

Boston Area Sub-region
 Counties: Suffolk, Plymouth

5.5.1. Suffolk County

5.5.1.1. Boston Harbor

Background

“During colonial times ... Boston lived off the sea. Its maritime economy was based on fishing, shipbuilding, trade, commerce, and a variety of import and export enterprises. But these activities spun off numerous land-based enterprises—taverns, hotels, Chandler shops, clothing stores, rope walks—and numerous other businesses that made Boston a lively and profitable seaport town.”¹ As both the capital of the Massachusetts Bay Colony and the principal market for all New England, early Boston hummed with maritime economic activity.

“Boston was ripe for maritime success in the eighteenth century. It had a deep protected harbor situated at the mouth of three rivers that provided access to the agricultural uplands. With the rise of industry in the nineteenth century, the rivers still served the city well, as the sites for numerous factories (although rail not river barges more often provided the transit). The port not only sent New England-made goods worldwide; it served as the gateway to waves of immigrant labor for these expanding industries. The burgeoning population, both native and newcomers, also provided a huge customer base for the city’s retail establishments.”²

“Colonial Boston’s diverse trade economy created jobs for a great number of tradesmen: coopers, bakers, hatters, tallow chandlers, truckmen, porters, carpenters, shipbuilders. Alongside the large mercantile firms and major port industries like shipbuilding, small business such as the Bell in Hand Tavern (est. 1795) nestled in the crowded blocks around the town dock. Town business prospered and grew. By 1740, Boston had become the commercial hub for the whole region, home to wholesalers and agents for upland industries (including distilleries in Medford and cod fisheries in Plymouth) as well as supporting an array of marine-based trades quartered around its own inner harbor.

The Towne House (later the Old State House) was the center of commerce. From its commanding view down the Long Wharf, merchant-ship owners, investors and ship masters met daily, establishing the commercial network for New England’s trade to the southern colonies, the West Indies, Spain, and most significantly to mother England. Boston soon supplied much of North America and Great Britain with rum, molasses,³ and fish in exchange for lumber, animal hides and English manufactured goods.

Boston’s seaborne commerce changed in the nineteenth century, moving away from foreign goods and coming to depend on the shipping of New England manufactured goods. As this domestic trade increased, port industries became more specialized. A sophisticated interdependent system of producer-manufacturers, warehousemen, wholesalers, retailers, haulers, coastal shippers, and rail agents developed to serve the port of Boston.

Ships were growing larger in size and tonnage. Marine trades evolved from small artisan shops to large manufacturing operations. The shipping industry was outgrowing Boston’s inner harbor. In the 1830s, developers looked to the vast waterfronts of South Boston and East Boston. East Boston became the major point of entry for ocean vessels. Vast piers were built by major rail lines like the great Eastern Railroad, the Boston and Maine, and the Boston and Albany. A diverse range of heavy industries in both South and East Boston

¹ http://www.ci.boston.ma.us/dnd/obd/G_OBD_Boston_Business_Heritage5.htm

² Ibid.

³ The role of cod in this circle of trade is fascinatingly described by Mark Kurlansky in *Cod* (New York: Walker and Company, 1997).

supported this domestic transport system. These industries were epitomized by the world renowned Atlantic Works of East Boston and R. Estabrooks Sons (City Iron Foundry) and the still active Boston Wharf Company of South Boston. With the advent of the harbor tunnels in the 1950s, these waterfronts were linked, evolving into the major road-hauling services that still traverse these industrial waterfronts today.”⁴

Early in the 1900’s Boston’s fishing industry was characterized by large gas or diesel-powered vessels that had adopted otter trawls and beam trawls to catch groundfish for the increasing demands of the fresh-fish market.⁵ “On-shore processors filleted the local catch...for easier consumer preparation. The Boston Fish Pier was built in 1913 as a state-of-the-art fish unloading, processing and storage center. The fresh fish business in Boston reached its peak during the 1930s when 300 million pounds of fresh fish were landed per year on the Fish Pier.”⁶

“By the 1930’s traditional manufacturing industries were beginning to move south to access cheap labor or were dying out.”⁷ Nevertheless, the diverse modes of transportation available in Boston facilitated the continuation of the city’s role as a hub. Today, container cargo port facilities, rail access, major highways and the international air terminal attract the flow of goods. In addition, fish harvesting, processing and marketing, while transformed, have remained a critical component of Boston’s economy.

Fishing Dependency

Boston is a complex urban environment, the metropolitan center of a cluster of neighboring cities and towns, the state capital with a robust economy featuring a multiplicity of industries ranging from biotech to farmers’ markets. The medical industry, higher education facilities, and tourism are just a few of the businesses that engender the flow of all forms of capital in and out of the area. While fishing-related business is dwarfed by some of the others, it is significant not only for its role as a component of Boston’s economy, but also for its importance in serving dispersed, smaller communities that are more obviously dependent upon fishing and fishing-related businesses. Boston remains an **essential provider** of fishing-related support services.

The importance of Boston to the New England region is very significant, in that it is a nexus for the international transshipment of fishery products throughout New England. The only other major point of transshipment is from New York through Fulton’s Market. However, Boston is more central to the overall flow of produce, and boasts a large number of seafood brokers as well as larger seafood companies with fleets of trucks and major facilities.

Governance

Boston has a mayor and city council. It is also the state capital of Massachusetts.

Demography

Population

The 1989 population of Boston was 574,283. Of these 274,259 were male and 300,024 were female.

⁴ <http://www.ci.boston.ma.us/dnd/obd/GOBDBostonBusinessHeritage5.htm>

⁵ The role of Italian immigrants in the Boston fishing fleet is highlighted in an article written November 16, 1909 entitled *Italian Fleet of Boston*. See at <http://downtosea.com/1901-1925/itInFleet.htm>

⁶Georgianna, Dan. 2000. *The Massachusetts Marine Economy*. Dartmouth, MA: University of Massachusetts.

⁷ Ibid.

Age Structure

Sixty percent of the population (345,162) was in the 22 to 65 years old range. 41,720 were under 6 years; 56,288 were between 6 and 15; the 16 to 21 years old category included 64,957 individuals.

Education

Of persons 25 years and over, 88,875 did not graduate from high school. 97,233 had a high school degree or equivalency. Of the 134,279 individuals who had attended some college, 64,390 had received a Bachelor's degree. Graduate or professional degrees were held by 45,321.

