butchering floor at the Chicago Stock Yard—would end up as the most visited commercial vessel in a museum in the United States?

Robert G. Albion, William A. Baker, and Benjamin W. Labaree, *New England and the Sea* (1972); W. H. Bunting, *Portrait of a Port: Boston, 1852-1914* (1971); Jerry Morris, *New England under Sail: A Guide to Sailing Ships, Ferries and Historic Vessels* (1993); Joseph M. Stanford, ed., *Sea History's Guide to American and Canadian Maritime Museums* (1990).

James F. Millinger

Moby-Dick *Moby-Dick*, Herman Melville's greatest work, was published in 1851. Melville had risen to prominence as a writer of adventure tales based on his own experiences at sea. In January 1841 he left Fairhaven, Mass., on the maiden voyage of the whaleship *Acushnet*. He deserted at Nuka Hiva in the Marquesas Islands, then joined the Australian whaleship *Lucy Ann*. After a bloodless mutiny the vessel returned to Tahiti. Melville made his way to the neighboring island of Eimeo (present-day Moorea), where he joined his third whaler, the *Charles and Henry* of Nantucket, Mass.

Melville's sixth book, originally titled *The Whale*, began as an adventure story drawing on both the author's whaling experiences and the real-life sinking of the whaleship *Essex* by a sperm whale. Although Melville generally wrote very quickly—*Redburn* (1849) and *White-Jacket* (1850) together were written in four months—*Moby-Dick* took him almost a year and a half to complete. As he wrote, Melville struggled to include an increasingly complex body of ideas that evolved during his new friendships with Nathaniel Hawthorne, to whom *Moby-Dick* is dedicated, and a circle of New England literati. These influences, and his rereading of Shakespeare, transformed the book from a whaling adventure into a story of the search for truth. What had begun as a relation of Captain Ahab's hunt for the white whale became in the writing a masterpiece salted with brilliantly drawn characters and inimitable wry humor that blends detailed accounts of whaling with Melville's quest for the limits of human understanding. Ahab posits in *Moby Dick* all that is unknowable and inscrutable, declaring, "To me, the white whale is that wall [the bounds of human knowledge], shoved near to me." Ahab believes that if he

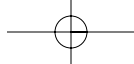
can strike through the wall, he will attain truth. The attempt drives Ahab to madness and, in the end, to the destruction of his vessel and every member of his crew except the narrator, Ishmael.

Many scholars have studied the genesis of *Moby-Dick*. Harrison Hayford noticed a curious pattern of "unnecessary" duplicates and theorized that the novel was written in several stages. In the earliest of these Queequeg was an ordinary seaman and Peleg was the one-legged Quaker captain. Ahab did not appear until late in the game. Melville went back, rewrote some passages, and inserted others, leaving vestiges of earlier writing.

Melville represents conventions of New England culture with Starbuck, the conscience-stricken Puritan; Stubb, the pragmatic, cynical Yankee; Flask, the plodder, bereft of imagination; and Ahab, the seeker consumed by his obsession. The four harpooners represent other ethnic groups commonly found on whaleships: Queequeg is a South Sea Islander, Tashtego a Native American from Gay Head on Martha's Vineyard, Mass., Daggoo an African, and the hidden, mysterious Fedallah is Asian. All these characters serve as foils for Melville's musings on humanity's place in the universe and the mechanisms of human society.

Only the first English and first American editions of *Moby-Dick* were printed during Melville's lifetime. Not until the 1920s was Melville rediscovered and *Moby-Dick* recognized as perhaps the greatest American novel. The first cinematic adaptation of the text was the silent film *The Sea Beast* (1926), which was followed by a sound version called *Moby Dick* (1930). Both movies featured John Barrymore as Ahab, who, in a drastic departure from the book, survives and returns to marry the girl he left behind. The 1956 motion picture, also called *Moby Dick*, was written by Ray Bradbury and directed by John Huston; it starred Gregory Peck as Ahab. A 1998 television adaptation of Melville's tale featured Patrick Stewart as Ahab and Gregory Peck as Father Mapple. The film *Jaws* (1975), based on the 1974 novel by Peter Benchley, is a latter-day version of *Moby-Dick*.

As can be seen in countless cartoons, notably in the *New Yorker* and Gary Larson's *Far Side* series, *Moby-Dick* has assumed a prominent place in American popular culture. Indeed, many seafood restaurants bear the name *Moby Dick*. Even the Starbucks coffee chain was named after the first mate of the *Pequod*. *Moby-Dick* has become an integral part of New England culture. Those who have not read the book still know of crazy Ahab and his monomaniacal pursuit of the great white whale.



Mary K. Bercaw, *Melville's Sources* (1987); Harrison Hayford, "Unnecessary Duplicates: A Key to the Writing of *Moby-Dick*," in *New Perspectives on Melville*, ed. Faith Pullin (1978); Elizabeth A. Schultz, *Unpainted to the Last: "Moby-Dick" and 20th-Century American Art* (1995); Haskell Springer and Douglas Robillard, "Herman Melville," in *America and the Sea: A Literary History*, ed. Haskell Springer (1995).
Mary K. Bercaw Edwards

Monhegan Island Located some 11 miles off midcoast Maine in Muscongus Bay, Monhegan was first sighted by Europeans during the exploratory voyage of Giovanni da Verazano in 1524. When Captain John Smith sojourned on "Monahigan" in 1614, he praised its convenient harbor, buffered from open winds by the tiny isle of "Monanis" (Manana), and its abundant ocean harvests. Many other early adventurers also noted this 2-square-mile island in the Gulf of Maine. They traded there with Native Americans, who camped seasonally to fish, and later established fishing stations. English cod fleets quartered at Monhegan helped sustain the fledgling colony established at Plymouth in 1620.

Permanent settlement began shortly after 1777, the year Henry Trefethren of Kittery purchased Monhegan and its outlying islands for £300 and three of his married children moved there to farm and fish. When Monhegan was incorporated as a plantation in 1839, it had 100 residents, numerous dwellings, a schoolhouse, a church, and well-fenced fields and pastures. During the second half of the 19th century fishing eclipsed farming, and Monhegan experienced the beginnings of tourism. Although the island remained isolated and insular into the 20th century, as early as the 1870s cottagers and boarders began summering there. A reporter for the *Boothbay Register* explained in 1907, "The artists followed the fishermen, literary men came next, then people of wealth and refinement." The island's exquisite landscape makes it a summer haven for artists, nature lovers, and those seeking respite from the world. Artists found the island particularly appealing. Encouraged by his teacher, Robert Henri, the painter Rockwell Kent worked as an artist and a carpenter on Monhegan during extended stays between 1905 and 1911. He was followed in 1911 by George Bellows and by many other artists since that time. Their paintings of the stark meeting of land, sea, and sky and of the fishermen and other island folk who toil on Monhegan have contributed to an image of the island as a place embodying core Yankee values.

Monhegan's year-round population has ebbed and flowed over time. Well into the 19th century descendants of original settlers pre-



Monhegan Island, 1973

dominated. New families arrived in the 1850s, increasing the population to a high of 195 in 1860. That number had declined by more than half by 1900. In 1940 population reached a 20th-century peak of 150, owing to natural increase and newcomers. With the outbreak of World War II, the island's young men all enlisted and then returned to shape the community for the next quarter century. As they matured and their children moved off-island, the year-round population dropped below 50. In 1964 the one-room school closed. During the 1960s and 1970s young people—many of them children and grandchildren of cottagers—began moving to Monhegan to live, work, and raise families in the relative safety and isolation of the island community. Since the mid-1970s the year-round population has hovered between 70 and 100, and in 1972 the school reopened permanently.

Monhegan lacks many commonplace amenities and is not always accessible in winter, when the mail boat runs three times a week, weather permitting. The town, a cluster of wooden structures built mostly along the island's few dirt roadways, covers barely a third of the island's surface. There are no cars on Monhegan, though the island is home to a number of rusted-out pickups; modest wooden signs mark commercial establishments; doors can still be left unlocked; daily interactions are face to face. Most of the island is owned by Monhegan Associates, organized in 1954 to "preserve for posterity the natural wild beauty" of the headlands and forests.

Monhegan has for generations been home to a working year-round community whose economic mainstay is lobstering. This community defines the character and culture of the island. Since 1909, under a state law imposed

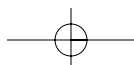
by the islanders themselves, the lobster season has been restricted to six months of the year in order to maintain a plentiful supply in a protected 2-mile zone around Monhegan's shores. The 2-mile zone was customary until 1998, when challenges from inshore fishermen brought the matter into the courts, where it was codified into law. At the beginning of the off-season, which coincides with the arrival of summer sojourners and day-trippers, lobster traps are stacked along roadways, and many of their owners join the island's full-time tradespeople in tourist-related occupations.

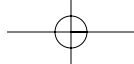
Islanders generally share a desire to preserve Monhegan roughly as it is. Some changes have nonetheless occurred. In the 1980s electricity replaced kerosene and gas lamps in many houses and businesses, and regular phone service was installed. The number of summer boat crossings has also increased. As islanders look toward the future, they worry about the delicate balance between the quality of the natural environment and tourism, about the economic and cultural costs of modernization, and about protecting the viability of their way of life.

Ted Bernard and Jora Young, *The Ecology of Hope: Communities Collaborate for Sustainability* (1997); Ruth Grant Faller, *Monhegan: Her Houses and Her People, 1780-1970* (1995); Charles B. McLane, *Islands of the Mid-Maine Coast*, vol. 3: *Muscongus Bay and Monhegan Island*, rev. ed. (1997); Ida Sedgwick Proper, *Monhegan: The Cradle of New England* (1930).

Holly V. Izard

Morison, Samuel Eliot (1887-1976) Historian. Rarely has a professional historian attained the level of public recognition enjoyed by Samuel Eliot Morison. A remarkably skilled writer, this Harvard College professor at-





Unveiling of the Samuel Eliot Morison monument, Boston, 1982

tracted a wide audience for his books, which were both scholarly and accessible to the general reader. Many had maritime themes, and two won the Pulitzer Prize. Morison established a lasting reputation as a self-professed sailor-historian with his masterful biography of Christopher Columbus, *Admiral of the Ocean Sea* (1942), for which he retraced Columbus's route and probable landfall in the Bahamas. Throughout Morison's life, recreational sailing remained important to him.

Morison was born into a distinguished Boston family and recalled in later years a childhood often spent in the company of his grandfather and namesake, the historian Samuel Eliot. In 1904 he enrolled at Harvard and by his sophomore year had resolved to study history, a decision further inspired by the presence at Harvard of an extraordinary group of historians, including Frederick Jackson Turner. After graduating in 1908, Morison studied in France for a year before returning to Harvard for graduate work. After receiving his doctorate, he taught at Berkeley but returned to Harvard in 1915 for an appointment to the history faculty. With the exception of three years at Oxford in the 1920s, he remained at Harvard until his retirement in 1955.

The prolific Morison wrote history as the story of individuals and their strivings, and did so in a highly effective and approachable manner. Early publications included *The Maritime History of Massachusetts, 1783-1860* (1921), *The Oxford History of the United States, 1783-1917*

(1927), and *The Growth of the American Republic* (1930), a popular textbook co-written with Henry Steele Commager. Morison's work consistently touched on the American promise of opportunity and individual liberty, with a clear emphasis on a foundation of social order. Never shy professionally, Morison advocated and then undertook the writing of the three-volume *Tercentennial History of Harvard College* (1935-36). During World War II he used political connections to become the U.S. Navy's semiofficial wartime chronicler, receiving a commission as a lieutenant commander and serving on several warships in the process. The payoff in terms of scholarship was the 15-volume *History of United States Naval Operations in World War II* (1947-62).

As the postwar decades unfolded, Morison continued to produce significant work, including *John Paul Jones: A Sailor's Biography* (1959) and the two volumes of *The European Discovery of America: The Northern Voyages* (1971) and *The Southern Voyages* (1974). During his retirement years Morison also maintained an extensive schedule of public lectures, further enhancing his popularity. Morison died in Boston in 1976; in 1982 the city recognized the life and achievements of Samuel Eliot Morison by erecting a monument in his honor on the Commonwealth Mall.

William Bentinck-Smith, "Samuel Eliot Morison," *Proceedings of the Massachusetts Historical Society* 88 (1976); Samuel Eliot Morison, *One Boy's Boston, 1887-1901* (1962); George M. Pfitzer, *Samuel Eliot Morison's*

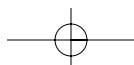
Historical World (1991); Wilcomb E. Washburn, "Samuel Eliot Morison, Historian," *William and Mary Quarterly*, 3d ser., 36 (July 1979).

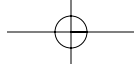
Paul D. Nygard

Museums Much of New England's maritime past is being extraordinarily well preserved in museums. The focus of these museums' collections varies widely, including naval architecture, yachting, whaling, 19th-century maritime life, and submarines. Because of the complex technology of the maritime world, curators and historians have difficulty explaining maritime events without devoting concentrated study to ship construction, nautical language, sail handling, navigation, and naval tactics, among other subjects. This necessary specialization, in addition to New England's rich seafaring heritage, explains the existence of so many fine maritime museums in the region.

The Peabody Essex Museum of Salem, Mass., which began in 1799 as the Salem East India Marine Society, was initially a professional organization for ship captains and supercargoes. Established to promote knowledge of trade to the East Indies and to create a museum of curiosities, it also assisted widows and orphans of deceased members of the society. Although its founders did not intend to create one of the nation's preeminent maritime museums, the staff in later decades would recognize the need to preserve the art and artifacts of Salem's dying maritime trades. By 1889 the Peabody had acquired enough material to designate a special maritime collection; today the Peabody Essex Museum is one of the largest museums in New England and its holdings have grown to include collections of decorative arts, architecture, and cultural artifacts.

The Peabody remained the region's sole maritime museum until the New Bedford (Mass.) Whaling Museum was established in 1903; in 1922 the Hart Nautical Collection was established at the MIT Museum in Cambridge, Mass. Maritime museums did not evolve in the era when museums as a whole consisted of difficult-to-access collections of esoteric objects intended only for the use of scholars. Instead, they emphasized the preservation of New England's seafaring heritage. And when the family car made it possible for American families to vacation in coastal towns, maritime museums blossomed. During the 1920s and 1930s, several influential maritime museums were created, including the Marine Historical Association, now Mystic Seaport (1929), the Nantucket Whaling Museum (1930), and the Penobscot Marine Museum (1936). All were inspired by awareness that New England's maritime industries were





Visitors at Maine Maritime Museum, Bath

in steep decline. By the 1920s sailing ships were disappearing, and mariners who had sailed during the glory days of clipper ships and whaling fleets were dying out. Growing public interest in “the old days” led to the establishment of these museums. Preservationists celebrated Yankee sailors’ hardiness and ingenuity and acknowledged shipping as the mainstay of many regional fortunes.

The most spectacular period of growth for maritime museums occurred during the 1960s and 1970s. Fully half of New England’s maritime museums were established between 1962 and 1978. This growth was part of a national trend; a boom in the creation of new museums resulted from, among other things, renewed public interest in the past, growth in the tourist industry, and new interest in traditional folkways such as wooden boatbuilding. Museum professionals reacted to new potential audiences by changing exhibit styles. Rather than simply displaying everything in their collections, curators created elaborate thematic exhibits that reflected concern for the education and interests of all visitors.

Every New England state (even landlocked Vermont) has had at least one maritime museum; most are located in Massachusetts and Maine. More than 60 institutions in New England have important maritime collections. About half of these have mission statements that emphasize maritime history entirely or significantly, and about one-quarter of them are active in the Council of American Maritime Museums.

Most maritime museums today exhibit nautical artifacts, including ship models, ship portraits, fishing and whaling implements, nautical gear, naval weaponry, small craft, and historic memorabilia. Some museums possess *are*

historic vessels, such as *Battleship Massachusetts*, nicknamed “Big Mamie,” located at Battleship Cove in Fall River, Mass. The best museums emphasize public education through guided tours, onsite interpreters, lectures and other public events, publications (print, Internet, and video), internships, school programs, sail training, traveling exhibits, and research libraries. Museums often occupy a maritime site such as a wharf or shipyard. Those fortunate enough to have a waterfront site with a view of passing vessels offer visitors yet another dimension of New England’s seafaring heritage.