Housing

The median year housing structures were built was 1939. Of the 250,863 units, 228,464 were occupied, 22,399 were not occupied. Of the occupied housing, 157,920 units were rented, 70,544 were owned. Median housing value was \$160,083.

Racial and Ethnic Composition

Sixty-three percent of the population was white in 1989 (361,513 individuals). About 25 percent were Black (146,695); 5 percent were Asian (30,457), 10.39 percent were Hispanic, and 33,753 classified themselves as "other race." American Indians, Eskimo or Aleut numbered about 1865.

*Economic Context*Income

Median household income in 1989 was \$29,180; median family income was \$34,377 and per capita income was \$15,581.

Employment⁸

Universe: Employed persons 16 years and over	
Agriculture, forestry, and fisheries (000-039)	1440
Mining (040-059).	142
Construction (060-099)	11416
Manufacturing, nondurable goods (100-229)	12686
Manufacturing, durable goods (230-399)	15916
Transportation (400-439)	12778
Communications and other public utilities (440-499).	7291
Wholesale trade (500-579).	7810
Retail trade (580-699)	40072
Finance, insurance, and real estate (700-720)	31239
Business and repair services (721-760)	16709
Personal services (761-799)	11007
Entertainment and recreation services (800-811).	3948
Professional and related services (812-899):	
Health services (812-840).	38290
Educational services (842-860)	29753
Other professional and related services (841, 861-899).	32160

Transportation and Access

"Boston is New England's leading port; a regional rail, bus, and truck terminal center; and an important air transport center. Boston is a hub from which many highways extend to serve the city to the north, west and south."⁹

⁸ 1990 US Census Data. Database:C90STF3A. Found at <http://venus.census.gov/cdrom/lookup/>

⁹ <http://www.state.ma.us/dhcd/iprofile/035.htm#GOVERNMENT>

Major Highways

Route 128 forms a semi-circle around Boston. The Central Artery gives access to the downtown area, and the Southeast Expressway extends to the South Shore area. The Massachusetts Turnpike (I-90) crosses Route 128 in Weston and terminates in West Stockbridge, with an extension to the New York Thruway.

Rail

Amtrak provides passenger service to New York City and Washington, D.C. MBTA subway service is available on the Red, Orange, Green and Blue lines. Commuter rail service is available to both North and South Stations. Conrail and the Springfield Terminal Railway (STRR) offer freight service to Boston. Conrail has an intermodal facility in Allston and a Flexi-Flo terminal in Boston.

Bus

Boston is a member of the Massachusetts Bay Transportation Authority (MBTA), which provides fixed route service within the city and to surrounding towns. The MBTA also provides THE RIDE, a special transit service for the elderly and disabled.

Other

Logan International Airport, easily accessible from downtown Boston, is the busiest Primary Commercial Service (PR) facility in New England. Also, Hanscom Field in Bedford and Norwood Memorial Airport provide commercial service. The Nashua Street Heliport is located near North Station. MBTA commuter boat service is available to Charlestown and to Hingham.

Hospitals, schools, libraries

There are no museums strictly focused on commercial fisheries but the Boston National Historical Park, USS Constitution Museum, and New England Aquarium all have exhibits and educational programs that are marine and/or fisheries related.

The Boston Public Library is well respected for its collection and its librarians. The system includes 26 neighborhood libraries.

There are about thirty hospitals in Boston:

- Arbour Hospital
- Beth Israel Hospital
- Boston City Hospital
- Boston University Infirmary
- Brigham And Women's Hospital
- Carney Hospital
- Children's Hospital Medical Center
- Crittenton Hastings House
- Dana Farber Cancer Center
- Faulkner Hospital Corp.
- Franciscan Children's & Rehab
- Hahnemann Hospital
- Hebrew Rehab Center For Aged
- Jewish Memorial Hospital
- Lane Health Center
- Lemuel Shattuck Hospital
- Mass. Eye And Ear Infirmary
- Mass. General Hospital
- Mass. Mental Health Center
- Mattapan Hospital
- New England Baptist Hospital
- New England Deaconess Hospital
- New England Medical Center Hospital
- Shriner's Burn Institute

Simmons College Health Center
 Spaulding Rehabilitation Hospital
 St. Elizabeth's Hospital Inc.
 St. John Of God Hospital
 St. Margaret's Hospital
 University Hospital, Inc.

Fisheries Profile

Community and fishing dependency

Boston and Massachusetts' North shore communities are ranked among the lower third of fishery dependent communities in New England according to this study's indices. As was noted in the Chapter 3, however, this ranking is misleading. Because our dependency ratios had to rely on census data that identifies harvesters but not other fisheries-related occupations, the numbers do not reflect the real importance of the fishing industry to the Boston sub-region. Boston's significance lies in its role as a major brokerage center for all of New England. Though the number of harvesters who fish out of Boston Harbor are limited, the support services for fishing that are based in Boston make the city an *essential provider* to the regional industry. Regulations and downturns in the stocks have repercussions for the support industries that reverberate along the whole coast and region.

According to the census numbers, the percentage of fisheries-related occupations in the Sub-NRR of the Boston Harbor NRR is 7, compared with an average of 22 for the eleven sub-regions. Only 0.05 of total employed are in fishing, and the fishermen/alternative ratio index is 0.22, which is below the mean of 2.14 by a factor of ten. These values, however, do not reflect the major flow of biophysical capital (commercial fish produce) to and from Boston. Twenty years ago, Boston Harbor was lined with commercial fishing vessels, sometimes three-deep at the dock, vying to fish the local waters and offload their product. Though the harvesting sector has now moved to other ports, Boston remains a major marketing hub for fishery produce.

When the fleet was larger, offloaded product was immediately bought at Boston's early morning auction and shipped to markets—locally, nationally and worldwide. Before the Portland (Maine) display auction was established, Boston's auction was the price setter for virtually all the dealers in the region. Due in part to its location, recent regulations have all but wiped out the Boston fishing fleet. Restrictions on Days at Sea (DAS) make it much more economical for vessels to leave from ports closer to the fishing grounds, such as Scituate, Chatham or Gloucester, than to steam out of Boston, thereby using up both limited DAS and costly fuel.

Today, only a dozen fishing vessels dock at the main commercial facility and 25 or so lobster boats are scattered around the harbor. This has transformed purchasing, marketing and shipping strategies of local seafood brokers. In the past, brokers could survive with a couple of small trucks to service the regional market and transport product to Logan. But today, brokers must travel to far-flung fishing communities to obtain product. Trucking, therefore, has a much more significant role than in the past. The larger refrigerated trucks have had a secondary effect on the infrastructure of Boston's fishing-related industry. The Fish Pier was built to accommodate hand carts and small trucks, the space needed for loading, unloading and maneuvering of the 18-wheelers is putting pressure on the traditional center of the fishing-related business.

The twenty or more brokers in Boston service hundreds of boats up and down the coast. For example, Atlantic Seafood of Boston obtains fish from forty to fifty boats along the Massachusetts coast with the aid of three large refrigerated produce trucks. Vessels offload fish at the nearest convenient dock, it's trucked to Boston, and from there is absorbed by regional, national and international markets. The proximity of Logan International Airport to the Boston trucking terminals and seafood brokers makes possible the rapid airfreight of such

products as whole monkfish and monkfish livers for the Asian market. It also enables processors and brokers to import fish from around the world to fill their orders for fish the New England harvesters are unable to provide.

Commercial fishing and fisheries-related employment

Harvesting structure

Twenty to twenty-three vessels are members of the Boston Harbor Lobster Cooperative that manages the Cardinal Maderios Wharf and lobster terminal. Development pressures came close to forcing the abandonment of lobster fishing out of the Harbor due to loss of space, that is, the loss of places to tie-up, load and unload, store gear, etc. For many years, the majority of lobstermen had tied up at Pier 7, near the Fish Pier, but a few years ago, they were forced out. Eventually, with help from the Roman Catholic Archdiocese of Boston (Bernard Cardinal Law) and the Commonwealth's Office of Coastal Zone Management, a site beside a derelict power plant with a view of the Black Falcon Cruise terminal was found and a \$3 million renovation of a wharf was undertaken.¹⁰

Today, most of the local lobstermen have diversified, lobstering June to January, then longlining for cod or dogfish, dragging for surf clams in the winter and fishing for sea urchins in September.

Twelve stern draggers fish now out of Boston. The boat-buyout program put many people out of work. While boat owner-operators could benefit from selling off their boats, crewmembers gained no benefit from the program and were forced to seek alternate employment.

*Processing structure*¹¹

Since 1992 when the downturn in groundfish stocks and the associated tightening of regulations reduced the supply of fresh fish for processing, about a third of the firms in Massachusetts have left the processing business. Surviving firms go farther afield to seek product, forming buying relationships with suppliers in smaller ports and attending the display auctions in Gloucester, New Bedford and Portland (Maine). More fish is imported and a wider variety of species are utilized. In other words, their capital contacts extend further than in the past, thus creating a closer network of ties, often with primary producers in smaller and fisheries dependent ports.

Some of the processors exploit niche markets, providing product for trade shows and promotions, for example, or use their contacts to wholesale products without processing.

The relatively new HACCP regulations have required new investments in equipment and training. Prices, however, have not kept pace with the increased costs. Compared to processing firms in other ports, Boston companies do have some advantages. In particular, access to Logan Airport and the New England regional food wholesaling system favors them.

Boston specializes in fresh fish production and wholesale marketing, employing about 1,063 individuals earning about \$40 million in 1997. Some of the employed are first generation seafood processors, immigrants from countries such as Guatemala and Mexico. These individuals are critically dependent on the processing opportunities to make a living, and cannot easily find alternate employment.

¹⁰ Chapter 91, a Massachusetts land-use regulation that mandates water-dependent use on filled tidelands, and the fact that the inner harbor is a Designated Port Area (DPA) helped ensure that the fishermen's use of the waterfront had higher priority than alternative proposals to construct a cement plant or coal conversion plant on the same site.

¹¹ Georgianna, Dan. 2000. *The Massachusetts Marine Economy*. Dartmouth, MA: University of Massachusetts

Support Services

For more than 80 years the historic building at the end of the Boston Fish Pier, now called the Exchange Conference Center, housed the New England Fish Exchange, the oldest daily fish auction on the East Coast. The Boston Fish Pier, which opened in 1915, still provides berthing space for some of the region's fisherman and houses the fish auction at a new location. Although alternative uses have been introduced to the Pier, according to Massachusetts Port Authority's (Massport) web site, "fishing and fish processing remain its primary function."

In revitalizing the Boston Fish Pier and dedicating the Exchange Center to the fishing industry, Massport is "preserving a vital local industry, ensuring the survival of a precious economic resource and protecting an important part of Massachusetts' maritime heritage."¹² Nevertheless, exemplifying the radical changes in Boston's involvement in the fishing industry, the site of the auction that for three-quarters of a century established the daily wholesale price for many species of fish for the whole New England region has been transformed to function as a conference center. True, the center is being managed by a seafood company, but its focus is not on harvesting and wholesale marketing, but rather on attracting meetings and functions that require feeding. Legal SeaFoods' Catering Division has taken over the management and operation of the Exchange Conference Center ("ECC") at the Boston Fish Pier.

The buildings on the pier also house HACCP-approved fish processing facilities on the first floors with adjoining office and storage space for those facilities on the second floors. A dozen fish brokers (wholesalers) line the fish pier. Those who market locally maintain small trucks to get in and out of local traffic and deliver to restaurants. Northern Avenue, that runs perpendicular to the fish pier, may be the area of Boston most densely populated with seafood restaurants. In fact, No Name is the oldest restaurant under the same management in the city (since 1917).

The Fish Pier was not built to accommodate 18-wheeler trucks that are now a requisite in the industry. There is some discussion that Massport is going to build a new fish pier farther down Northern Avenue that will enable easier access for the trucks and will provide state-of-the-art facilities for the processors.

In the late 1980's and early 1990's a decline in the availability of raw material led some of the brokers to turn to frozen-at-sea product and farmed product. Now brokers obtain product from Boston, New England, Alaska, Canada, and other international sources. Product for the most volatile markets tend to be on a consignment basis (brokers charge a 5 to 7% commission). Sales are split about evenly between local (Boston), New England and national markets. A small quantity may be sold to Canada (primarily for salting).

Employment (year-around and seasonal)

Estimates of twelve druggers with 4 to 5 men crews (48 to 60 harvesters), 20 to 30 lobster boats with captain alone or one crew, suggests fewer than 100 fishermen are employed in Boston. Cutting, handling, marketing employ at least 1000 others. Jobs for one well-established broker include sales, receiving, customer service, repacking, cutting (swordfish, tuna and halibut), shipping, inventories, accounting, and truck driving.

Sales/revenue

The average income per fishermen in Boston was \$23,000 in 1997.¹³ Fresh fish production and wholesale marketing employed about 1,063 individuals earning about \$40 million in 1997.