Edward P. Alexander, *Museums in Motion: An Introduction to the History and Functions of Museums* (1979); American Association of Museums, *Museums for a New Century* (1984); American Association of Museums, *The Official Museum Directory* (1997).

Nathan R. Lipfert

Pirates, Privateers, and Smugglers

Pirates, privateers, and smugglers have plied the coasts and borders of New England and captured the attention of its residents for centuries. During the 16th and 17th centuries, descendants of the Puritans illegally conveyed various goods, including molasses, distilled into rum, to avoid acts of the British Parliament. From 1919 to 1933, New Englanders smuggled liquor by boat and across the Canadian border to thwart Prohibition. In the 21st century smugglers bring illegal drugs and immigrants, automatic weapons, and bootleg cigarettes in and out of New England.

A pirate is someone who robs at sea. Although pirates still operate in Asian and Caribbean seas, piracy had ended in New England waters by 1720, especially after the British government stepped up its efforts against piracy in 1700. Deceived by Lord Belloc, Captain Kidd found himself in a Boston jail in 1699. In 1704 authorities executed six pirates in Boston after exhortations from the Reverend Cotton Mather. Another 26 pirates died by hanging in Newport, R.I., in 1723. In some areas, pirates’ corpses were coated with tar and displayed publicly as a warning to others.

The end of widespread piracy coincided with the expansion of privateering. Considered little more than legalized piracy by many, it only took a license or a “letter of marque and reprisal” from the government to convert a private armed vessel into a privateer.

Privateers performed an important role in America’s early wars. During the War of Austrian Succession (1740–48) American privateers played the leading role in America’s war effort and significantly assisted England by impeding Spanish and French shipping. At least 230 privateers, carrying more than 5,000

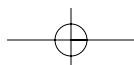
men, sailed from New York City, Newport, and Boston during the French and Indian War (1754–63). Over the course of the Revolutionary War, there were between 2,000 and 3,000 American privateer attacks on British shipping. Although Rhode Island, Connecticut, and New Hampshire all commissioned privateers, no state sent more privateers to sea than Massachusetts between the Revolution and the War of 1812. In the latter conflict 515 American privateers captured 1,345 British vessels.

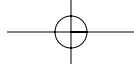
After the war years, the expiration of letters of marque led some privateers into piracy. A more diverse and realistic portrait of the people who sailed on privateers and pirate ships—long considered nothing more than “all kinds of flotsam and jetsam”—has emerged. David Cordingly argues that pirates practiced egalitarianism and democracy. In addition to electing their captains and relying on profit sharing, pirates voted on other matters affecting their vessels and resolved disputes through arbitration. Displaced workers and family members often sailed on privateers, as did African Americans, who frequently sailed on privateers based in northern seaports.

Smuggling was a violation of the law but occurred regularly and became an economic necessity for many New Englanders. Opportunities for smuggling African slaves, European manufactures, rum, sugar, and sugar products abounded in colonial America. England’s economic policies and lax enforcement, moreover, encouraged American smuggling with the Dutch, the French, and the Spanish West Indies. America’s trading with the enemy during the French and Indian War infuriated the British. Intended to discourage smuggling and curb the legitimate trade of the colonies with continental Europe, the American Revenue Act (generally known as the Sugar Act) of 1764 hit New England particularly hard. John Tyler argues that smuggling played a larger role in the Tea Act, the Boston Tea Party, and the interests of the Boston merchants and America’s revolutionary leaders than generally realized.

Although only a small portion of New England mariners engaged in piracy, and the impact of smuggling and privateering far exceeded piracy’s impact on the region, pirates dominate tales of seafarers. Whether they emerge as ruthless, as in Robert Louis Stevenson’s *Treasure Island*, as entertaining caricatures in a Gilbert and Sullivan opera, or as peg-legged Lego pirates, pirates continue to capture the imagination.

The 1984 discovery near Cape Cod of the *Whydah*, the only pirate shipwreck ever found, galvanized the interest of the public, treasure hunters, and maritime archaeologists. Seeking recruits and supplies in New England, the





Whydah got caught in a storm in 1717 and joined the 3,000 other sunken vessels along the 40 miles of shoals beyond the Cape's outer beach. The ship, which had captured more than 50 merchant vessels, seemed destined to reemerge as a theme park and museum in the Charlestown Navy Yard; controversy surrounding its early history as a slave galley, however, prompted developers to seek a final home for the proposed *Whydah* attraction elsewhere. A Cape Cod museum devoted to the *Whydah's* continued excavation is open to the public and offers information about conservation of the ship's artifacts.

David Cordingly, *Under the Black Flag: The Romance and Reality of Life among the Pirates* (1997); Simon Smith, "Piracy in Early British America," *History Today* 47 (May 1996); John Stilgoe, *Alongshore* (1994); John Tyler, *Smugglers and Patriots: Boston Merchants and the Advent of the American Revolution* (1986).

William A. Baller

Ports In 1916 Hildegard Hawthorne published a travel book entitled *Old Seaport Towns of New England*, in which she described the scenery and history of towns from Portland, Maine, to New Haven, Conn. She tried to capture the charm of these seaport towns for readers who had never visited New England. Hawthorne lamented the disappearance of the traditional maritime trades and crafts, the rotting wharves and dilapidated shipbuilding yards. All of the cities, New London, Conn., especially, had shifted their emphasis toward manufacturing.

Many characteristics that made New England's seaports "maritime" cities have been disappearing for some time. Traditional maritime industries have fallen victim to a variety of economic and political factors over the past 150 years. At the turn of the 19th century at least 10 percent of New Englanders made their living from the sea. Commercial use of the coast is still evident today by the sight of fishing trawlers in nearly every New England port and lobster boats off the coast of central and northern Maine, but government regulations on the fishing industry and technological improvements (containerized cargo, for instance) have made it increasingly difficult for New Englanders to make a living from the sea.

After the Civil War, environmental, economic, and political factors forced much of the region's shipbuilding to move to Maine. The introduction of iron and steel to ship construction in the latter part of the 19th century, however, made it hard for Maine builders to compete in the world market. Shipbuilding is now confined to a few coastal cities such as Bath, Maine, and Groton, Conn.; these cities are so dependent on navy contracts, however, that their future is uncertain in a post-Cold

War America. Most vessels built in New England now serve either as military or as pleasure boats.

Another important task of coastal cities is to serve as an entrepôt for goods moving into the interior hinterland. The transshipment of goods largely shifted to New York and New Jersey early in the 20th century, but by the end of the century Boston was making efforts to improve its position in international trade. The introduction of containerized cargo in the early 1960s, however, drastically reduced the need for dockworkers.

Today, only a few remaining New England ports can still service large, oceangoing vessels, and the commercial use of space on the waterfront is being replaced with recreation and leisure industries. Many high-paying manufacturing jobs have been replaced by lower-paying service jobs. A marina that services large pleasure yachts has replaced the navy yard in Newport, R.I. Commercial wharves are being converted into "dockminiums." The gentrification of the waterfront has caused property values to soar and has driven working-class neighborhoods inland.

Tourism is now actively promoted in New England's coastal cities. Massport's Cruiseport has seen a dramatic increase in cruise ship passengers since 1995, when 42 ships carried 59,720 passengers; in 2004, 96 ships carried 199,453 passengers. Senator Edward Kennedy of Massachusetts worked for and passed federal legislation in the 1980s to help preserve America's historic ships. Some cities, like Fall River, Mass., have invested in maritime museums and waterfront redevelopment projects using private and state dollars. New England states now promote their waterfronts with everything from license plates to television advertisements. As coastal cities continue to promote the recreational uses of the sea, they face the challenge of providing a clean and safe aquatic environment.

But New England's ports have not merely become amusement parks and weekend playgrounds. Massport's Conley Terminal moved 51,770 containers in 1998, importing more than 500,000 tons and exporting nearly 190,000 tons. The Massport Marine Facilities also moved more than 40,000 automobiles, plus petroleum products, salt, liquefied natural gas, gypsum, cement, and scrap metal. Connecticut's three deep-water ports, Bridgeport, New Haven, and New London, specialize in cargo markets that overlap in some respects with Boston. These ports also transship forest products, produce, chemicals, metals, and waste papers. The port of Portland handled more than 650,000 tons of dry cargo in 1997, putting it in the same league with Boston in terms of tonnage. Portland likewise handles

forest products, scrap metal, coal, salt, tapioca, and fertilizer.

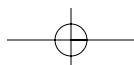
New England's port facilities today represent a variety of public-private ownership arrangements. For instance, Merrill's Marine Terminal in Portland (built in 1982) is privately owned, whereas port facilities in Portsmouth are run by the New Hampshire State Port Authority (created by the state legislature in 1957), an independent agency superintended by a board of directors appointed by the governor and executive council. But although some New England coastal cities and towns are recovering the historic charm that Hildegard Hawthorne described, it is unlikely that many will reindustrialize with those traditional maritime industries she described.

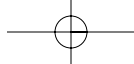
Robert G. Albion, William A. Baker, and Benjamin W. Labaree, *New England and the Sea* (1972); Elaine Forman Crane, *Ebb Tide in New England: Women, Seaports, and Social Change, 1630-1800* (1998); William L. Taylor, *A Productive Monopoly: The Effect of Railroad Control on New England Coastal Steamship Lines, 1870-1916* (1970).

Steven H. Park

Sea Chanteys Chanteys (also *chanties* or *shanties*) are shipboard work songs used informally to coordinate rhythms when hoisting sail, weighing anchor, loading cargo, and, occasionally, furling sail, hauling nets, and rowing. Chanteying was initially a phenomenon of the American and British merchant marine and the songs themselves descended directly from West African work songs. The practice in Scandinavian, French, German, and other European vessels derived from the Anglo-American example in an international shipboard labor pool. Unaccountably, the term almost certainly derives from the French *chanter* (to sing) or its command form, *chantez* (you, sing). Whatever the spelling, it is properly pronounced *shanty*, and it refers as much to the specific occupational use of such songs as to the songs themselves.

Shipboard chanteying arose largely as a generalized phenomenon in the years following the Napoleonic Wars, occasioned by sailors' exposure to the traditional call-and-response work songs of African slave laborers loading cargo in the Gulf Coast and Caribbean ports. Singing at work was inherently infectious, and on shipboard it proved effective in allaying boredom, increasing efficiency, and elevating crew morale in an era when merchant ships tended to be chronically undermanned. Meanwhile, increasing numbers of slaves and free blacks were serving in the crews of merchant vessels, bringing their songs and age-old African singing traditions with them. These became intermingled with Anglo-Scots-Irish genres, popular songs, and





various other European and American influences, resulting in a distinctive occupational type. Typically, chanteys were sung by that portion of a ship's crew at work on a given task, unaccompanied by musical instruments. They were led by a so-called chanteyman, who was formally or informally selected from the crew.

Regarding their origins, chanteys can be organized into four groups: songs and chants adopted directly from the African American stevedores, of which few survive in their original forms; chanteys indigenous to the merchant service—the characteristic body of songs made up by sailors for the performance of specific shipboard tasks; songs imported intact from the general culture and turned to the purpose of accompanying shipboard tasks; and various hybrids, mostly adaptations and derivations from popular culture ashore. Like any folk process of oral tradition, as the songs were passed from ship to ship they were expanded and improvised upon until they became inextricably intermixed and the distinctions obscure.

Chanteys are classified into three main types, distinguished primarily by function and by rhythm and structure. The first type, the hauling chantey, includes three species: long-drag or long-haul halyard chanteys were used for hoisting topsails, for other types of heavy hauling, and occasionally (though not customarily) for rowing and other rhythmic chores of long duration. They are typified by a call-and-response format, with a single line sung as a solo, followed by a one-line chorus joined by all hands. The crew would haul on the accentuated downbeats of the chorus:

SOLO: As I was a-walking down Paradise
Street

CHORUS: To me WAY, aye, blow the man
DOWN!

SOLO: A pretty young damsel I chanced for to
meet

CHORUS: GIVE me some time to BLOW the
man down!

Short-drag or short-haul chanteys were for working topgallants, royals, and the other smaller sails, and for working sheets, clews, bunts, and braces to position square sails:

SOLO: Boney was a warrior

CHORUS: Away ay-YAH!!

SOLO: A harrier and a terrier

CHORUS: John Fran-SWAH!

A small family of chanteys was intended for furling sail aloft, which requires a unified haul among several hands to gather, fold, and tuck the bunt. The structure of these chanteys is unique, the important feature being a recognizable burden (sung as a solo or in unison) leading up to a final syllable that was the signal to haul:

To me way, hey, yah! We'll pay Paddy Doyle
for his BOOTS!

To me way, hey, yah! We'll all throw much at
the COOK!

Or:

SOLO: Oh do, my Johnny Boker, come rock
and roll me over;

CHORUS: Do, my Johnny Boker, DO!

Technically, these are short-haul types intended for a special purpose, as are the sweating-up and hand-over-hand chanteys, used for setting jibs, staysails, and the smaller square sails high aloft. Although almost any halyard chantey might do, one that was particularly associated with hand-over-hand work is nowadays probably the most famous chantey of all:

SOLO: What shall we do with a drunken
sailor?

CHORUS: What shall we do with a drunken
sailor?

What shall we do with a drunken sailor?
Early in the morning.

The second type, heaving chanteys, are those used for working the capstan, brake windlass, and pumps—thus for weighing anchor, cutting-in whales, loading cargo, and pumping ship. These may be generally (but not rigidly) subdivided by rhythm and structure. Capstan chanteys are suited to walking around the capstan in waltz or march time. Often they are structured like halyard chanteys, the distinction being more one of customary usage than of rhythm or format:

SOLO: Oh the times are hard and the wages
low.

CHORUS: Amelia, where you bound to?

SOLO: The Rocky Mountains is my home.

CHORUS: Across the Western Ocean.

They frequently have a longer solo followed by a chorus of two or more lines, however, and because of the long duration of the tasks for which they are intended, the lyrics are often ballad-like narratives:

SOLO: From the West Indies docks I bid
adieu

To lovely Sal, and charming Sue;
Our ship's unmoored, our sails unfurled,
We are bound to plow the watery world.

CHORUS: For we are outward bound;
Hurrah! we are outward bound!

The stroke required to work the seesaw-like "jiggity-jig" brake windlass apparatus has a more staccato rhythm than capstan work. Many of the same chanteys were also used to operate the bilge pumps, which entailed a similar up-and-down motion. The extent to which chanteys were interchangeable among capstan, windlass, and pumps seems to have

been a matter of individual preference among chanteymen and crews. Halyard chanteys and capstan chanteys were converted for walkaway, a method of hoisting a sail by walking along the deck with the halyard, rather than hauling it in place. Similarly, halyard chanteys were sometimes recruited for use at the windlass and pumps. Often, shore songs were employed; others were hybridized, such as "Banks of the Sacramento," a ubiquitous derivative of Stephen Foster's "Camptown Races."

Finally, a few ceremonial and occasional chanteys were reserved for special occasions during a voyage. The "Salt Horse Chantey" or "Poor Old Man," though unrelated to the practical heaving-and-hauling required in the sailors' regular work, has ritual significance as an ironic tribute to the sailors' paying off their advances after a month or two at sea. "Homeward bound" songs for the capstan and windlass are specific chanteys (or variants of chanteys) purported to have been sung only at the conclusion of a voyage, when the bowsprit was pointed home.

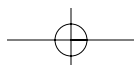
Chanteys were occupational work songs, seldom if ever sung on shipboard for any purpose not connected with actual work. As early as the 1870s they were popularized and romanticized in arrangements for the parlor, glee clubs, and schools. Meanwhile, as steam propulsion gradually supplanted commercial sail, chanting aboard ship declined and by 1930 had become extinct. In his play *Moon of the Caribbees*, written around the time of World War I, Eugene O'Neill employs chanteys as a point of pride symbolic of "real" deepwater sailors, as distinguished from the newer breed of steamship men who—like the Hairy Ape—work inside a machine and therefore never had use for chanteys.