¹² <http://www.massport.com/business/excha.html>

¹³ Georgianna, Dan. 2000. *The Massachusetts Marine Economy*. Dartmouth, MA: University of Massachusetts.

Species, Seasonality

The mix of species has changed over the past ten years as a result of regulations. Formerly, cod and haddock were the principal species landed by the trawlers whereas now most land flounders.

Landed species include cod, flounders. Pollock, haddock, monkfish, lobster, clams, scallops, Ocean catfish, and mussels.

Form of ownership (e.g., owner/operator; corporation)

Owner-operators predominate.

Recreational fishing and employment

There are no conflicts between recreational fishermen and lobster fishermen. The lobster fishermen commented that the stripped bass were "eating up lobsters like crazy. The recreational guys would say that they see a lot of lobsters when they cut open bass." There are so many bass now that they start feeding frenzies. "There used to be a lot of bluefish, but they got scared away."

Recreational marinas are in Winthrop, South Boston, Quincy and Charlestown. Sailing seems to be more prominent than recreational fishing.

Cultural role of fishing*Museums*

One retired fisherman commented that he used to bring in interesting species of fish into the New England Aquarium, but that now, "you kind of feel like you're the enemy."

Ethnicity in the fisheries

Boston Harbor Lobstermen are a primarily a mixture of English, Irish, Scottish, though there are a few Italians and one Greek captain.

Dragger fishermen are primarily Polish or Italian-American. Many are immigrants, newcomers who did not grow up in the industry. Language barriers preclude extensive socializing.

In the processing industry, many of the fish cutters are Hispanic. Workers for the dealers and packers are a "good mix including Vietnamese, Cape Verdean, and/or Hispanic."

Religion

Roman Catholics dominate the harvesting sector.

Kinship & family

Several of the processing/wholesale dealers started as fishermen, went on to develop their processing or brokering businesses and have raised their children in the business.

Fishing related organizations and their roles in the community and fishery*Commercial fishing associations*

Boston Harbor Lobster Cooperative

Processing Associations

National Fisheries Institute

Fishing-related programs and services

NGO's

Conservation Law Foundation's main office is in Boston. CLF filed suit against NMFS and the Council to compel stricter management regulations in an effort to avert a total collapse of groundfish fish stocks. In the past, CLF worked closely with fishermen's organizations to assure passage of the 200-mile limit (EEZ) and to fight oil and gas exploration on Georges Bank.

New England Fishery Development Association promotes and provides information about New England's seafood industry.

Training institutes

A number of the Boston Harbor lobstermen went to the family assistance center in Hyannis for training and help seeking alternative employment.

The success rate of moving finfishermen out of harvesting has varied. On fisherman, previously retired but now fishing again, complained that the program did nothing for him: "They wanted to make me into a carpenter, and I was 59 years old. I'm no good at carpentry and too old to learn. So I came back into fishing - I have nothing else to do."

Coast Guard

District headquarters of U.S. Coast Guard First District is in Boston. The cutter station in Boston is characterized as "small."¹⁴ There is also a Light Station in Boston.

Perceptions of the Fishing Community¹⁵

Importance of fishing to the community

Harvesting has only a minor role in Boston, but fishing-related business is important. Brokering, processing, and transportation services are significant components of the mix that is Boston's economy. Perhaps more importantly, though, these same services make Boston an essential provider to smaller ports. "There will always be a fishing industry in Boston because of the airport." In addition, "nostalgia" for the quaint assures some support by the city for their oldest industry.

Boundaries

Harvesters have little access to metalsmiths, marine electronics, nets or ship's carpenters in Boston, they must go out of town. Few of the dragger fishermen live in Boston, some live as far away as Maine, New Hampshire or Rhode Island, though some live in Everett or Stoneham and a number of the lobstermen live in Quincy.

	Lobster Fishermen	Trawlers
Sell fish	Boston Fish Pier	Boston Fish Pier
Offload fish	Cardinal Mederios Wharf	Boston Fish Pier
Buy fishing gear	Used to be Boston, now Hingham	New Bedford
Buy ice	N/A	Boston
Buy fuel and oil	Fish Pier or from a truck at wharf	Boston, used to have oil boats
Haul out for repairs	Quincy	New Bedford or Gloucester
Bookkeeping	Self	Self
Bank	Quincy (or where live)	Boston
Shopping	Where live	Where live/Internet for supplies

¹⁴ <http://www.uscg.mil/d1/newengland/d1units.html>

¹⁵ Based on key informant interviews

Church	Where live	Where live
School	Where live	Where live
Health care	Wife's job or Fishermen's Partnership	Where live
Childcare	Where live	Where live
Visit relatives	Quincy (or where live)	Where live
Recreation	Used to go to Caribbean, So. America, Hawaii, haven't been in 5 years	
Socialize	Relatives' and friends' homes	No fishermen's club, no camaraderie any more, except on own boat.

Communication Issues

Dragger fishermen categorized communication with local, state and federal officials as "poor." "Fishermen talk, but nobody listens, the government does not pay attention." For example, "for 61 years I never had a problem with a whale, never even heard a whale story about someone else."

Assessments

Dragger fishermen strongly disagree about assessments. It is true that "when the foreign vessels came in, the balance was upset ... How can they say that trawlers are destroying the bottom? I never brought up a plant in the net? For 100 years Stellwagen has been fished day after day, there are still more fish there than anywhere else. The whales too are still there, following the fish. It is true that the whiting have left, but that's normal. They will eventually return."

Local management practices

No local practices have been developed.

Economic Change

Ten years ago, "money was flowing," in the lobstering fishery. The economic condition of the industry was "excellent." There was an abundance of lobsters; Boston was noted as #1. There was a longer season then; perhaps the water was warmer in the inlets and marshes. Since then the fisheries economy has gone "up and down." Today, it is just "down." Specifically, five years ago it was characterized as "fair or average," having started to go down in 1990. Today (1998) it is very poor. "Last year we said, 'it couldn't get any worse.'" Five years from now, it is "tough to say ... At some point it will turn around. The 1970's were a low point, but it turned around. The old-timers think in terms of 7-year cycles, but I don't really think so."

In the early 1990's a storm wiped out the gear of a lot of the lobstermen who then took disaster relief loans. Payback remains hard for some.

Some guys go fishing part-time now. Some lobstermen became firemen; others have taken truck-driving training, "just in case."

For the trawlers, the economic condition of the industry was said to be "good" ten years ago with fish stocks up and many more fishermen in the industry. The down turn began with Amendments # 5 and #7 (to the Multispecies Fishery Management Plan), particularly restrictions on days at sea. Those most vulnerable were the older boats and smaller boats incapable of steaming farther offshore. The regulations made things tough until the monktail market expanded. Now there are more flounders around. Today, fishermen still "making a good year's pay," but it bothers some to see the \$1 million investments (vessels) being tied to the wharf for 3 months at a time. "Idle is no good." Fishing and the economic condition seem to be improving, but some are concerned that permits will be sold to foreigners.

One fisherman suggested that the competition between fishermen and dealers worked against each of the sectors. Instead of dealers simply trying to get product for the lowest price, the two should have worked together to improve quality and brought up the prices for both.

Changes in fishing effort

There is significantly less effort now. More men than in the past fish only part-time and almost all the lobster fishermen have diversified. A number of the lobstermen fish alone now when before they would have had at least a sternman.

The DAS regulations have severely limited the draggers' fishing time and effort. Fishermen now try to pick and chose when they go out to maximize price and safety.

Effects of recent management

"The financial struggle is ridiculous. You're treading water and someone's handing you bricks to see how long you can stay up." However, the competition has eased some. "There was so much (lobster) gear out in the 1980's that it was bad ...There were 'lobster wars' over territory and guys cutting you up" if you veered too far north or south rather than going "straight out of your port."

The Boston Auction exists "somewhat." It used to handle a million pounds a day, once it even handled 6 million pounds. Today, the average is 50,000 pounds daily. Because the regulations require taking the nets apart when crossing the closed areas, a number of boats that used to land in Boston no longer do so. Instead, trucks are sent to outlying ports to pick up their catch or the vessels land in Gloucester or New Bedford.

Today's 100-pound daily catch limit on codfish has had devastating effects on the inshore fishery fleet of Boston. Fishermen complain of throwing overboard as much as 4,500 pounds of cod after one haul. This is seen as a terrible waste, and fishermen argue that the sheer volume of cod being caught is justification to raise the limit to a level that would allow them to make a living. This would be 400-550 lb. a day for a small to medium size vessel.

Regulations affect brokers and processors, as well as their clients (the general public, seafood restaurant operators). Policies that limit access to product also limit the flexibility of brokers and producers. This in turn affects the number of employees, the kinds of trucks used, and their ability to respond to external markets. Well-established firms seek readily available product, sometimes turning to farmed and frozen-at-sea product to fill their orders. In some cases, their orders increasingly come from chains, supermarkets and larger corporations.

Characteristics of local fishermen

Most of the lobstermen have a high school degree.

A good fisherman "has to be a hard worker, can't be an angry person, has to learn to live with other people when they're cold, wet, hot, long, short..." Many of the immigrant fishermen were illiterate, but extremely inventive and knowledgeable about their vessels, their gear and their prey. A Boston fisherman, for example, invented the tire "cookies" used on roller gear. The fishermen had their own "clique" or group that would share information about where to catch targeted species and how to rig their nets.

Safety

The electronics and survival gear make fishing safer, but the regulations or economic conditions that force fishermen to go out alone make lobstering more dangerous than in the past.

Both electronics and the stern trawler design (rather than side-trawler) have made fishing

safer for draggers. Boats are improved and crewmembers don't handle the gear by hand nearly as much. With hydraulic wenchers and wire guides, everything "comes to you ... all done by one switch controlled by the captain. The crew can stand in the wheel house out of harm's way." Only unhooking the doors is manual.

Job satisfaction

Draggerman: "Fishermen have never been satisfied. They're always looking for a better or different kind of life. Most were prepared to do anything else. I was family-oriented and thought I could help out on my father's boats. I didn't think I could find another job were I could make more money." A couple of the fishing families evolved into marketers of fish.

Fishing families

Fishing remains a family enterprise among many of the lobstermen of Boston Harbor. Boats tend to be owned by several brothers or cousins, though sternmen are often unrelated. Some of the wives stay directly involved through such tasks as stuffing the bait bags.

"Italian fishermen (trawlers) don't encourage their children to go fishing. Their kids are into everything else." (Examples offered: doctor, university administrator, environmentalist, etc.)

Traditionally, the draggers were family boats with family crewmembers (father, uncles, brothers, and cousins).

One Boston Fish Broker's Story

"Tony" began fishing with his father out of Boston when he was only five years old. Since he had to go to school, he could only fish on weekends and holidays. His fascination with the industry continued through high school with his cousins, uncles, and father involved in fishing. His father decided that it would be a good idea to have "Somebody on the other side of the business." So Tony went into the business of being a fish broker. When he started working fourteen years ago at age eighteen, week days were the workdays, and you could be home on the weekends and holidays. But as the competition for fish increased, so did costs. Regulations and the buyout program decimated the Boston fleet, so producer customers were sought all up and down the coast. As time passed, holidays and weekends have disappeared in the competition for produce. Tony's days start at five A.M., as he must be up to compete with the local fish auction, which is prepared to buy anything and everything. Tony keeps the loyalty of his producers and matches the fish auction strategy by buying up everything they catch, even if at times he knows he cannot make much of a profit with the species or quality of the fish landed. Tony regularly buys from producers with boats ranging from forty to ninety feet in length. He also employs twelve full-time workers, some of whom are first-generation immigrants from Guatemala and Mexico. With some stocks down and quotas in place for others, Tony is forced to buy smaller amounts from each individual producer than in the past, so his trucks must cover a lot of ground to make up the difference. From the time he started until today, Tony has earned about the same, but now he works a lot harder—12 to 14 hours a day at times, seven days a week. He does this to respond to the logistics of widely dispersed producers catching a smaller volume who are forced to adjust to seasonal closures, DAS restrictions, and other regulatory complications. What, he says, hurts fishermen the most is the emotional impact of throwing overboard many thousands of pounds of codfish that cannot be landed. Tony markets lobsters regionally, and sells finfish nationally and monkfish livers and whole monkfish to Japan and Korea.