Joanna C. Colcord, *Songs of the American Sailormen* (1938); Stuart M. Frank, *The Book of Pirate Songs* (1998); Frederick Pease Harlow, *Chanteying aboard American Ships* (1962); Stan Hugill, *Shanties from the Seven Seas* (1961).

Stuart M. Frank

Seamen During the colonial and Federalist eras, many coastal New Englanders worked as mariners. Seaborne commerce, fishing, and whaling expanded rapidly from the 1600s through the early 1800s. New England's maritime industries declined steadily after the Civil War; consequently the numbers of employed seamen declined as well. In the 17th and 18th centuries, seamen brought cultural diversity to New England's coastal cities and towns with their travels and experiences; in the 19th century, with their ethnic and regional backgrounds; and in the 20th century, with their traditions and history.

White seamen in colonial New England



shipped out with slaves, free blacks, and Native Americans. In 1742, 8 percent of Boston's population of 16,400 was enslaved, and most slaves worked in some maritime capacity; one-fifth were owned by mariners. Early Nantucket, Mass., settlers may have learned whaling from the local Gay Head Indians, and New Bedford, Mass., New London, Conn., and several other ports took up whaling soon after the Revolutionary War. Whalers from most Massachusetts ports employed Native Americans well into the 19th century. Nantucket whalers recruited seamen from the Massachusetts mainland, and many African Americans accepted the invitation and settled on the island with their families.

Merchant trade with the West Indies and with the other American colonies began in the mid-17th century. "Coasting" (seaborne trade along the American coast) allowed towns and small coastal settlements to exchange farm and forest products for British manufactured goods, providing both agricultural profits and a higher rural standard of living. Port cities, especially Boston, prospered as commercial centers. In 1698 there were 171 merchant vessels registered in Massachusetts, and Boston had 194 ships engaged in merchant trade, and for the rest of the colonial era maritime commerce employed a quarter or more of Boston's male residents.

New England had an early tradition of community participation in maritime commerce. By 1740, New Englanders owned some 1,500 merchant vessels. In ports such as Boston, New London, and Salem, Mass., merchants built and financed ships and hired their captains; frequently the merchant owners were retired captains themselves. In many small communities, the ships were built and financed as communal ventures, with local captains, most of the crew, and a good percentage of the populace sharing in the profits. The captains hired the mates (officers) and sailors. In the smaller ports, the majority of the crews were local men, neighbors, and often relatives.

Slavery ended in all the New England states shortly after the Revolutionary War, and New England's black population increased steadily. The federal Seamen's Act of 1790 mandated contracts for seamen that stipulated employment and wages regardless of race, and New England blacks hired on as seamen in large numbers. For the most part, African American seamen were career mariners with homes and families in port towns. The 1830 city directory for Portland, Maine, listed 33 African American seamen who were also homeowners. Approximately one-fifth of the sailors from Newport, R.I., Providence, Boston, and Nantucket were African American; the ma-

majority of them were residents. In 1832, 25 percent of Providence's African American heads of household were mariners. From 1803 to 1860, some 3,000 African Americans shipped aboard New Bedford vessels; that city had the highest percentage of black population of any in New England, at nearly 7 percent in 1838.

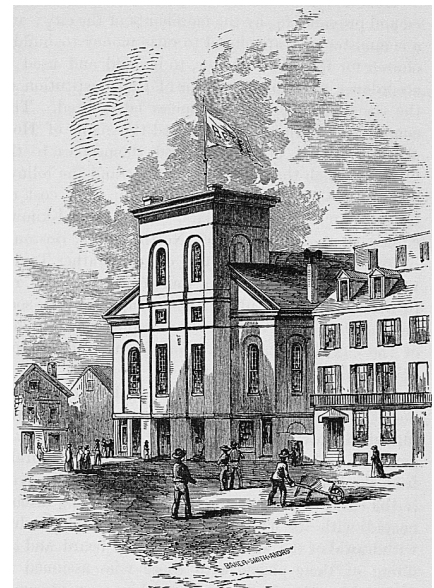
After the Revolutionary War, New England's maritime industries expanded rapidly, with the encouragement and support of the new federal government. Jobs for seamen multiplied until there was virtually a berth for any American who wanted to go to sea, from masters (captains) to green hands (new sailors). New England boys from ports and fishing villages followed their fathers and brothers to sea, along with thousands of others who left farms and small towns to go "before the mast," as they referred to it.

The resident population of seamen brought a certain sophistication to coastal New England, from Boston to the smallest Maine port. Souvenirs and consumer goods from all over the world were displayed in homes and sold in shops. Geography and navigation were taught in public schools along with the "three Rs," and some seaports that traded with Latin America also offered Spanish in their schools. Young men and women alike studied this relatively cosmopolitan curriculum, thus enriching the culture of the entire community.

Although seafaring jobs continued to increase, the percentage of American-born seamen declined sharply after 1830. Merchant and whaling vessel owners began to emphasize greater speed and larger cargoes, and voyages became more difficult and more dangerous. Captains turned the hiring of crews over to recruiting agents who rounded up the cheapest white laborers they could find, often shutting out experienced sailors. There were also new opportunities ashore by 1850, and fewer American-born young men went to sea. Eager to take their place, laborers from abroad signed on.

Portuguese sailors joined New England crews relatively early, first from the Azores and later from Cape Verde. In the 1780s whaling ships had begun stopping at both archipelagos, first to take on salt and later expressly to hire crews. The Portuguese were regarded as good sailors and hard workers, and by the 1860s well over 25 percent of New England's whaling crews were Portuguese. The majority of Azorean sailors settled in New England, primarily in New Bedford and New London. Initially most Cape Verdean sailors left their families behind on the islands and returned when they could, but in the decades after the Civil War they began establishing homes and families in New Bedford and Providence.

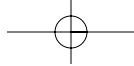
Boston received 311,000 European immi-



Seamen's Bethel, 1872

grants in its harbor from 1820 to 1855, more than half of them Irish. Of the Irish who stayed in Boston, most found jobs ashore and only a few went to sea. Many Irish immigrants went to Provincetown and Gloucester, Mass., and to Portland looking for other employment and became seamen in those ports. The same process held for other immigrant groups, and by midcentury a great many of Boston's seamen were transients. Sailors went to Boston for a berth but no longer for a home. The welfare of mariners had concerned New England's clergy and social reformers since colonial times, and in 1833 the Boston Port Society opened a boardinghouse and the Seamen's Bethel, a church for mariners, "to improve the moral, religious and general condition of seamen and their families." The mission continues to this day in Boston's North End.

The fishing fleets of Massachusetts were slower to hire foreign-born seamen than were the merchants and whalers. Fishing boats went on shorter trips and fishermen were paid by a percentage of the catch, so their shoreside lives were relatively stable and their pay remained competitive. Nevertheless, by the 19th century, fishing ports began attracting foreign-born seamen to their wharves. Irish laborers came to Provincetown and Gloucester in midcentury to work in the shipyards and went fishing instead. Significant numbers of Azorean Portuguese left New Bedford and whaling for Gloucester and Provincetown and fishing. Gloucester's population grew by more than 10,000 between 1840 and 1875, making it not only New England's busiest fishing port but also its most diverse city. Along with the Portuguese and Irish, Italians, Nova Scotians, and Scandinavians came to Gloucester.



The percentage of Maine's seamen who were foreign-born did not increase to the same degree as it did elsewhere. Maine's maritime commerce flourished in relatively independent community ports, with predominantly local captains and crews. Maine was home to half of the entire U.S. Atlantic fishery in the 1820s, with small fleets employing 2,600 men out of 70 harbors. Many of those men fished in the summer and farmed or built ships for the rest of the year. Maine's merchant vessels were also relatively small and often a community or even family venture, with the captain owning a controlling interest. Seafaring was the center of Maine's coastal life, and its communal structure was its strength. Independence and a strong sense of community still characterize Maine's coastal towns.

During the Civil War, the Union's merchant marine fleet was decimated; half of New England's vessels were lost. Neither American nor New England shipping ever recovered. Merchant vessels built in Maine and captained by Maine masters continued trading in the decades after the Civil War. Elsewhere, New England's presence in maritime commerce steadily declined, from carrying one-third of U.S. merchant trade in 1880 to only 4 percent in 1950. The whaling industry, too, collapsed after the Civil War. Azoreans and Cape Verdeans in New Bedford dominated what remained of the industry, but after the 1880s few vessels were still whaling.

New England's fishing industry remained viable and economically important. By the end of the 19th century, the fishing fleets were manned primarily by Portuguese, Nova Scotian, and Scandinavian seamen. By 1880 New Bedford's fishermen were almost entirely Azorean and Cape Verdean, and Provincetown's population was more than one-third Portuguese. From that time on, Italians, mainland Portuguese, Swedes, and Norwegians began coming to Boston to fish. Most moved north to the ports of Gloucester and Portland or south to the fishing towns of Rhode Island.

Today, New Bedford, Gloucester, and Provincetown still have fleets of offshore fishing boats, but the rest of New England's fishing industry is inshore and small-boat. Meanwhile, ferries, other passenger vessels, workboats, tugs, and recreational vessels continue to employ mariners, some of whom are trained at Maine Maritime Academy or at the Massachusetts Maritime Academy. Seafaring as a way of life is still compelling to a few people in New England. But while the region may always have busy ports such as Boston and Portland, its prominent role in merchant shipping is in the past.

Richard Henry Dana, Jr., *Two Years before the Mast* (1840); Sebastian Junger, *The Perfect Storm: A True Story of Men against the Sea* (1997); Rudyard Kipling, *Captains Courageous* (1897); Samuel Eliot Morison, *The Maritime History of Massachusetts* (1961); Charles Nordhoff, *Whaling and Fishing* (1856); William Hutchinson Rowe, *The Maritime History of Maine* (1948); Walter Teller, ed., *Five Sea Captains: Their Own Accounts of Voyages under Sail* (1960).

Wendy Knickerbocker

Shipbuilding "Build me straight, O worthy Master," wrote the New England poet Henry Wadsworth Longfellow in "The Building of the Ship," aptly choosing a theme close to his New England heart as a metaphor for the state. For until the Civil War nearly wrecked Longfellow's ship of state and decimated the American merchant marine, New England shipbuilders were producing at least half the ships that floated the nation's ocean-going commerce. During the entire era of wooden ships, from the 1620s to the 1920s, New England ships and shipbuilding were defining elements of the region.

New England shipbuilding in fact predates permanent settlement in the region. The short-lived Popham Colony at the mouth of Maine's Kennebec River constructed the pinnacle *Virginia* in 1607, considered to be the first ship built in North America. Massachusetts launched its first vessel, the *Blessing of the Bay*, in 1631, and the other colonies followed suit shortly after settlement.

Shipbuilding became a characteristic New England industry for several reasons. North of Cape Cod, especially, agricultural opportunities were limited, whereas one of the world's richest fishing grounds lay just offshore. Colonists required ships to engage in fishing and to transport the surplus catch, along with surplus agricultural produce and wood, to distant markets in exchange for manufactured goods and produce unavailable at home. Even within New England, waterborne transportation was more efficient than land transport until the development of the railroad in the second quarter of the 19th century. Coastal New Englanders became mariners to provide for their economic needs and increasingly to take advantage of the transportation needs of other regions.

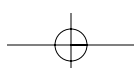
The need to build ships was served by New England's natural features. The coast's many estuaries and rivers provided sheltered shoreline close to deep water where vessels might be constructed and launched. And New England forests contained the most desirable mix of woods for shipbuilding: white oak preferred for ship frames and planking, white pine for deck planking and spars, hackmatack (larch) for strengthening knees, and a variety of hard-

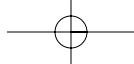
woods that could be used with or in place of oak.

The beginning of New England shipbuilding was an extension of the trade in old England. For 300 years the industry retained the craft organization that was established in England by the end of the 16th century. A "master" builder headed a shipyard, having earned his title through a formal or informal apprenticeship of up to seven years with an older master. The master builder was experienced in all aspects of ship construction, from design through framing, planking, caulking, rigging, and management of the shipbuilding crew. In a colonial era shipyard, a crew might consist of as few as three to five men. Some might be journeymen who had completed an apprenticeship and were gaining further experience in the trade before establishing their own yards. At least one might be a specialized craftsman, especially a caulker, who drove tarred hemp fibers called oakum into the seams between the ship's hull and deck plans to strengthen and seal the hull. Most of the labor was supplied by general ship carpenters, who used broad ax and adze to shape timbers, sawed out the planks, bored the holes for wooden treenail fastenings, and put the vessel together, working alongside the master builder. The completion of this collective effort was commonly celebrated in a launching ceremony, sometimes including much of the local community along with shipbuilders and owners. In the larger shipbuilding communities, such ancillary tradesmen as sparmakers, riggers, shipcarvers (who carved the decorative work for vessels), ship painters, pump and block makers, boatbuilders, and sailmakers worked on contract to complete a vessel after launch.

New England shipyards operated on two models. The most common approach through the mid-19th century was the "contract" yard, which produced vessels on demand from merchant shipowners, occasionally building on speculation to keep the shipyard crew together in slack times. Contract yards ranged from the smallest operation, producing only one or two vessels on a tidal creek, to the noted East Boston yards of Paul Curtis and Donald McKay that produced world-renowned clipper ships in the 1850s.

In the second approach, sometimes called the "captive" yard, the builder was also the shipowner. In these yards, which became a larger segment of the New England industry around the mid-19th century, the vessels were designed and built specifically for the yard owner's personal shipping activities. Captain Paul Cuffe of Westport, Mass., whose father was African and whose mother was Wam-





panoag, operated such a yard between 1790 and 1810. In the 19th century, some or all of the ships built by such noted yards as the Skolfield yard in Brunswick, Maine, the Thatcher Magoun yard at Medford, Mass., and the Arthur Sewall yard of Bath, Maine, were operated by the yard owners. The naval shipyards at Boston and Portsmouth, N.H., which produced government vessels, were specialized forms of the captive yard.

Some shipbuilding communities, such as Greenmanville at Mystic, Conn., were the maritime equivalent of mill villages. In the paternalistic structure of a wooden shipyard, shipwrights supplied their own tools and claimed certain perquisites. Workmen routinely took chips—scrap wood—as fuel until the second quarter of the 19th century, when some owners began to sell chips. In many shipyards, a twice-a-day rum ration was replaced by a coffee break as the temperance movement grew in the 1830s and 1840s. Store pay, in which credit at the yard owner's store was issued in lieu of cash wages, survived into the 1880s in some areas. Beginning around 1840, ship carpenters used labor actions to reduce the working day from a sunup-to-sundown schedule to 10 hours, and later to seek higher wages. Craft associations for ship carpenters existed in the larger shipbuilding communities, and the Knights of Labor had some success in negotiating for ship carpenters in the larger yards in the 1880s, but organized labor was not a major force in New England's wooden shipyards.

By the middle of the 1850s, when the United States merchant marine surpassed Great Britain's as the largest oceangoing fleet in the world, New England-built ships were among the most prominent. New England and shipbuilding were synonymous, and the shipbuilding industry prospered. The merchant marine was crippled by economic contraction after 1857, and by the effects of the Civil War; thereafter, New England ships were increasingly designed for bulk cargo carriage in the coastal trades, which were protected from foreign competition. Continuing to build large sailing ships when other regions were shifting to steam-powered vessels, New England yards produced large square-rigged freighters often termed "down easters" (because so many were built "down east" in Maine) to carry bulk cargo to and from the West Coast, and increasingly large fore-and-aft-rigged schooners for carrying bulk cargo—principally coal for steam and electric power—from Middle Atlantic ports to New England.

New England wooden shipbuilding experienced increasing consolidation during the 19th century. As local timber supplies were de-

pleted; as average vessel size exceeded the capacity of the smaller estuaries; as maritime trade became increasingly centralized in the largest ports; and as the demand for ships became more sporadic, the industry abandoned many of the smaller and more remote building sites. A few survived owing to specialization, such as Essex, Mass., whose marginal location on a narrow tidal river was overcome by the proximity of Gloucester and the local specialization in building fishing vessels for the Gloucester, Boston, and Provincetown fishing fleets. In both large and small ports, the surviving yards became reliant on outside timber sources, obtaining oak in the Middle Atlantic and southern states and mast timber in the Midwest and eventually the Pacific Northwest.