Commercial Lobster Company (Fish Pier, South Boston)

The Zanti family have owned and operated Commercial Lobster for three generations. In the late 1940s, after bringing his sons into the fishing trade, Giuseppe opened the waterfront business so that the family could bring their catch directly to market themselves. By the 1950s, the family boats could not keep up with the demand. The Zanti's began to purchase lobsters from other fishermen, and sons Joe and Frank gave up fishing to manage the wholesale business full-time. Commercial Lobster prospered until 1980, when waterfront development forced the firm to relocate to the Marine Industrial Park on Northern Avenue. Having lost its highly profitable retail base, the firm struggled. It took a dozen years and the renewed energy of the third generation of Zanti's to turn the business around. They expanded the product base to a range of shellfish and shellfish meats, and aggressively expanded their wholesale market area. Today, Commercial Lobster has become a major player in the New England fish industry. The family plans "for a long and prosperous future to pass on to a fourth generation."

Boston Area Sub-region
Counties: Plymouth, Massachusetts

5.5.1.2. Plymouth County

Background

Created in 1685, Plymouth County extends from Boston Harbor south to the Cape Cod Canal and west to the outskirts of New Bedford. The region has many small towns that have rich histories, clean beaches, charming harbors, exquisite marshlands and beautiful lakes and rivers. Many visitors use Plymouth County as a touring "headquarters" for a series of day trips to popular sites in the area, Boston and Cape Cod.

The Pilgrims landed in Plymouth in 1620, establishing the first permanent settlement in New England. Because of its role in American history, Plymouth County is a popular destination for international visitors. Plimoth Plantation is a fascinating re-creation of the Pilgrims' 1627 settlement; related historic attractions include Mayflower II, docked in Plymouth Harbor and the Wampanoag Indian Homesite.

Other Plymouth sites of interest include the nation's oldest public museum, a wax museum, two wineries, six historic houses and a reconstructed 1636-grist mill. Historic sites in other towns include the Hull Lifesaving Museum and Scituate Lighthouse. Contemporary art facilities include the Fuller Museum of Art in Brockton, The Art Complex Museum in Duxbury and the South Shore Art Center in Cohasset. Many visitors stop by the Cranberry World Visitors' Center to learn about the region's strong cranberry heritage.

Whale watch cruises are available spring, summer and fall. Plymouth County has a wealth of natural resources including seven state parks, five major salt-water beaches and thousands of acres of scenic parks and marshlands. Deep-sea fishing excursions are available from a number of harbors.

The County seat is Plymouth. Other cities, towns and communities include: Abington, Bridgewater, Brockton, Carver, Duxbury, East Bridgewater, Halifax, Hanover, Hanson, Hingham, Hull, Kingston, Lakeville, Marion, Marshfield, Mattapoisett, Middleborough, Norwell, Onset, Pembroke, Plymouth, Plympton, Rochester, Rockland, Scituate, Wareham, West Bridgewater, Whitman.

Hingham is under significant pressure from development, but gentrification takes the form of a large marina that dominates the dock space. Lobster is the primary fishing activity, and there are only a few remnants of fishing infrastructure. To access the commercial dock, which is lined with storage cubbies filled with lobster gear, fishermen must pass directly through a large recreational boat storage facility packed with expensive recreational sail and power craft. At the water's edge, the dock is festooned with lobster fishing paraphernalia and individual storage facilities (lobster "pounds"), sitting adjacent to a narrow dock with berths filled with lobster boats.

There is a marine railway, used mostly to berth recreational vessels, and the local fishing supply store specializes in lobster fishing. Diesel fuel is available dockside, and multiple trucking operations ship lobsters nationwide. A commercial marine supply house and a boat welder support the local fishing association dominated by lobster fishermen.

The local president of the Boston Harbor Lobstermen's Association claims that dependence on lobster fishing has put many people out of business. In the last two years, he estimates that between Hull and Boston, Massachusetts, 60 lobster boats and their crew have left the industry or the area because of low catches and soaring expenses. Nearby Hewitt's Cove

costs \$8000 to dock per year, plus costs for the rental slip, onshore storage (freezers and trap stacks), plus the cost of electricity.

There are no air fill stations in Hingham, but Weymouth has a station. Other fishing networked towns include Chelsea and Abington, which maintain bait houses for the lobster industry. Several women from Abington used to run a bait shop locally, but were forced to sell out due to the rising value of local waterfront/dock space. The local marina caters to the recreational sector, and the local bar is located in the Marina Bay Club. There is one boat builder in Abington. There is a boat dealer in Quincy, but most fishermen go to Maine to buy new or used lobstering craft.

Although the Hingham waterfront is dominated by the marina and recreational boat yards, there are no boat excursions or whale watching tours. There is a harbormaster in Hingham.

The declining cultural fishing capital and infrastructure in several of the coastal communities in the Boston sub-region is typical of the region. This process forces fishing families to rely on cross-community capital networks to compensate for the loss of local fishing infrastructure. It has become clear that the fishing dependency concept as described by Magnuson-Stevens must be adjusted. Cross-community total capital flows and networks are critical to the sustainability of commercial fishing activity. These communities also reveal how thin the existing infrastructure is, and how vulnerable are the fishing families that rely on this infrastructure. The closure of an icehouse or loss of bait houses in a community can have dramatic effects on the sustainability of commercial fishing if there are no nearby replacements for such fishing capital.

*Demography*¹⁶

Population

The county's population according to the 1990 U.S. Census was 435,276 with 212,733 male and 222,543 female.

Age Structure

Children (to 21 years) numbered 133,684; adults (21-64) numbered 251,314; and seniors (65 and older) numbered 50,278 in 1989.

Education

For those 25 years and over, 44,897 had no high school diploma; 94,553 had a high school diploma; 75,893 had some college; and 61,614 had a Bachelor's degree or higher.

Housing

There were 168,555 housing units of which 149,519 were occupied and 19,036 were vacant. Of the occupied housing, 109,133 units were owner-occupied and 40,386 were rented. The median year housing structures were built was 1961. The median value of owner-occupied housing was \$156,000.

Racial and Ethnic Composition

The majority of people were white (407,191), many with Irish, English, Italian, German and French ancestry noted. In addition, there were 16,048 Blacks; 898 American Indian and 8 Aleut; 3,282 Asian and 7,849 "other race."

Economic Context

Income

The median household income reported by the 1990 Census was \$40,905, and the per capita income was \$16,523.