As shipbuilding became less a small local industry and more a consolidated one, the shipwright's trade became a more specialized and transient one. In the larger yards, which might employ as many as 100 men, the tasks and skills were divided among sawyers, framers, plankers, caulkers, and joiners. In the largest shipbuilding communities, such as Bath, independent contractors operated crews of plankers and caulkers who moved from shipyard to shipyard as their skills were required. Itinerant shipwrights also moved from region to region. Ship carpenters from New Brunswick and Nova Scotia sought work in New England yards as the Canadian industry shrank, and New England ship carpenters migrated between centers in response to economic shifts. As an extreme example, Donald McKay, New England's best-known shipbuilder, was born in Nova Scotia and learned the shipwright's trade in New York before setting up his yards in Massachusetts. The characteristic wooden shipbuilding industry survived longest in Maine, where skill and low wages kept wooden shipyards viable until the end of the World War I. Scattered small yards, which produced either large boats or small ships, survived into the 1980s building wooden fishing and recreational vessels.

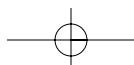
After the colonial era, New England shipyards were extremely homogeneous. The former slave Frederick Douglass's inability to find work as a caulker in the prosperous and diverse whaling port of New Bedford, Mass., in 1839 underscores the lack of diversity. Despite the captive yard operated by Paul Cuffe and the contract yard co-owned by African American shipbuilder John Mashow in South Dartmouth, Mass., the vast majority of New England wooden shipwrights were of northern European extraction and New England, New York, or Maritime Canada nativity. Women might operate boardinghouses or

stores that served shipwrights, but they did not work in the yards.

Beyond a few isolated cases, iron and steel shipbuilding was not introduced in New England until the 1890s, more than two decades after its establishment in New York and along the Delaware River. But with the creation of iron and steel shipyards at Bath in the 1890s and at Quincy, Mass., and Groton, Conn., in 1900, the complexion of New England shipbuilding changed. A steel shipyard is the maritime equivalent of a factory, with the capability to assemble identical vessels from preformed parts. Builders of metal ships operate cutting, bending, and punching machines for metal plates, riveting or welding tools to construct the hulls, and pipefitting and other metalworking tools to complete the vessel. Relatively few ship carpenters seem to have acquired the metalworking skills necessary in the new yards, so there was little continuity between the new and old yards.

Like the wooden shipyards, the steel shipyards flourished intermittently, building many vessels during times of war, very few during economic contractions. With corporate ownership to capitalize the mechanized facilities, with heavy unionization, with a diverse workforce that included women—especially during World War II—these yards resembled steel shipyards elsewhere in the United States more than they did their precursors in New England. With little demand for merchant ships, modern steel shipyards in the United States have been increasingly dependent on naval contracts to survive. The Fore River Shipyard in Quincy, Mass., for instance, was unable to compete economically even though it built very sophisticated LNG (liquefied natural gas) ships during the 1970s. The two large yards in Bath and in Groton carry on the process of shipbuilding in New England through the construction of naval surface ships and submarines. A few smaller yards, like Washburn and Dougherty, in East Boothbay, Maine, still build ferries, research vessels, and tugs.

In his gloss of the shipbuilding process, Longfellow captured the sense that a wooden shipyard produced an organic being, an animate object almost imbued with a soul by the hands that shaped it. It is the wooden vessel, however obsolete, that relates most closely to the popular notion of the New England character. Yards that built wooden ships were organized as paternalistic communities that used resources at hand to produce practical, yet aesthetically pleasing and complex products cheaply and efficiently. The idealized wooden shipyard thus represents the imagined resourcefulness and strength of character associ-



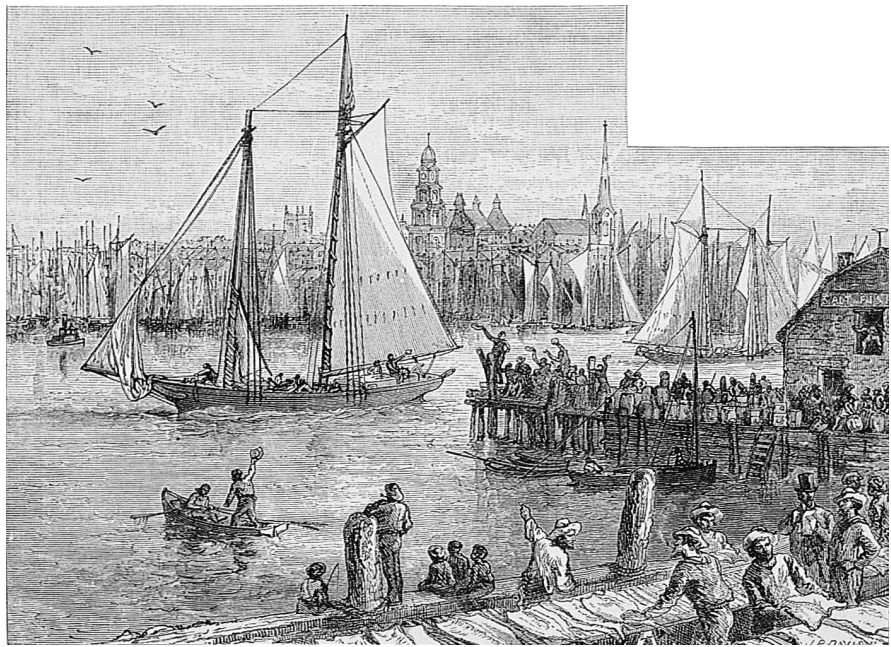
ated with New England. Like New England itself, modern steel ships are large and complex. Modern steel ships are shaped and assembled in corporate, departmentalized, unionized shipyards largely dependent upon federal contracts for their work. Both surviving large yards in New England stress their innovative approach to construction and the quality of their vessels. Modern New England shipwrights may identify more strongly with their trade union than their shipyard, but few can resist the emotional bond to their product, a vast structure that seems to come to life once it is delivered into the sea.

Robert G. Albion, William A. Baker, and Benjamin W. Labaree, *New England and the Sea* (1972); William A. Baker, *A Maritime History of Bath, Maine, and the Kennebec River Region*, 2 vols. (1973); Joseph A. Goldenberg, *Shipbuilding in Colonial America* (1976); Henry Hall, *Report on the Ship-Building Industry of the United States* (1884); John G. B. Hutchins, *The American Maritime Industries and Public Policy, 1789-1914* (1941); William N. Peterson, "Mystic Built": *Ships and Shipyards of the Mystic River, Connecticut, 1784-1919* (1989); Ralph L. Snow, *Bath Iron Works: The First 100 Years* (1987); Dana A. Story, *Growing up in a Shipyard: Reminiscences of a Shipbuilding Life in Essex, Massachusetts* (1991).

Andrew W. German

Ships and Boats Given New England's long coastline, ample timber resources, and the early orientation of its settlers to the sea, it is not surprising that numerous characteristic watercraft were developed in this region. Although most have become obsolete and have disappeared from the contemporary waterfront, distinctive traditional vessels such as Friendship sloops, Marshall catboats, and Long Island Sound oyster dredges still ply New England waters. Meanwhile, regional yacht builders produce fiberglass pleasure boats. Shipbuilders turn out fishing boats, ferries, Aegis-class destroyers, and submarines that carry the American flag around the world. Yankee clipper ships may have gone the way of the dinosaurs, but New Englanders still go "down to the sea in ships," as the fishermen's bronze memorial in Gloucester, Mass., proclaims.

Gloucester's "ships" were in fact fishing schooners that, in various shapes and sizes, pursued the natural riches of the banks just offshore. Built with a convex bow, gracefully curved sheer lines, and lofty rig, the "Gloucester" fishing schooner evolved over 200 years, and in its final early-20th-century form displayed a distinctive profile. This schooner is perhaps the most recognizable New England vessel type and was portrayed in the classic 1937 film adaptation of Rudyard Kipling's novel *Captains Courageous*, starring Spencer Tracy, Lionel Barrymore, and Freddie Bar-



Gloucester schooners in harbor, 1881

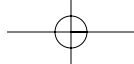
tholomew. Perhaps no image of a sailing vessel so evokes the idea of a New England "ship" more than the Gloucester fishing schooner. And perhaps no boat evokes New England small craft as readily as the flat-bottomed Banks fishing dory. Carried aboard the Gloucester schooners, dories were cheap and easy to build, in part because of their distinctive narrow triangular stern. Today they are almost as common at seafood restaurants or on postcards as they once were in the harbors of Gloucester, Boston, and Rockland, Maine.

The bluff-bowed whaleship, with its ungainly but utilitarian lines, is another classic New England vessel. Whaleships were often bark-rigged, and commonly were reconditioned packet vessels. The old packets were chosen for their full-bodied cargo holds, capable of storing hundreds of barrels of oil and tons of whalebone. Originally built in New Bedford, Mass., in 1832, the ship *Gen. Washington* of New London, Conn., was just such a vessel and at 606 tons was considered one of the largest of its breed. Like Herman Melville's *Pequod* in the novel *Moby-Dick*, these vessels were sometimes built specifically for whaling. Whaleships were often constructed near their port of sail, particularly during the first half of the 19th century, the "golden era" of American whaling. The last surviving example of this type is the bark *Charles W. Morgan*, now berthed at Mystic Seaport in Mystic, Conn. It was built at New Bedford in 1841 and sailed most of its profitable career out of that port, which for most of the 19th century was

the whaling center of the United States. Toward the end of the century many local shipyards closed owing to the general demise of wooden shipbuilding in the United States and the decline of whale fishery. Wooden shipbuilding, except for the construction of yachts and fishing vessels, remained primarily on the Maine coast.

The smaller, double-ended whaleboats carried on board the larger ships were actually used to "catch" the whale. Whaleboats had European origins but tended to be identified with New England boatbuilders—particularly those builders working in New Bedford, New London, and Nantucket, Mass.—who brought them to a high state of refinement. New Bedford specialized in constructing a modified Arctic whaleboat, used both for whaling and for exploration in icy waters. Whaleboats were also adapted as seine boats, from which fishermen set large fishnets for menhaden and mackerel.

New England's changing coastline frequently influenced the design of local vessels. The work they engaged in as well as the commodities they carried were also factored into their construction and appearance. The rocky, indented coast of Maine with its dramatic tides contrasts sharply with the sandy shores of Cape Cod, for instance, and with the marshy, low-sloping lands of the southern Connecticut coast. As the eminent historian of American small craft John Gardner pointed out, the sailing dory of Swampscott, Mass., is illustrative of regional and local factors; it was designed with a round bottom "yet with



enough flat to sit upright on the beach when it grounds out . . . the outer layer of which is easily renewed when it wears thin from dragging over rocks." The Piscataqua River wherry was designed with a low freeboard to allow for free and easy rowing, since the current of that river was very strong, particularly near Eliot, Maine, where it was principally built.

One of the most remarkable indigenous watercraft to evolve in New England was the Piscataqua River gundalow, a flat-bottomed sailing barge designed to take advantage of the Piscataqua's fierce currents. Gundalows had an extraordinarily short mast, on which a long pivoting-yard with a lateen sail could be raised or lowered. This unique rig allowed them to pass under the low fixed bridges common in the region. Watermen abandoned the last working gundalow in 1920, but today a reproduction named *Captain Edward H. Adams*, launched at Portsmouth, N.H., in 1982, plies the Piscataqua estuary on educational missions.

Small craft in particular came to be associated with the town or region in which they were developed. The Block Island "cow horn," the "Yarmouth" pinky, the Connecticut River shad boat, the Rhode Island hook boat, the New Haven sharpie, or the Maine "reach boat" are among the numerous examples. The general characteristics of many of these boats often took on subtle local variations and evolved as they were adapted or designed for particular uses most commonly associated with the various New England fisheries. Any resident of Savannah, Ga., or Key West, Fla., in the 1850s, for instance, would have recognized the Connecticut fishing smack even though it was built in New London, Waterford, or Noank, Conn. These 10- to 40-ton sloops and schooners were particularly known as products of southeastern Connecticut shipyards and were designed to spend the winter months fishing in southern waters. They were also designed with wet wells, allowing fishermen to keep fish alive in the hold of the vessel for delivery to market. In Maine, where the 20th-century lobster fishery spawned a number of local types, the open Hampton boat came to have discernible local variations. Compare the slightly sharper-bowed boats built at Orr's Island with those from Boothbay Harbor or elsewhere in the state. The Hampton boat may have evolved into a larger version, which is the typical Maine lobster boat of today. Early versions of this boat tended to be narrower than the more modern types, such as the "Beal's Island boat" with its covered wheelhouse.

The menhaden fishery, which harvested great quantities of menhaden for bait, oil, and fertilizer, was first started commercially in New England during the mid-19th century.

The necessary inshore seining produced singular fishing-boat designs such as the beamy "carryaway" boats and the heavily planked seine boats. Later the more efficient and at one time ubiquitous menhaden steamer, first developed in Bristol, R.I., became a well-recognized type on the East Coast. It sported a distinctive profile characterized by a tall wheelhouse constructed over a forward deck cabin. A second long deckhouse aft, which contained a hoisting engine, was punctuated by a tall engine-stack. This general deck layout worked so well that modern vessels in this fishery have retained it.

During New England's early colonial period, small shallops (a type of open-decked, two-masted fishing vessel) and single-masted sloops were the most common fishing and coastal trading vessels. Pinnaces, somewhat larger vessels that were often described as small ships, were also common in 17th-century transatlantic trades and coastal work. Indeed, the pinnacle *Virginia*, launched in 1607 at what is today the town of Popham, Maine, located at the mouth of the Kennebec River, was the first vessel launched in British North America. In the 18th century, larger sloops, brigs, and scows, as well as ships of 400 tons' burthen, were the common carriers of the period. Many were constructed specifically for the important West Indies trade. Often referred to as "horse jockeys," they were specially fitted with high-railed decks for carrying the horses, mules, and cattle that were among New England's principal exports.

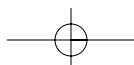
As the 19th century dawned, so did the great era of shipbuilding in New England. It was an industry that increasingly became tied to southern cotton. Vessels of a special form were constructed to transport this commercially important crop to markets in New York, New England, and Europe. Southern ports tended to be relatively shallow, so vessels were designed with flatter floors or bottoms rather than the more traditional "V" shape that had characterized earlier ships. In some instances, vessels with particularly shallow drafts were built in New England for specific southern ports or coasts, such as those that existed along the Gulf of Mexico. Shipyards in Maine and Connecticut were particularly favored in this regard by the New York merchants who dominated this trade. These schooners, brigs, and small barks were also frequently designed with centerboards that could be retracted, allowing them to pass along the shallow Texas coast and the notorious sandbars that guarded such ports as Galveston and Lavaca. At the same time these vessels were seaworthy and thus favored for the often-dangerous coastal passage between cotton ports and New York or Boston.

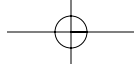
With the opening of more European and Asian markets to trade in the 1840s and the discovery of gold in California, the era of the clipper ship was born. New York City was the homeport for most of these distinctively handsome ships. They were lofty, heavily sparred, and characterized in popular vision by a graceful concave bow and stern. These large ships were also constructed with considerable deadrise that contributed to their speed but constrained their cargo capacity. More often than not clipper ships were the products of New England shipyards. Vessels such as Donald McKay's *Flying Cloud* launched at East Boston, or Irons and Grinnell's *Andrew Jackson*, a product of Mystic, were touted in their time as being the fastest sailing ships in the world. The *Andrew Jackson*, in fact, was a "medium clipper," meaning that it had a fuller body allowing greater carrying capacity. It also sported a distinctively graceful round stern that came to be associated with so many large sailing vessels built at Mystic. Other New England ports such as Medford, Mass., and Portsmouth, N.H., also produced their share of these "greyhounds of the sea," ships with metaphorical names such as *Atmosphere*, *Winged Arrow*, and *Whirlwind*.

As the 19th century drew to a close, Yankee shipwrights developed another type of large commercial vessel for the American grain trades; the fabled "down-easters" were principally built in Maine. These large ship-rigged vessels were designed for maximum carrying capacity, while retaining some of the speed and appearance of medium clippers. One of the last to survive was the Bath-built *Benjamin F. Packard*, which ended its life as a tourist attraction at Playland Amusement Park in Rye, N.Y., during the 1930s.

The era of the great coastal schooners began at roughly the same time, but extended well into the 20th century. These were very large vessels designed to carry huge quantities of such bulk cargoes as grain, timber, oil, ice, and coal. These four-, five-, and six-masted schooners came to be generally identified with the wooden shipbuilding yards in Maine. Typical of these vessels were the five-master *Rebecca Palmer*, launched at Rockland, and the six-master *Eleanor A. Percy* and flush-decked four-master *Annie C. Ross*, both products of Bath. By the end of the century, Bath led the nation in building wooden ships.

Yacht builders also added their special touch to designs developed in New England. Examples include George F. Lawley and Sons of South Boston, whose designs and shipyard influenced all late-19th-century racing yachts. David O. Richmond of Mystic, a lesser-known builder, did much to perfect the lines of the colorful "sandbagger" sloop. The most





renowned of the New England builders was the Herreshoff Manufacturing Company of Bristol, R.I. This firm was well known for its “fin-keeled” racing sloops such as *Gloriana* (1891), as well as for its sharp “clipper-bowed” steam yachts like *Eugenia* (1899). Nathanael Greene Herreshoff’s most celebrated creations were the America’s Cup sloops *Columbia*, *Constitution*, *Reliance*, and *Resolute*. Writing of *Columbia* in *Rudder Magazine* in 1899, editor W. E. Robinson expounded, “Nothing so handsome in naval architecture was ever seen.”

Large navy ships are still built in Bath, but these destroyers and guided-missile frigates lack distinctive regional characteristics. During World War II the “fleet”-style submarine came to be closely associated with the Electric Boat Company of Groton, Conn., as did the large nuclear-powered *Polaris* and *Trident* “missile boats” and 688-class Fast Attack submarines of recent decades. Certainly Groton, located across the Thames River from New London, has the right to call itself the “submarine capital of the world.”

Commercial ships and boats are much less common than they once were in New England’s harbors because trucks, not coasters, carry freight today. Nevertheless, freight, fish, and fun will inspire future New Englanders to build ships and boats as they have done for centuries.

William A. Baker, *Colonial Vessels: Some 17th-Century Sailing Craft Ship Designs* (1962); Baker, *Sloops and Sballops* (1966); Howard I. Chapelle, *The American Fishing Schooners, 1825–1935* (1973); Albert Cook Church, *Whale Ships and Whaling* (1978); John Gardner, *Building Classic Small Craft*, vol. 1 (1977); Kenneth R. Martin and Nathan R. Lipfert, *Lobstering and the Maine Coast* (1985); William N. Peterson, *“Mystic Built”: Ships and Shipyards of the Mystic River, Connecticut, 1789–1919* (1989); Dana A. Story, *The Shipbuilders of Essex* (1995).

William N. Peterson

Slocum, Joshua (1844–1909) Sailor and author. Joshua Slocum, arguably New England’s most famous sailor, was not a native New Englander. Born in Nova Scotia, where loyalist ancestors had emigrated, he made his way to Massachusetts, his family’s former home, and between voyages lived with relatives near Boston. Having chosen a career in the merchant marine in the twilight of the age of sail, he quickly rose to command and ownership. In 1871 he married Virginia Albertina Walker, a New Yorker then resident in Sydney, Australia, who went to sea with him until her death, in the merchant ship *Aquidneck* at anchor off Buenos Aires, in 1884. Slocum married Henrietta Elliott in Boston in 1886: she was 24; he was 42. After a disastrous honeymoon voyage, in which the *Aquidneck* was wrecked in South America and the family re-

turned in the 35-foot canoe *Liberdade*, Hettie never sailed again.

Having experienced all the vicissitudes of the merchant sailor, Slocum was now back where he started—lacking funds, a ship, and a soul mate. He turned to writing but had little success with his first book, *The Voyage of the “Liberdade”* (1890).

Slocum’s old friend Captain Eben Pierce, a retired whaleman, ought to go down in history among New England’s greatest practical psychologists. He knew Slocum’s past and present predicament, and when the two met again in 1892, Pierce provided Slocum with precisely the therapy he needed: “Come to Fairhaven,” he casually offered, “and I’ll give you a ship.” The ship in question turned out to be the hulk of a sloop propped up in a pasture. Named *Spray*, the 36-foot, 9-inch vessel wasn’t even near the water.

What happened next goes beyond Yankee self-reliance or ingenuity. Slocum undertook the reconstruction of the boat, and although interrupted by an 1893 voyage on the *Destroyer*, which became the basis of his second book, in 13 months he completely rebuilt the *Spray*. After a brief spell of charter fishing, in April 1895 the 51-year-old Slocum left Boston in the *Spray* on a 46,000-mile trip that would make him the first man to sail around the world alone. His voyage took him to Gloucester, Mass., Nova Scotia, the Azores, Gibraltar, South America, Samoa, Australia, South Africa, and the West Indies before he returned to New England, arriving in Newport, R.I., in June 1898. Soon thereafter, on July 3, Slocum went back to Fairhaven and dropped anchor not far from where he had rebuilt the *Spray*. His cargo hold was brimming with curiosities acquired during his voyage, among them a stick of bamboo grown by the late Robert Louis Stevenson, a gift of the Scottish poet and novelist’s widow, along with several of Stevenson’s books.

The voyage, remarkable in itself, was made even more so by the book that Slocum wrote about it. Although he was not exactly a celebrity when he arrived in Newport in the summer of 1898, amid the hubbub of the Spanish-American War, he soon arranged with the Century Company to serialize his account and publish the book version of *Sailing Alone around the World*, which appeared in 1900. Often regarded as a nautical equivalent of Henry David Thoreau’s *Walden*, the work is less a study of philosophy or nature than a straightforward account, powerful and charming, of a Rooseveltian man of action, and it is no surprise that the rough-riding hero of San Juan Hill and the captain of the *Spray* met and enjoyed each other’s company. The influence of Theodore Roosevelt can be seen in the

Spray’s final cargoes: orchids for the summer White House, Sagamore Hill, in Oyster Bay, N.Y., in 1906 and a 2-ton block of coral for the American Museum of Natural History in 1908.

As early as 1898 Slocum had also toyed with the idea of creating a sailing school, with Slocum’s literary friend Clifton Johnson serving as an intermediary, in the voyages of three vessels named *Yankee*—a schooner, a brigantine, and a ketch—under the command of Irving and Electa Johnson. With Gloucester, as their homeport, the Johnsons circumnavigated the globe seven times with a handpicked crew of amateur sailors eager to learn. Their teaching voyages were the forebear of today’s proliferation of sail-training programs, to which Slocum’s own book serves as an inevitable and always welcome addition.

On November 14, 1909, Slocum set sail in the *Spray* from Vineyard Haven, Mass., and was never heard from again.

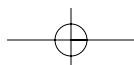
Kenneth E. Slack, *In the Wake of the “Spray”* (1966); Victor Slocum, *Capt. Joshua Slocum: The Life and Voyages of America’s Best Known Sailor* (1950); Walter Magnes Teller, *The Search for Captain Slocum: A Biography* (1956); Teller, ed., *The Voyages of Joshua Slocum* (1985 [1958]).

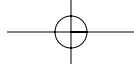
Robert Durwood Madison

Submarines For more than two centuries the submarine has played a significant role in New England history, firing the imaginations of Yankee inventors, contractors, entrepreneurs, politicians, and naval personnel. New England remains the hub of American submarine design, technology, construction, repair, training, and even tourism for both practical and historical reasons: port facilities, sufficient capital, a skilled workforce, and long-standing naval and maritime traditions.

In 1775 at Saybrook, Conn., David Bushnell built a human-propelled submarine and subjected it to sea trials on Long Island Sound. Called the *Turtle*, Bushnell’s craft became the first combat submersible when it attempted to blow up a British warship during the American Revolution.

Subsequent efforts to increase submarine viability succeeded when John P. Holland sold his New Jersey-built sub to the U.S. Navy on April 11, 1900, a date now observed as the official birthday of the Submarine Force. Thereafter most submarine construction shifted to New England’s private yards, Electric Boat in Groton, Conn., and Lake Torpedo Boat Company in Bridgeport, Conn. In 1914 the Portsmouth Navy Yard (now the Portsmouth Naval Shipyard), at the mouth of the Piscataqua River between New Hampshire and Maine, secured the first contract for a submarine built in a government yard.





Submarine construction, Portsmouth Navy Yard, New Hampshire, ca. 1944

World War I spurred production of diesel-powered submarines. Upstream from Electric Boat on Connecticut's Thames River a New London navy yard evolved into the country's first submarine base. A training school was established there after the war.

During the 1920s and 1930s Electric Boat and Portsmouth Navy Yard continued to deliver improved subs for the so-called silent service. In World War II, Portsmouth (with 79 subs) and Electric Boat (with 78) supplied the vast majority of U.S. combat submarines. Led by Medal of Honor skippers Dick O'Kane of Durham, N.H., and Red Ramage of Monroe Bridge, Mass., American submariners sank 5.5 million tons of Japanese shipping.

With the onset of the Cold War, New England-built submarines incorporated the latest technological advances. In 1955 Electric Boat's *Nautilus* sent the historic message "Under way on nuclear power," inaugurating a new era in maritime propulsion. Five years later Portsmouth Naval Shipyard's *Seadragon* surfaced through an opening in the ice at the North Pole. Portsmouth's *Albacore*, with its experimental whale shape for maximum speed, revolutionized hull design worldwide. On July 27, 1996, the 18th and last Trident-class submarine, Electric Boat's *Louisiana*, was commissioned. These subs carry 24 nuclear-tipped missiles and can individually deliver more firepower than was expended in World War II. Electric Boat has built two Seawolf-class submarines, the first of which was commissioned

in July 1997. The company delivered the first Virginia-class sub in 2004.

New England has actively promoted its historic ties to submarines. Visitors can tour several decommissioned subs in the region: the USS *Lionfish* in Fall River, Mass.; the USS *Croaker* and *Nautilus*, in Groton, Conn.; and the USS *Albacore* in Portsmouth, N.H. They can also view the conning tower and bridge superstructures of the USS *Flasher* in Groton, Conn., and the USS *Sailfish* at the Portsmouth Naval Shipyard. Since the end of the Cold War the U.S. Navy has loosened security restrictions and invited the public aboard active boats.

In addition to its purely military importance, the submarine industry in New England continues to have major politico-economic ramifications. Buoyed by trillions of dollars in defense appropriations over the years, congressional representatives from navy-yard districts vigorously seek government funds to maintain adequate workloads for their constituents.

Despite the successes, the modern submarine era has been the site of human sacrifice and controversy. In 1963 the Portsmouth Naval Shipyard's *Thresher*, a nuclear-attack submarine launched in 1960, sank some 200 miles off Cape Cod, Mass., killing everyone on board. Antiwar and antinuclear protests were commonplace at Groton and Portsmouth during and after the Cold War whenever a launching or commissioning ceremony took place. The

July 29, 1995, commissioning of the Trident-class USS *Maine* at the Portsmouth yard sparked a half dozen organizations, including Greenpeace, to demonstrate in large numbers against the sub's nuclear armament.

There is no doubt, however, that David Bushnell's rudimentary submersible has transformed the history of New England, the United States, and indeed the world. In the future, submarines will continue to serve as mighty deterrents to war and to become increasingly sophisticated devices for peaceful pursuits. Along with submersibles, their peaceful counterparts, submarines contribute to scientific discoveries and human betterment, mapping the ocean floor, recovering lost nuclear bombs, and providing disabled subs with advanced rescue capabilities that can save the lives of trapped crew members. The underwater voyages of Electric Boat's USS *Skate* and Portsmouth's *Seadragon* in largely inaccessible Arctic waters have yielded previously unobtainable oceanographic and geographic data.

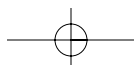
John D. Alden, *The Fleet Submarine in the U.S. Navy: A Design and Construction History* (1979); Norman Polmar, *The American Submarine* (1981); Gary E. Weir, *Forged in War: The Naval-Industrial Complex and American Submarine Construction, 1940-1961* (1993); Richard E. Winslow III, *Portsmouth-Built: Submarines of the Portsmouth Naval Shipyard* (1985).

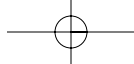
Richard E. Winslow III

Tall Ship Festivals During the final quarter of the 20th century tall ships came back to New England with a vengeance. Shipwrights in Maine, Massachusetts, and Connecticut launched new schooners, and New England's fabled coast attracted sail-training vessels from around the world.

Although the real work of those vessels takes place below the horizon, between the stars and the loneliness of the sea, waterfront festivals featuring tall ships have become a staple of summertime popular culture in New England. Saluting the past by invoking an era of "wooden ships and iron men," those festivals nevertheless are resolutely forward-looking. Corporate sponsorship and appearance fees are important for the vessels. Meanwhile, city planners and business groups look to the ships as key players in the revitalization of urban waterfronts. "Almost every community wants to be part of a tall ships visit," said Vice Admiral Tom Weschler, coordinator of Newport Salute 2000. "It's a perfectly natural inclination to follow a winner."

The tall ships' visit to Boston for the Millennium Celebration—called Sail Boston 2000—drew more than a million spectators and generated hundreds of millions of dollars in revenue. That summer, an alternative convocation of sailing ships gathered in New





London and Mystic, Conn. Those events followed earlier successful ones, such as Sail Boston 1992 and a similar gathering in Newport, R.I., in 1986. Newport had hosted its last America's Cup race in 1983, and this new infusion of cash and maritime activity was especially welcome. Smaller-scale events, such as the various oyster festivals in Norwalk, Conn., continuously nurture public interest in the ships themselves, and provide social events for the crews during years in which no major festivals are planned. Norwalk's shallow harbor can only accommodate small vessels, unlike deepwater ports that can host Europe's finest Class A tall ships. In general, tall ship festivals attract regionally based vessels such as R/V *Corwith Cramer* from Woods Hole, Mass., and vacation cruise schooners from Maine and Mystic, in addition to ships from abroad. Some are spanking new, built for sail training, while others, like *Ernestina* of New Bedford, Mass., are noteworthy historic ships.

This renaissance of sail was unimaginable earlier in the 20th century. By the 1930s, commercial sail appeared to be dead, and the arrival in Boston or Portland of a rust-streaked schooner or a Spanish square-rigger laden with salt always attracted people who imagined they were seeing the last of a dying breed. It would have taken a visionary then to predict that sail training and vacations under sail would become a growth industry in the late 20th century, making an aesthetic mark and an economic impact that could not be ignored. But following the success of President John F. Kennedy's invitation to foreign tall ships to congregate at the New York World's Fair in 1964, and the even more spectacular success of Operation Sail in New York during the nation's Bicentennial in 1976, promoters and public officials capitalized on resurgent interest in sailing ships. Today there is intense competition to lure the best ships for each event.

Sailing technology has not been used effectively for modern cargo ships or tankers, despite fervent dreams and valiant attempts by both romantics and engineers (especially during the OPEC oil crisis in the 1970s). But sailing ships have a powerful grip on the imagination of educators and entrepreneurs. Writing in 1840 in *Two Years before the Mast*, Richard Henry Dana rightly observed, "There is a witchery in the sea, its songs and stories, and in the mere sight of a ship, and the sailors' dress, especially to a young mind, which has done more to man navies, and fill merchantmen, than all the press gangs of Europe."

Captain Daniel D. Moreland, who grew up in Connecticut and is one of the most respected sailing shipmasters working today, has participated in many recent tall ship festivals.

He understands the primal attraction of these apparently obsolete vessels both to committed trainees and to casual visitors. "These ships connect us in time to our rich past," he noted in his address to the Admiral's Ball in Halifax, Nova Scotia, in April 2000. "As they sail over the horizon bound we know not where, they sail with our imaginations in tow into the unknown of the future."

It is unlikely that tall ship festivals will endure forever, even if auxiliary sailing ships continue to operate. But for the time being, these gatherings of majestic ships, so rooted in the past and so forward-looking, are a fundamental part of maritime New England's contemporary culture.