¹⁶ <http://venus.census.gov/cdrom/lookup/>

Employment

INDUSTRY

Universe: Employed persons 16 years and over	
Agriculture, forestry, and fisheries (000-039).	3069
Mining (040-059)....	347
Construction (060-099)	14667
Manufacturing, nondurable goods (100-229).	12190
Manufacturing, durable goods (230-399).	18032
Transportation (400-439)..	9525
Communications and other public utilities (440-499).	7002
Wholesale trade (500-579)....	10537
Retail trade (580-699).	43194
Finance, insurance, and real estate (700-720).	18599
Business and repair services (721-760).	9076
Personal services (761-799).	4963
Entertainment and recreation services (800-811).	2509
Professional and related services (812-899):	
Health services (812-840).	21554
Educational services (842-860).	16176
Other professional and related services (841, 861-899).	14035
Public administration (900-939).	9789

OCCUPATION

Universe: Employed persons 16 years and over	
Managerial and professional specialty occupations (000-202):	
Executive, administrative, and managerial occupations (000-042).	29112
Professional specialty occupations (043-202).	30349
Technical, sales, and administrative support occupations (203-402):	
Technicians and related support occupations (203-242).	8279
Sales occupations (243-302).	28422
Administrative support occupations, including clerical (303-402).	37217
Service occupations (403-472):	
Private household occupations (403-412).	465
Protective service occupations (413-432).	4958
Service occupations, except protective and household (433-472).	22915
Farming, forestry, and fishing occupations (473-502)	2606
Precision production, craft, and repair occupations (503-702).	25206
Operators, fabricators, and laborers (703-902):	
Machine operators, assemblers, and inspectors (703-802).	10250
Transportation and material moving occupations (803-863).	7878
Handlers, equipment cleaners, helpers, and laborers (864-902)	7607

CLASS OF WORKER

Universe: Employed persons 16 years and over	
Private for profit wage and salary workers	156305
Private not-for-profit wage and salary workers.	14521
Local government workers.	17661
State government workers	7336
Federal government workers.	5203
Self-employed workers	13578
Unpaid family workers	660

Boston Area Sub-region
Plymouth County

5.5.2.1. Plymouth

Background

Long before the Pilgrims landed in New England and settled in Plymouth, the area was home to the Wampanoag, called "people of the dawn" because they lived in the east.¹⁷ The Wampanoag farmed, fished, hunted and gathered. In the spring, whole villages moved to the seashore to fish and plant crops—corn, squash and beans. Since their homes were often made of woven mats stretched over wood frames, they would carry the mats with them leaving the wooden structures behind for their return. In the fall and winter they moved inland to the forests of oak, maple and pine where they hunted deer, wolf, bear, beaver, moose, wild turkey, raccoon, otter, and wildcat. From the streams, rivers, lakes and ocean they took fresh and saltwater fish; in winter they ice fished.

Pilgrims arrived on the *Mayflower* in 1620 and Plymouth was incorporated as a town the same year. William Bradford, who helped establish Plymouth Colony, was its governor for more than 30 years.¹⁸ His *History of Plymouth Plantation, 1620-1647*, first printed in full in 1856, is a minor classic, reflecting the unusual qualities of the man and the values of the small group of English separatists who became known as Pilgrims. Bradford was born in March 1590 in Austerfield, Yorkshire, the son of a yeoman farmer. He was self-taught. As a young man, he joined Puritan groups that met illegally in nearby Scrooby and was a member of that congregation when it separated from the Church of England in 1606. Bradford was among the 125 Scrooby separatists who sought (1608) religious sanctuary in Holland. When the congregation decided (1617) to seek refuge in America, Bradford took major responsibility for arranging the details of the emigration.

The term Pilgrim is derived from his description of himself and his co-religionists as they left Holland (July 22, 1620) for Southampton, where they joined another group of English separatists on the *Mayflower*. When John Carver, Plymouth Colony's first governor, died suddenly in April 1621, Bradford was unanimously elected to replace him. He was re-elected 30 times. In 1640, Bradford and the group of original settlers known as the "old comers" turned over to the colony the proprietary rights to its lands, which had been granted (1630) to him by the Warwick Patent and then shared by him with the old comers. During the period of his governorship, and especially during the first few years, Bradford provided the strong, steady leadership that kept the tiny community alive. He strove to sustain the religious ideals of the founders and to keep the colony's settlements compact and separate from the larger neighboring colonies. Bradford died on May 9 or 19, 1657.

Plymouth is a coastal community in southeastern Massachusetts, approximately 5 miles north of the Cape Cod Canal.¹⁹ It is the seat of Plymouth County, and has the largest area of any town in the Commonwealth. For most of its existence, Plymouth was an isolated seacoast area where economic fortunes were linked to the sea and shipping. The site of the original 1620 settlement is now a portion of today's Downtown/Harbor District.

Today, Plymouth's character is reflected in monuments and buildings celebrating a vibrant past preserved by a conservation ethic. The wide curving shore of Plymouth is fronted by a sea wall behind which is a tabloid of hotels, restaurants, novelty shops, and tourist businesses, situated in a well-preserved front of historic buildings. While Plymouth attracts thousands of tourists at the height of the summer season, the town maintains a diverse fishery sustained in part by the protection of docking space for the local fleet.

¹⁷ http://pilgrims.net/native_americans/index.htm

¹⁸ <http://pilgrims.net/plymouth/history/#alden>

¹⁹ <http://www.state.ma.us/dhcd/iprofile/239.htm#NARRATIVE>

The South Shore's accessibility to the Boston metropolitan area has greatly influenced the growth rates of its communities. Desirability in terms of land prices, tax rates and residential amenities further influenced community growth and Plymouth's population mushroomed from 18,606 in 1970 to 45,608 in 1990, an increase of 145% in just 20 years. Also of significance during the period was the development of a healthy industrial and commercial base. The Town of Plymouth is committed to controlling its residential growth while welcoming industrial and commercial expansion.

Fishing Dependency

There are two piers at Plymouth. The Mayflower and an excursion boat use the state-owned pier in season, no commercial fishing vessels are allowed to dock there. The 1000-foot long town pier, where commercial vessels tie-up, was built in the late 1800s and is, so far, protected from development. The dock integrates the local fishing culture directly into the cultural flavor of the port. Dockside restaurants are positioned to give patrons a water view of the commercial fishing activities, and summertime tourists stroll the docks to take photos of the fishing fleet unloading their catch. One of the first questions visitors ask is, "what time do the boats come in?" The well-maintained dock space makes Plymouth an attractive berthing spot for local and regional fishermen. Local community support insures this space will be preserved for commercial use, even though it still amounts to only about 15% of the total dockage space, with the other 85% representing recreational marina berths.