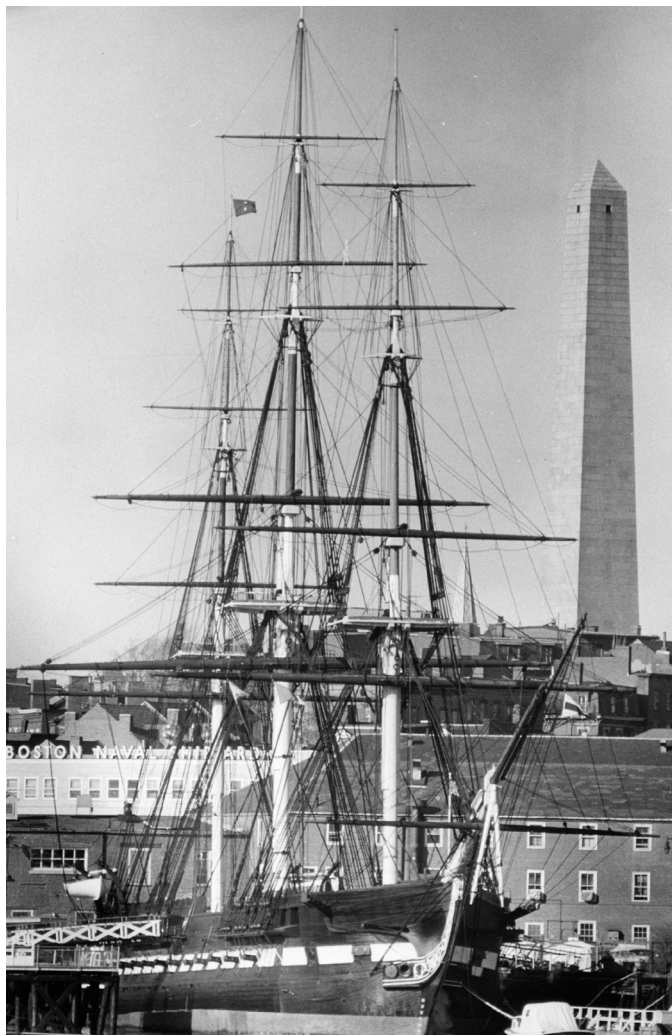
Julie Michaels, ed., *Tall Ships: Supplement to the Boston Globe Associated with Sail Boston 2000* (July 11-21, 2000); *Sail Tall Ships: A Directory of Sail Training and Adventure at Sea* (2001).

W. Jeffrey Bolster

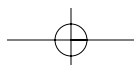
USS Constitution The 204-foot, 44-gun frigate *Constitution*, undefeated in battle and

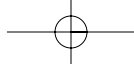
captor of more than 30 enemy vessels, was built in Boston's North End in the Edmund Hartt shipyard during 1795-97 and was the largest ship built in Boston to that time. Beginning its service in 1798, it was active in the West Indies during the Quasi-War with France (1798-1801) and then in the Barbary War (1803-7). During the latter conflict, *Constitution* was flagship of the Mediterranean Squadron under Commodore Edward Preble and led several attacks against Tripoli, contributing significantly to the conclusion of a peace treaty.

At the outset of the War of 1812, *Constitution* was one of only 17 units in the entire U.S. Navy and faced a Royal Navy numbering nearly 1,000. In a duel with HMS *Guerrière* on August 19, 1812, Captain Isaac Hull led the ship to an unexpected and most welcome victory. The success rallied American morale, and from it the ship gained the nickname "Old Ironsides" in recognition of the imperviousness of its stout wooden hull to enemy shot. When the news reached England, an article in



USS Constitution at Charlestown Navy Yard, Boston, 1970s





the December 28, 1812, edition of the *London Times* observed that “such an unexpected triumph” could give “tone and character to the war. Never before in the history of the world did an English frigate strike to an American.” On December 29, 1812, Commodore William Bainbridge led Old Ironsides to a second victory, over HMS *Java*. On being informed, the British admiralty forbade any further one-on-one duels with big American frigates; henceforth, they were to be engaged only when in squadron strength.

Following an overhaul and a period blockaded in Boston, the ship sailed on two more war cruises. In the second, Captain Charles Stewart led it in a textbook action against the combined force of HMS *Cyane* and HMS *Levant* on February 20, 1815. First dividing his foes, he then defeated them in detail. By the time the ship returned to the United States in May 1815, the war over, it clearly had become the focal point of American pride, representing in its perfect record the successful defense of their independence by a federation of often contentious states that hitherto had put local interests first, and the recognition that to America now belonged their principal allegiance. An article in the May 23, 1815, edition of the *National Intelligencer* expressed that *Constitution* had become “a Nation’s Ship, and should be preserved. Not as ‘sheer hull’ . . . but, in honorable pomp, as a glorious Monument of her own.”

The ship continued active in regular service until 1881, even circling the globe in 1844–46. Following a period as a receiving ship and a longer period of neglect, *Constitution* was restored during the late 1920s with the help of pennies collected and donated by children from all over the country and has since served as a patriotic symbol and source of civic inspiration. In celebration of the 200th anniversary of its launching, *Constitution* underwent further restoration to make it seaworthy and on July 21, 1997, made a brief cruise under sail for the first time in 116 years. By congressional directive, the ship is maintained in the city of its birth and each year is visited at the Charlestown Navy Yard by approximately a million people from all over the world.

Tyrone G. Martin, “*Constitution’s Finest Fight* (2000); Martin, *Creating a Legend* (1997); Martin, *A Most Fortunate Ship* (1997); Martin, *Undeclared* (1996).

Tyrone G. Martin

USS *Thresher* On April 10, 1963, the nation mourned the loss of 129 sailors and civilians in one of the worst naval tragedies in American history. The world’s most advanced nuclear-attack submarine, the USS *Thresher*, imploded at a depth of about 1,000 feet 220 miles off the New England coast, killing

everyone aboard. Among the survivors left behind by the crew were 187 children.

The *Thresher* was built at the Portsmouth Naval Shipyard at the mouth of the Piscataqua River between New Hampshire and Maine. Shipyard officials were strongly encouraged to complete work on the ship with all due speed. The international climate, heavily accented by the Cold War, contributed to a pervasive sense of urgency.

The *Thresher* was launched in July 1960. It was commissioned in August 1961, about one year before Soviet nuclear missiles aimed at the United States were detected in Cuba and six years after the formation of the Warsaw Pact. British warships, Revolutionary War frigates, Civil War ironclads, and submarines for World Wars I and II had been built at the Portsmouth yard. The *Thresher* was the first of a new class of search-and-destroy submarines, one of many firsts for a shipyard with a sterling reputation for quality that traces its formal establishment to 1800.

The motto “Silent Strength” suggested a virtual invincibility ensured by the ship’s speed, maneuverability, and near invisibility to predators. Despite the advantages supplied by highly sophisticated engineering, the *Thresher* spent 406 days undergoing repairs or overhauls before its final voyage. Safety, according to some critics, placed second to expedience in this process.

On April 9, 1963, the submarine departed Portsmouth Harbor for test dives. The next day, off the Massachusetts coast shortly after 9:00 A.M., the *Thresher* reported “minor difficulties.” The *Skylark*, a surface ship accompanying the submarine, lost contact with the vessel about three minutes later.

At or near test depth a packing gland may have broken, creating a mist that probably caused the electrical system to fail and the engine to stop. Total darkness blanketed the people on board before emergency batteries restored a small amount of light. In this circumstance it would have taken approximately seven minutes for the vessel’s nuclear reactor to generate sufficient energy to get the *Thresher* moving again. Leaks probably occurred throughout the submarine, causing the sub to sink slowly deeper.

Soon the ocean’s power broke through the *Thresher’s* hull, instantly killing the sailors nearby. Theoretically, the force of compressed air would have killed people in other parts of the vessel almost immediately as well. Because diesel fuel is pressure sensitive, what was left of the submarine exploded.

Several months later parts of the vessel were found scattered over a wide area at a depth of 8,400 feet by the *Trieste*, a research ship capable of very deep dives. An observer on the research craft called the area a “junkyard.”

The loss of the *Thresher* and its crew has been commemorated every April 10 since 1964 in Portsmouth, N.H., and Kittery, Maine. The annual ceremony serves as a painful reminder of the tensions of the Cold War era and a salute to the Portsmouth Naval Shipyard’s contribution to national defense.

John Bentley, *The “Thresher” Disaster: The Most Tragic Dive in Submarine History* (1975); Robert F. Burgess, *Ships beneath the Sea: A History of Subs and Submersibles* (1975); Norman Polmar, *Death of the “Thresher”* (1964); U.S. Navy, *United States Ship “Thresher” (SSN 593): In Memoriam, April 10, 1963* (1964).

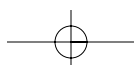
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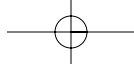
Vacation Cruise Schooners Penobscot Bay serves as the locus for a fleet of 15 working schooners currently carrying passengers on six-day cruises among the islands of Maine. No other state can boast such a concentration of historic schooners in one area.

During the late 1930s Frank Swift of Camden, Maine, outfitted the former two-masted cargo-carrying schooners *Mabel*, *Mattie*, and *Mercantile* to entice vacationers to experience life on a coasting schooner. Until World War I, these vessels and thousands like them had carried lumber, lime, granite, and other cargoes while also serving as freight and mail boats for Maine’s remote islands. Following World War II, Maine’s windjammer fleet was expanded with the addition of veteran schooners *Alice Wentworth*, *Victory Chimes*, and *Adventure*. Beginning in 1962 a series of vacation sailing schooners—the *Shenandoah*, the *Bill of Rights*, the *Harvey Gamage*, and the *Mary Day*—were constructed for both southeastern New England and Maine waters at the shipyard of Harvey Gamage at South Bristol, Maine.

Presently, Rockland, Maine, is home to a fleet of historic schooners involved in the vacation cruise business, including the *Mary Day* (constructed in 1962) the *J&E Riggins*, a former oyster dredger (1927); the *Isaac Evans*, also an oyster schooner (1886); and three former fishing schooners: the *Lewis R. French* (1871), the *Nathaniel Bowditch* (1922), and the *American Eagle* (1930). The former brick schooner *Stephen Taber* (1871), the venerable three-masted “ram” schooner *Victory Chimes* (1900), and the *Summertime* (1986) complete this fleet of schooners, most of which are listed on the National Register of Historic Places. In 1983 Captains Douglas and Linda Lee built the *Heritage*, based on the lines of a traditional Maine coaster.

Less than 10 miles north of Rockland, the picturesque town of Camden is home to four wooden schooners—*Roseway* (1935), a former Boston pilot vessel; *Mercantile* (1916); *Grace Bailey* (1882); and *Mistress* (1960)—and a steel ketch, *Angélique* (1980). Nearby Rockport is





home to the pilot schooner *Timberwind* (1931). The average length of these vacation "windjammers" is 75–80 feet on deck. Accommodations are provided in small staterooms with two, three, or four bunks.

Cruises traditionally run Monday through Saturday, from early June to late September. Destinations depend on wind, tide, and other weather considerations. Life aboard is relaxing but also affords guests the opportunity to participate by raising or furling sails. Most schooners have no engine but are assisted by a yawl boat (an auxiliary power launch) used while leaving or entering port. The paid crew and cook handle skilled tasks under the watchful eye of the captain, who must be licensed by the U.S. Coast Guard. The food, always bountiful, is served up family style, and coffee is always ready for early risers. Each year the Maine schooners provide thousands of vacationers a taste of life in the age of sail and a tangible connection to one aspect of New England's maritime heritage.

John F. Leavitt, *Wake of the Coasters* (1970); Edward W. Smith, Jr., *Workaday Schooners* (1975); Harry W. Smith, *Windjammers of the Maine Coast* (1983); Peter H. Spectre, *A Passage in Time: Along the Coast of Maine by Schooner* (1991).

Renny A. Stackpole

Waterfronts Many of New England's historically important landscape features are found where land and water meet. Waterfronts conjure up romantic images of the past: of iron men and wooden ships, of fishing shacks, ship launchings, and homecomings. As New Englanders turned to the waterfront for their livelihood, sail lofts, chandleries, counting houses, West India shops, and other businesses jammed busy lanes and alleys. Wharves and warehouses multiplied, reaching ever deeper into harbors. When space was no longer available, new land was created.

Change has always been characteristic of New England's waterfronts. The wealth accumulated by merchants trading with Europe and the Caribbean from 1650 was invested in the industrial transformation that was taking place there. As a consequence of the wealth accumulated, seats of art, learning, and worship were funded, as were scores of magnificent "sea captains" homes that still dot the genteel landscape of coastal towns and cities. Among the best known of these places is Strawberry Banke in Portsmouth, N.H. Others include Salem, Newburyport, and Nantucket, Mass.; Stonington and New London, Conn.; and Kennebunkport and Portland, Maine, to name just a few.

The Industrial Revolution changed the character of New England's waterfront cities. After 1830 the thrust of urban growth shifted

from the wharf to inland waterfalls. Waterfront cities continued to grow because they were the entry places for the raw materials and finished products of the interior. The first places in New England to reach a population of 100,000 were waterfront cities: Boston in 1850, Providence in 1880, Fall River, Mass., and New Haven, Conn., by 1900.

Before the mid-19th century, manufacturing was clustered along the waterfront, as were warehouses, wharves, and docks. As railroad terminals grew, they accommodated the warehousing and other storage and distribution facilities, and thus some waterfront buildings were abandoned; wharves crumbled and marine-related functions suffered. Later, the advent of the motor truck brought further change; this flexible and faster mode of moving bulk goods short distances reduced the disadvantage of locating away from rail sites and piers at harborside. Waterfront space often became derelict space.

The recreational waterfront landscape has also changed. Newport, R.I., was a summer resort for wealthy planters as early as the 1720s. The American Revolution interrupted that trend, but by 1830 its popularity had rebounded. Other elegant retreats grew along the shores of nearby Narragansett Bay and also at Bar Harbor, Maine; Watch Hill, R.I.; and in Stonington, Groton, Saybrook, and Bridgeport, Conn. This prompted Noah Webster to tab Long Island Sound an "American Mediterranean."

Immigrants accounted for much of the late-19th-century urban growth. These newcomers' ideas about Sunday leisure added to the increasing tendency of New Englanders to forsake the traditional observance of the Sabbath in favor of a day of play. The growth of the recreational waterfront was stimulated by the expanding trolley, railroad, and steamboat network. A strong aspect of waterfront resorts was the great variety of attractions they offered. Some were quiet, family-oriented places with strict temperance observances, a few private and selective; some were religious enclaves; while at others nude bathing was allowed. Most, however, catered to the average person. Often the beach was part of an amusement park, and popular places they were! By 1900, as many as 50,000 people a day traveled by steamboat down the Providence River to the Narragansett Bay waterfront resorts.

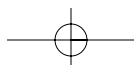
After 1900 the nature of waterfront recreational land use changed. The expanding trolley lines allowed greater numbers of working-class tourists to frequent the shore, causing the social elite to find it a less desirable place to spend time. A few of the most expensive spots, such as Bar Harbor and Newport, hung on. By the late 19th century, seasonal blue-collar cot-

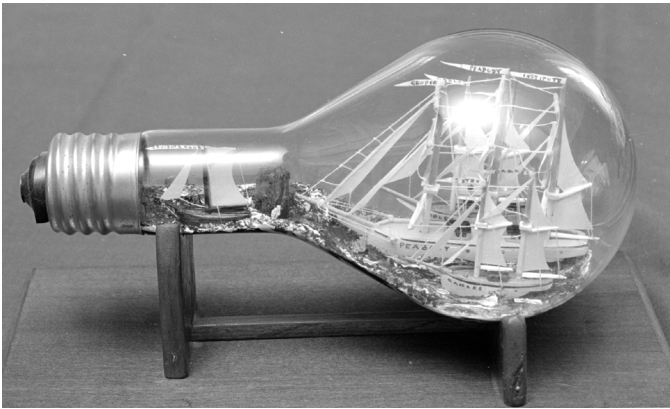
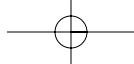
tage colonies had become popular because they allowed people greater control over their leisure environment. As cottages grew, the older hotels, gardens, and amusement parks gave way to make room for them. Cottages rapidly dominated the waterfront. Because many of the older resorts were in need of renovation, their owners often found it more convenient to encourage cottage development or other types of land subdivision and sale. In addition, after 1918, expanding military waterfront uses contributed to erasing much of the older social landscape. The Hurricane of 1938 further devastated some of the older resorts. Those hotels that remained functioned as retreats for people of ordinary means rather than as gathering places for the very wealthy.

More recently, many former summer resorts have been occupied year-round thanks to improvements in highway transportation. Accordingly, throughout New England, shoreline towns have experienced great population growth. Once-sleepy little villages are now busy places. Tony shops now cater to visiting city dwellers, no longer to those who go to sea. In old, weathered waterfront buildings, and newer ones made to look old, quaint boutiques and shops offer jewelry, arts and crafts, and gourmet food. "Nautical" antiques such as divers' helmets, weather instruments, and binoculars can be found. Shop windows promote chamber music concerts, holistic medicine lectures, and old house tours. Increasingly the old resort hotels have been converted to condominiums and apartments. Their users frequent restaurants that no longer require jackets and ties for dinner. Nearby yacht clubs have had to relax not only dress codes but also membership requirements in response to a growing public perception that exclusivity is no longer de rigueur.

Yet New England's waterfronts remain centers of commerce. All types of ships and barges, with the exception of supertankers, call. They transport commodities such as lumber and stone, chemicals, scrap iron, gypsum, lime, wood, pulp and paper, rubber and auto parts, other manufactured items, tar, asphalt, and food. In the summer, cruise ships, large and small, call at some ports. Bulk fuels such as coal and oil make up the greatest tonnage. New England relies heavily on oil for its energy needs, so oil-tank farms take up much space along the region's waterfronts. In Connecticut, for example, there are more than 1,000 coastal tanks with a combined capacity of 14 million barrels of oil. The tonnage of oil arriving and the size of the vessels that bring it continue to increase.

New England's waters have always been dangerous for navigators, especially in the winter. Rocks, shoal water, narrow passages





Ship in a lightbulb,
by Winson Morill of
South Hamilton,
Mass., 1978

and channels, fog and high winds, treacherous currents, and tides are hazards. In the past few years the number of oil spills has increased, resulting in damage to waterfront property, beaches, and wildlife. In the winter of 1996 an oil barge went aground at the southwestern end of Narragansett Bay during a raging storm, spilling about 850,000 gallons of its 4-million-gallon cargo of heating oil. Some of the spill was carried to Block Island, 12 miles south and near the eastern end of Long Island Sound. This, the largest such incident in Rhode Island history, closed shellfish beds, stopped commercial fishing and lobstering, and killed or injured hundreds of shorebirds. As the possibility of such large accidents has increased, so has public and private concern.

As the number of recreational boaters has increased, more small spills are occurring. As a result, water-oriented businesses such as boatyards, repair shops, marinas, and yacht clubs have put pollution-control devices and action plans into place in response to state and federal regulations. The presence of fuel-containment booms at such facilities is increasingly common, as is prominent signage outlining correct refueling procedure. A waste-oil facility is common and the use of environmentally friendly boat paints and solvents is encouraged, if not required.

The landscape of boatyards has changed in other ways. In 2004 more than 110,000 recreational boats were registered in Connecticut alone. All over New England marina owners have had to accommodate the needs of weekend captains, their mates, and guests—needs far different from those who made a living at sea. Copious parking space is provided. In addition, showers and toilets, playscapes for children, and sometimes swimming pools and tennis courts are in evidence as well as a restaurant and snack bar. There may be 20, 200, or 2,000 slips. Mooring space is more and more difficult to find and the waiting lists are longer. Space for dinghies is also at a premium. Weekend sailors must spend valuable

sailing time trying to get to and launch them. The need for storage space has made vertical structures for tenders and other small craft an increasingly common waterfront land use.

The technology of hauling and repairing boats has also changed. The marine railway that once hugged the water's edge is now a relic. The ever-present mobile travel-lift has allowed boats to be stored away from the water well above the tide line, causing a type of "mari-urban" sprawl. Many boatyard owners and managers, frustrated by the stress of demands made upon them and by increasing government regulations, insist they will sell as soon as they are able. As the quest for coastal living space increases, boatyards are increasingly seen as potential condominium developments.

In some yards, however, the past is still present. At the Lowell Boat Shop in Amesbury, Mass., founded in 1793, one can visit the oldest boatshop in the United States—the birthplace of the dory. Two hundred thousand such vessels were built there. The Crosby Boat Yard in Osterville, Mass., on Cape Cod, carries on a 150-year-old tradition of boatbuilding, but now incorporates state-of-the-art materials and computer-aided design. Other such places include the Palmer and Latham Yard in Noank, Conn.; nearby, the old Latham Chester Store, a focus of mercantile activity for almost 90 years, was recently saved from demolition and restored.

Preservationists have become increasingly concerned about the future of historically significant waterfront structures. The National Trust for Historic Preservation launched a program in 1977 aimed at preserving America's maritime heritage. Historic waterfront properties are increasingly threatened by renewal and development. The same accessibility that allowed the growth of suburban waterfront boating facilities helped render the old, multi-storied downtown waterfront properties obsolete. Much waterfront space lies in limbo in the older portions of New England's cities, increasingly threatened by the wrecker's ball.

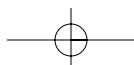
The interest in waterfront preservation comes at a time when urban policymakers are recognizing that cities that cut themselves off from rivers and waterfronts suffered a loss of vitality. The success of Boston's Quincy Market, the harbor fronts of Norwalk, Conn., and Salem, and the renewed wharves of Portland show that waterfront festival marketplaces can be a focus of retail activity for the city. Boston and Hartford are tearing down highways that hinder access to the waterfront. Housing along waterfronts, as in Boston, Newport, Stamford, Conn., and Portland, has become a growing trend. Theme parks, science museums, and marinas are also replacing derelict waterfront space. In the future, New England's waterfront will be characterized less by walls and fences, vista-obstructing tall buildings, and unsafe, windswept space. Waterfronts will be people-oriented, incorporating parks, pathways, and green spaces. Historic landmarks and vistas will help remind visitors where the city's past began.

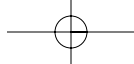
Ralph H. Brown, *Historical Geography of the United States* (1948); Thomas R. Lewis and John Harmon, *Connecticut: A Geography* (1986); D. W. Meinig, *The Shaping of America*, vol. 1: *Atlantic America, 1482-1800* (1986); John R. Stilgoe, *Alongshore* (1994); James Vance, *This Scene of Man* (1977); Robert Wenkam, *New England* (1974).

Thomas R. Lewis

Whaling Few occupations are as closely tied economically and symbolically to New England as whaling. To many, whaling conjures up images of hardy seamen engaged in a pursuit that could either cost their lives or make their fortunes. A touch of romance lingers in the fictional and the factual accounts of New England's whaling days. Both chronicle the drama of men who pit their lives, skills, and luck against the mighty whale, demonstrating something essential about the American character. Yet to others, the history of whaling in New England is a tale of systematic slaughter for profit when times were good and then of port towns in decline, having cast their fate with a way of life that was doomed to become obsolete. Today, thanks to conservation groups and whale-watching tours, the great mammals remain an important part of New England's identity and economy.

Europeans followed the whale to the east coast of North America in the 16th and 17th centuries, and like the Algonquian inhabitants of the region, they attempted to drive the right and sperm whales into shore by harpooning them and wearing them down. Once killed, whales were butchered and try-pots were set up on beaches to render the oil from their blubber. Whereas Indians used whales for bone, food, and oil, Europeans were primarily





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interested in the oil for lubrication and illumination. The advent of permanent English settlements in the early 17th century established land-based whaling as one of the region's first commercial enterprises. Nantucket's early Quaker settlement took advantage of the island's proximity to a whale-migration path, became experts at the hunt, and quickly established Nantucket as the center for British colonial production of spermaceti candles and lubricating oil. A booming market led to technological improvements that changed the nature of whaling and its geographic base in the late 18th century.

Whaling became an increasingly important source of New England's wealth as demand for whale products rose and shipowners sought new ways to extend the range of ships, lengthen the time spent in hunting grounds, and increase the yield of their hunt. The development of on-board tryworks, which allowed crews to render whale blubber in iron pots on deck, turned ships into floating factories. After the Revolution, New London, Conn., and New Bedford, Mass., replaced Nantucket as the nation's whaling centers. By 1830 whaling was firmly established in New Bedford, spurring the growth of ancillary businesses that ranged from ships' suppliers to shipbuilding and banking.

The middle decades of the 19th century were the zenith of American whaling. Up to 700 ships were in service, and as many as 70,000 people were employed in the industry by 1850. The continued demand for oil and improvements in ship design prompted owners to expand their hunting range first into the eastern Atlantic and then around Cape Horn into the Pacific Ocean. Rounding the Horn and sailing into dangerous Arctic and Antarctic waters had long been avoided, but heightened competition forced whalers to increase both their range and the length of their voyages; hunts could last for up to four years.

An additional impetus to Pacific voyages was the discovery of petroleum deposits in 1859 in Pennsylvania, which brought a flood of kerosene onto the home-illumination oil market. The whaling industry responded by trying to find more oil at lower cost and by creating other markets for whale products. Baleen, the material that forms a straining filter in the mouths of baleen whales such as the Arctic bowhead, was processed to provide ribs for umbrellas and corsets or worked into hoops, combs, shoehorns, and whips. The high prices commanded by these items provided the incentive for extended Pacific voyages. These voyages in turn would provide a setting for literary depictions of the men who pursued the great whale.

Seafaring had always been an occupation



"A Dead Whale or a Stove Boat"; Bela Pratt's controversial 1915 whaling monument at New Bedford, Mass., depicts an atypically "Yankee" harpooner

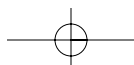
that defined what it meant to be a man. New England whaling men confronted not only all the dangers of the sea but the largest living creature on earth. He who battled both and won was a man among men. Individual skill, courage, and strength were greatly prized but ultimately had to be put to a communal purpose if the hunt was to succeed. Fraternity was central to the cohesion of crew members who depended on each other during critical moments of the voyage and the kill. Whaleships were some of the most diverse workplaces in 19th-century American society. Atlantic and Pacific islanders were often recruited for American ships, joining crews of Yankee, black, and Native American seamen. The Cape Verde Islands and the Azores contributed many competent crewmen who quickly learned the skills required for whaling.

Whalers shared many of the eternal customs of men at sea, as well as some peculiar to their own specialized pursuits. Long stretches of idle time were spent creating scrimshaw, an art form unique to whaling ships and now prized by collectors. Whaling's exotic and intensely masculine culture caught the imagination of writers, artists, and balladeers. A primary work in the American literary canon, Herman Melville's *Moby-Dick* (1851), used a Pacific whaling voyage out of New Bedford to explore the theme of man and his eternal struggle with nature and self. An existential novel written long before the coining of the term, *Moby-Dick* works at many levels of meaning. The persistent themes of trial, redemption, and regeneration in New England and American culture no doubt account in part for the continued popu-

larity of the novel throughout the 20th century and into the 21st. *Moby-Dick* has generated four popular films from the silent-movie era to the present. While each adds plot elements for contemporary markets, the essential symbols remain the same.

As the 19th century closed, whaling began to take on a role that was more symbolic than vital within New England's society and economy. The Civil War disrupted the industry and destroyed ships. Changing postbellum fashions and emerging technologies doomed whaling, as petroleum refineries provided cheap illuminating and lubricating oils and light steel replaced whalebone in many popular products. The transcontinental railroad lowered the cost of shipping whale products to the East and caused a shift in the base of operations from New England to the West Coast. The last wooden whaling ship, the New Bedford-built *Charles W. Morgan*, was retired from duty in 1921, more a relic than part of a vital industry. By the 1960s most countries had called a halt to commercial whaling in recognition of drastically declining whale populations. Iceland, Japan, and Norway were still hunting whales at the beginning of the 21st century.

Ironically, the same forces that contributed to the demise of New England whaling provided the means by which the old whaling towns revived their economies. As "save the whales" became one of the main slogans of the ecology movement in the 1970s and 1980s, the once-feared whale became a benign symbol of the need to conserve the earth's resources. In the 1980s and 1990s movies portrayed whales



as victims of humans' rapacious attitudes toward nature, and television audiences were riveted by efforts to save whales that had washed up on beaches or been trapped in ice floes. Whaling was reinvented, as boatloads of tourists armed with cameras instead of harpoons sailed out to Stellwagen Bank, a national marine sanctuary at the mouth of Massachusetts Bay, and other spots where the great mammals congregate.

The interpretation of the whaling past has long been a central feature of tourist attractions and museums in the southern New England towns of Nantucket and New Bedford, Mass., and Mystic, Conn. Whaling thus remains part of the regional economy. But today's cultural sensibilities make it hard to imagine someone hefting a razor-sharp harpoon and shouting, "A dead whale or a stove boat!"

Margaret S. Creighton, *Rites and Passages: The Experience of American Whaling, 1830-1870* (1995); Lance E. Davis, Robert E. Gallman, and Karin Gleiter, *In Pursuit of the Leviathan: Technology, Institutions, Productivity, and Profits in American Whaling, 1816-1906* (1997); Elmo P. Hohman, *The American Whaleman: A Study of Life and Labor in the Whaling Industry* (1928).
Gretchen A. Adams

Women Seafaring is among the most male-dominated occupations in Western civilization, a strikingly marked division of labor to which Margaret Fuller famously made reference in her 1845 appeal to expand opportunities for women, "Let them be sea captains if they will." New England's ships and boats were crewed almost exclusively by men, while coastal villages and seaports were disproportionately female throughout the centuries in which maritime commerce dominated the region. Since relatively few women have gone to sea, it has been harder to identify maritime women than to see sailors or fishermen themselves. Most did not walk with a rolling gait, their faces were not unusually weather-beaten, nor did they dress distinctively or flaunt tattoos. To the amusement of nonmaritime observers, their speech might be salted with nautical terms, but in general these women displayed the particular characteristics of their locality, socioeconomic status, and ethnicity. What unites the disparate group of New England maritime women is that their lives were and are largely defined by the rhythms and risks of men's maritime enterprise.

Before the first English settlers arrived, indigenous coastal peoples of both sexes exploited the abundant inshore marine resources. Algonquian women fished with line or net, dove for lobsters, and harvested clams, oysters, and scallops, processing their catch for food or fertilizer to be used on the corn and

squash fields for which they were primarily responsible. During the 17th and 18th centuries, Native Americans were dispossessed of their lands and displaced by English colonizers up and down the New England coast. Indigenous ways of life were supplanted by the European gendered patterns that assigned the sea to men and the land to women in maritime communities ranging from primitive fishing outposts to bustling, cosmopolitan port towns.

As sailors' kith and kin, as providers of all sorts of services (licit and illicit) to seamen on shore leave, European American and African American women on land have played mediating roles in maritime culture, maintaining and renewing family, community, and the local economy during and in between men's repeated absences at sea. Like the shore where sea and land meet, New England maritime women have served both as substance and symbol of crucial connections between men at sea and society on land.

The earliest settlers of the Massachusetts Bay Colony established fishing outposts on the coast north of Boston to exploit the wealth of cod and other fish on the offshore banks. These settlements differed from the unusually stable villages of the interior: women and men were equally notably irreverent, violent, and hostile to authority. The early New England fishing industry apparently did not employ women directly, as did, for instance, the Newfoundland fishery, where women worked on shore processing fish. New England women seem to have participated only occasionally in drying and curing the catch, which primarily occurred in men's seasonal camps nearer the fishing grounds. Wives and other women provided room, board, laundry, and other domestic services for both single and married fishermen; they also made and mended seines, nets, and lines. Wives also regularly represented their husbands' interests onshore, occasionally even marketing their shares of the catch, and most often in performing the wide range of tasks necessary to sustain family and homestead during men's absences. The extreme risks of the fishing industry were reflected in the high percentage of widows; the exploitative credit relations of the fishery were reflected in those widows' poverty.

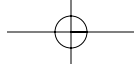
Fishing villages remained on the margins of colonial and early national New England society, but the bustling seaports—Boston, Newport, R.I., Salem, Mass., and a host of smaller towns—were at its heart. As in other urban centers throughout the Atlantic world, women were integrated throughout the local economies that thrived on seaborne commerce. Many women onshore contributed to maritime enterprise directly by boarding and feeding, sewing and mending, and washing

and ironing for sailors and other travelers. Women baked ships' bread and preserved meat and fruit for voyages. A few women even worked as shipwrights, helping build the vessels on which men sailed.

Many more serviced seamen sexually, drifting in and out of prostitution as poverty demanded and opportunity dictated. For instance, Mahala Green was cited twice in two years by the sheriff in Providence for keeping "a house of ill-fame and disorder" during the early 1830s. In New London, Conn., a black madam named Mary Craig Lopez ran the favorite brothel of African American whalemens before she was jailed in the 1840s. Beginning in the early 19th century, other women from the middling and elite classes worked energetically to eradicate this sort of activity. They strove to assist "deserving" seamen's wives and children, and to reform sailors and maritime culture more generally through their activities in religiously inspired seamen's aid organizations and port societies. In Boston, Sarah Josepha Hale, a prominent editor whose brother had been lost at sea, founded the Seamen's Aid Society.

Such efforts notwithstanding, sailors' wives sustained their families partially on advances from their husbands' employers and partially on barter and cash-producing activities in their own right. Alongside other seaport women, maritime wives and widows also ran boardinghouses; sold dry goods, groceries, and other sundries; operated taverns; leased land, buildings, and wharf space; taught school; and even participated in small-scale trading ventures on the voyages their husbands sailed or financed. Wives often settled their husbands' accounts and paid their taxes while men were at sea. The range and extent of maritime women's activities ebbed and flowed with the industries and commerce on which the seaport economy was based, but many of these forms of female participation persisted well into the 20th century.

Radically new technological developments and consequent economic restructuring fundamentally altered New England maritime women's relationship to the sea in the mid- and late 19th century. The numbers of maritime women diminished overall in traditional ports such as Salem, Boston, and Providence, as the center of deepwater shipping shifted "down east" to Maine. For those women who remained connected to the sea, new roles were introduced while older ones persisted. The fisheries declined with worldwide shifts in demand and supply at the same time as New England industrialized, drawing both men and women away from the sea. Women in fishing communities continued to fill traditional support functions. They also took on new kinds of



work created by new methods of processing, preserving, and marketing fish; for example, by 1886, fully a third of the cannery workers in Maine were female.

New technologies (most important, the shift from sail to steam) and global economic forces in merchant shipping similarly affected women onshore. Fewer New England women found themselves connected to sailors, their lives dictated by the rhythms of seafaring, as American shipowners found foreign labor cheaper and more tractable. But by the middle of the 19th century, a surprising number of women actually went to sea themselves, not as crewmembers, but as family. At least several hundred wives and daughters went along to provide the domestic trappings of family life for captain husbands or fathers on long international voyages. Mary Chipman Lawrence, for instance, spent three and a half years aboard the whaler *Addison* during the 1850s; her journal was later published as *The Captain's Best Mate*. This sort of voyaging was a paradoxical consequence of the middle-class Victorian notions of companionate marriage and of work as public, stressful, and male, necessarily complemented by a home that was private, nurturing, and female.

Other women embarked on shorter local trips, cooking and cleaning for fathers, brothers, or husbands on smaller coasting vessels in a floating version of a family economy. In the post-Civil War period, some women found employment as stewardesses on large passenger steamships that featured an elaborate hierarchy of labor organized by gender and race, as well as by skill. Some of those stewardesses were married to male crew members; others were single.

The effects of 20th-century trends on women and gender roles in New England maritime communities are even less well understood. Economic competition and federal regulation of the fisheries may have reshaped gender roles as onshore wives expanded their support by developing marketing strategies and negotiating government bureaucracy. In the 1930s and 1940s, some legislation even encouraged fishermen to carry their wives to sea in an effort to double the catch they were allowed. As maritime leisure industries expanded dramatically beginning in the late 19th century, women figured prominently as entrepreneurs catering to seaside tourists, rather than sailors, and also as consumers themselves. More recently, small numbers of women have begun to enter previously male-dominated occupations, finding jobs as licensed merchant marine officers, marine scientists, and lobstermen.

Our understanding of women's contribu-

tions to New England maritime enterprise over four centuries remains uneven. Much is yet unexamined, reflecting the persistence of strongly gendered symbolism that has pervaded both high and popular culture. Maritime culture has been and still is replete with myths, and nowhere is this more the case than in its gender stereotyping. Visual and literary imagery from the colonial period perpetuated the association of land, solid and reassuringly stationary, with women, while the sea, wide open and turbulent, but also the route to adventure and wealth, was associated with men. Cross-dressing, seagoing, working-class heroines of ballads and broadsides ultimately reinforced the dichotomy by stressing the exceptional qualities of such "Female Sailors Bold." In the late 18th and early 19th centuries, Romantic artists and writers exaggerated the division, juxtaposing their vision of the ocean as sublime masculine space, immeasurably vast and uncontrollable, with a feminized world of land that was enclosed, gentle, nurturing, and knowable. The ocean's force was underscored in part by characterizing maritime women, especially wives and widows and their orphaned children, as long-suffering, poignant reminders of the mortal risks with high costs of seafaring.

Throughout the 19th century, these images and themes were embellished and sentimentalized in the literary productions of such popular writers as Harriet Beecher Stowe and Lydia Sigourney, as well as in vernacular forms ranging from quilt designs to Currier and Ives lithographs, from temperance tracts to sea chanteys. Writers more commonly associated with the sea (James Fenimore Cooper, Richard Henry Dana, Herman Melville, Joseph Conrad, and Jack London) drew on gender conventions in counterposing a claustrophobic femininity on land to a muscular fraternity redemptively forged at sea. In the post-Civil War period, images of strong, stoic, and sometimes independent maritime women also emerged, reflecting the power of the sea more directly, though still from shore, in regionalist literature and art (notably associated with Sarah Orne Jewett and Winslow Homer) and in popular culture (such as the late-19th-century acclaim of the Newport harbor lighthouse keeper's daughter, Ida Lewis, the "Heroine of Lime Rock").

Even as New England's relation to the sea has shifted to predominantly recreational use shared by women and men, the dichotomized gender stereotyping in maritime culture remains potent in many forms, from movies to museum exhibits to perennially popular sea fiction and nonfiction. Only recently have nautical enthusiasts been joined by gender

studies scholars who have begun to disentangle the symbol from the substance of New England women's engagement with the sea.

W. Jeffrey Bolster, *Black Jacks: African American Seamen in the Age of Sail* (1997); Margaret S. Creighton and Lisa Norling, eds., *Iron Men, Wooden Women: Gender and Seafaring in the Atlantic World, 1700-1920* (1996); Linda Greenlaw, *The Hungry Ocean: A Swordboat Captain's Journey* (1999); Benjamin W. Labaree, *America and the Sea: A Maritime History* (1998); Mary Chipman Lawrence, *The Captain's Best Mate: The Journal of Mary Chipman Lawrence on the Whaler "Addison," 1856-1860*, ed. Stanton Garner (1966); Lisa Norling, *Captain Abab Had a Wife: New England Women and the Whalefishery, 1720-1870* (2000); Haskell Springer, ed., *America and the Sea: A Literary History* (1995); Roger B. Stein, *Seascape and the American Imagination* (1975).

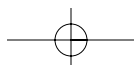
Lisa Norling

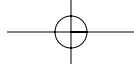
Wooden Boat Revival The wooden boat revival, the worldwide repopularization of wooden watercraft, is a movement that began in the early 1970s. Much of the activity associated with the wooden boat revival occurred in and around New England.

Until World War II, most boats were constructed from wood. These boats were built in both large and small shops, and required the personal attention of skilled craftsmen. In the 1950s, fiberglass was introduced as a boat-building material. It made forming hulls in a mold relatively fast and inexpensive, and the new material also promised a low-maintenance boat. Given these economies, fiberglass boats quickly displaced wooden ones.

During the fiberglass revolution, wooden boats were still built and used, but the reputation of wood as a construction material had been diminished by the marketing efforts of fiberglass boat companies. In the early 1970s, a movement to revive wooden boats and wooden boat craftsmanship came to a head. The movement was spurred by a deep sense of impending loss—both of the craft and a way of life—as well as by a growing recognition that wood has structural and aesthetic qualities that are superior to those of fiberglass. Today, wooden boats enjoy a wide following, and wood is often used in ways that earlier traditional builders would not recognize—in combination with modern materials like epoxy adhesives and fiberglass.

The wooden boat revival originated in a number of places around the world. In New England, several notable people and institutions were influential, including John Gardner, the curator of small craft at Mystic Seaport in Mystic, Conn. Gardner originated the concept of teaching traditional small-craft construction in the museum's classes. He also published several books and articles on the





*New Hampshire
boatbuilder, 1999*

topic, including important articles in the *National Fisherman*. Captain R. D. "Pete" Culler, a designer and builder from Hyannis, Mass., also published several books and articles on wooden boats. His influence on the aesthetics of traditional boats remains strong.

Information dissemination and education were critical to the movement's success. The Apprenticeship figured prominently in this regard. This program was founded by Lance Lee in Bath, Maine, in 1972, and is modeled after the famous Outward Bound outdoor experiential education courses. Apprentices attending Lee's program typically sign on for a two-year apprenticeship and come away with a solid foundation in traditional boatbuilding. The operation is located today in Rockland, Maine. The Landing School in Kennebunkport, Maine, was founded in 1978, and has grown to be crucial to the boatbuilding industry in general. Students learn the fundamentals of classic boatbuilding and can apply these skills in careers using modern techniques and materials.

WoodenBoat magazine, founded in 1974 by boatbuilder Jonathan Wilson, serves as a mode of communication for the wooden boat industry. Founded in Brooksville, Maine, and now published in Brooklin, Maine, the magazine provides information for boatbuilders as well as for owners and designers and serves as a marketplace for boatbuilders and vendors of boat-related items. The company also publishes books on wooden boat construction. Similarly, International Marine Publishing Company of Camden, Maine, has published numerous books on wooden boats and related topics, and a group called the Traditional Small Craft Association, dedicated to the survival of traditional watercraft, publishes a newsletter called the *Ash Breeze*. Many other wooden

boat publications are collected at maritime museum libraries, and at the WoodenBoat Library, located at the magazine's Brooklin headquarters.

John Gardner, *Building Classic Small Craft* (1977); Gardner, *Building Classic Small Craft*, vol. 2 (1984); David C. "Bud" McIntosh, *How to Build a Wooden Boat* (1987); Peter Spectre, *Different Waterfront: Stories from the Wooden Boat Revival* (1989).

Matthew P. Murphy

Yachting and Recreational Boating

Recreational boating is big business in contemporary New England, and is likely to continue expanding in the foreseeable future. This is quite a change from the colonial era, when common wisdom held that "those who would go to sea for pleasure would go to hell for a pastime." Today coastal New Englanders are more likely to share the sentiments expressed by Rat in Kenneth Grahame's *Wind in the Willows*: "Believe me, my young friend, there is *nothing*—absolutely nothing—half so much worth doing as simply messing about in boats."

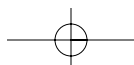
Roger F. Duncan and John P. Ware, authors of the best-selling *Cruising Guide to the New England Coast* (1979), noted there the "tremendous changes in the coastal communities and in the yachts and yachtsmen who visit them" compared to just 40 years earlier:

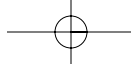
In the thirties we saw commercial sailing vessels on the coast still carrying cargoes more or less profitably and the few yachts we saw were usually over 30 feet and often much bigger. The 100-foot schooner *Constellation*, carrying main and fore gaff topsails, sparkling in brass, varnish, and black paint, passed us off Rockland, her paid crew standing by in the lee of the foresail. Today our harbors are crowded with scores of cruising boats under 30 feet, requiring the construction of marinas and stimulating a tremendous service industry.

The democratization of yachting has expanded even more since Duncan and Ware wrote in 1979, as has its contribution to the regional economy. The Massachusetts Marine Trade Association proudly noted that in 2001 there were more than 146,000 boats in that state alone, not counting canoes, kayaks, and rowboats, which do not require registration. Thirty-five thousand of those recreational vessels were sufficiently large to be kept in moorings, marinas, or docks along the coast of the commonwealth; the rest were in lakes, or went to the water sporadically on boat trailers or car tops. Boaters in Massachusetts alone spent more than \$192 million in 2000 on new boats, engines, and equipment, and contributed more than \$297 million to the state economy in peripheral spending for repairs, insurance, supplies, and groceries. The other New England states could tell a similar story. In Rhode Island, for example, Newport no longer hosts the America's Cup race, but it continues to sponsor yacht races and regattas for recreational boaters of all abilities, while the Museum of Yachting is a popular tourist attraction. Recreational boating thus ranges from multimillion-dollar sailing yachts to modest fiberglass runabouts, to kayaks and aluminum johnboats. Today almost anyone who desires to "mess about in boats" can afford to do so. As a result, the cultural values and meanings associated with boating in contemporary New England vary widely.

Members of the Eastern Yacht Club in Marblehead, Mass., a town sometimes described as "the yachting capital of the world," are serious sailboat racers and long-distance cruisers. They include Olympic sailing competitors, America's Cup defenders, and noted yacht designers. Founded in 1870, the Eastern is a venerable club steeped in tradition, and its elegant building is full of trophies and memorabilia from generations of yachting. The culture of boating as practiced at the Eastern Yacht Club is significantly different from that of the Great Bay Yacht Club, in Dover, N.H. Initially home to the locally built Merrimack class of racing dinghies, the Great Bay Yacht Club is less august and less competitive than the Eastern. It has no clubhouse, and the organization itself, which is much more middle class, is only about 30 years old. The South Norwalk Boat Club, in Connecticut, exemplifies yet another variant of recreational boating. It consists primarily of powerboat enthusiasts and sport fishermen, and its members' interests vary significantly from those of sailors. In fact, sailors and powerboaters often maintain a rivalry, sometimes good-natured, sometimes not.

This wide array of interests and values among recreational boaters is mirrored by a





Columbia, the 1899 and 1901 America's Cup defender

spectrum of niche publications, many of which are based in New England. *SAIL*, which describes itself as the "world's leading sailing magazine," is published in Boston. *Messing about in Boats*, a bible for "backyard Noahs," and an inspiration for individuals

with a modest budget who yearn to get afloat, is published in Wenham, Mass. *WoodenBoat* magazine, the baby-boomer generation's primer for the wooden boat revival, is produced in Brooklin, Maine.

To get an idea of how New England yacht-

ing has changed during the past century and a half, one needs only to pick up a copy of *Carter's Coast of New England*, first published in 1864 as *A Summer Cruise on the Coast of New England*. Robert Carter and three friends, in the company of two professionals they dubbed the Pilot and the Skipper, sailed from Boston to Provincetown, then along the short New Hampshire coast, and ultimately down east to Bar Harbor, Maine, in a 30-foot fishing smack. The boat itself, its spartan lack of amenities, the presence of the professional crew, and the frighteningly small number of other recreational boaters they encountered suggest that the world of yachting has been revolutionized since the Civil War.

Fiberglass hulls, inboard engines, and navigational electronics reflect that change. So does the emphasis on leisure in modern society and the availability of discretionary income. The glossy magazines and spic-and-span marinas that define boating today signal a cultural shift of great magnitude. More people than ever before can experience the challenge of tacking a sloop to windward or the sense of adventure that accompanies any voyage, no matter how brief. But as all yachtsmen and women worth their salt know, some things never change. The east wind still bodes ill, the summer fog remains unsettling, and half-tide ledges lurk nonchalantly, as they always have, for unwary mariners.

Robert Carter, *Carter's Coast of New England*, ed. Daniel Ford (1977); Roger F. Duncan and John P. Ware, *A Cruising Guide to the New England Coast* (1979).

W. Jeffrey Bolster