Plymouth ranks 17th (18th overall out of 36 ports) for fishing infrastructure differentiation in the New England NRR. Fishing infrastructure is concentrated at the main commercial dock just south of the famous Plymouth Rock memorial. The commercial space is surrounded by boutiques, restaurants, and gift shops adorned with fishing, whaling, sea life, and related motifs. A restaurant is perched at an angle overlooking the commercial dock, which juts out into the water in a line of well-maintained berthing spaces. Locals look on fishing as integral part of the historic setting, but the weakness of the industry is reflected in the lack of interest or opportunity for local youth to enter the occupation and an overall decline in the place and space dedicated to the cultural capital of fishing.

Governance

Board of Selectmen, Town Manager, Representative Town Meeting

*Demography*²⁰

Population

The town's population in 1989 was 45,608 with 22,393 male and 23,215 female.

Age Structure

According to the 1990 U.S. Census, 14,302 were children (under 21 years); 25,796 were adults (21-64 years) and 5,510 were seniors (over 65).

Education

Of persons over 25, 4,571 had no high school diploma; 9755 had graduated from high school; 8156 had some college; and 6461 had a Bachelor's or higher degree.

Housing

There were 19,658 housing units, of which 15,875 were occupied and 3,783 were vacant. Of the occupied housing units, 11,667 were occupied by their owners and 4,208 units were rented. The median year structures were built was 1971 and the median value of owner-occupied housing was \$146,200.

²⁰ U.S. Census 1990

Racial and Ethnic Composition

According to the 1990 U.S. Census, 44,132 were white. There were also 760 Blacks, 90 American Indians, 262 Asian and 364 "other race." Irish, Italian and English ancestry was noted by almost 25% of the population, German, Portuguese and French were also noted frequently.

*Economic Context*Income

Median household income in 1989 was \$39,886 and the per capita income was \$15,882.

Employment

INDUSTRY

Universe: Employed persons 16 years and over

Agriculture, forestry, and fisheries (000-039).	364
Mining (040-059)..	16
Construction (060-099)..	1781
Manufacturing, nondurable goods (100-229)..	1180
Manufacturing, durable goods (230-399).	1304
Transportation (400-439).	1002
Communications and other public utilities (440-499).	900
Wholesale trade (500-579).	911
Retail trade (580-699)...	4411
Finance, insurance, and real estate (700-720)..	1962
Business and repair services (721-760).	911
Personal services (761-799)...	648
Entertainment and recreation services (800-811)..	301
Professional and related services (812-899):	
Health services (812-840)..	2259
Educational services (842-860).	1490
Other professional and related services (841, 861-899)...	1388
Public administration (900-939)..	1093

OCCUPATION

Universe: Employed persons 16 years and over

Managerial and professional specialty occupations (000-202):	
Executive, administrative, and managerial occupations (000-042)	2783
Professional specialty occupations (043-202)	3081
Technical, sales, and administrative support occupations (203-402):	
Technicians and related support occupations (203-242).	821
Sales occupations (243-302)..	3326
Administrative support occupations, including clerical (303-402).	3692
Service occupations (403-472):	
Private household occupations (403-412).	45
Protective service occupations (413-432)...	577
Service occupations, except protective and household (433-472).	2485
Farming, forestry, and fishing occupations (473-502)..	327
Precision production, craft, and repair occupations (503-702)..	2497
Operators, fabricators, and laborers (703-902):	
Machine operators, assemblers, and inspectors (703-802)..	771
Transportation and material moving occupations (803-863)..	877
Handlers, equipment cleaners, helpers, and laborers (864-902)	639

CLASS OF WORKER

Universe: Employed persons 16 years and over	
Private for profit wage and salary workers...	15873
Private not-for-profit wage and salary workers.	1473
Local government workers..	1899
State government workers.	641
Federal government workers.	458
Self-employed workers...	1534
Unpaid family workers.	43

Transportation and Access

Plymouth is in southeastern Massachusetts, bordered by Bourne on the south, Wareham on the southwest, Carver on the west, Kingston on the north, and the Atlantic Ocean on the east. Plymouth lies in the heart of the Old Colony Region between Boston and Cape Cod. The major highways are the Southeast Expressway (State Route 3) and Interstate 495, which give access to the airport, port and intermodal facilities of the Greater Boston Region. U.S. Route 44 runs E-W between Plymouth and Providence, Rhode Island.

Commuter rail service exists between South Station, Boston and Kingston with limited passenger service from Plymouth. The Bay Colony Railroad provides freight rail service to North Plymouth. Plymouth is a member of the Greater Attleboro-Taunton Regional Authority (GATRA), which provides Dial-A-Ride service to the elderly and disabled. The Plymouth and Brockton Street Railway Company provides commuter bus service to Braintree and Boston, with limited service to Rockland, Kingston, Sagamore Circle, Barnstable, and Hyannis. The Plymouth Municipal Airport, a General Aviation (GA) facility has 2 asphalt runways and non-precision instrument approaches are available.

Hospitals, libraries, museums

- Jordan Hospital
- Plymouth Public Library
- Plymouth Antiquarian Society
- 1749 Court House Museum—Built in 1749, this is the oldest wooden courthouse in the country.
- Forefathers Monument—Monument to the pilgrims made out of solid granite. It's the largest of its kind in the United States.
- Harlow Old Fort House—This Pilgrim home was built in 1677.
- Hedge House—Built in 1809, this was the home of a merchant and shipowner. 19th century home furniture is on display.
- Jabez Howland House—This colonial was built in 1667 and features historic furnishings and household items.
- Jenney Grist Mill—A replica of the mill used by the Pilgrims. The original was built in 1636.
- Mayflower II—A reproduction of the original Mayflower, the ship in which the Pilgrims journeyed to America. Visitors will get a sample of what life was like during their voyage in 1620.
- Mayflower Society Museum—This house, built in 1754, features exhibits of 18th century furniture and household items, as well as a formal garden.
- Pilgrim Hall Museum—This museum is set in a Greek Revival building, and features artwork and historic furniture.
- Plimoth Plantation—Journey back in time, as actors recreate life in 1627 Plymouth. The outdoor museum is a replica of the original settlement.
- Plymouth Rock—The real thing. Plymouth Rock commemorates the site where the Pilgrims first came ashore in 1620.
- Richard Sparrow House—Exhibits focus on crafts and 17th century pottery. Built in 1640, this is the oldest house in Plymouth.
- Spooner House—Built in 1749, the Spooner family occupied this house for over 2 centuries.

Fisheries Profile

Commercial fishing and fisheries-related employment

Harvesting structure

Fishery dependence centers on the lobster fleet with its 50 operating vessels. There are also four stern draggers and four gillnetters concentrating on dogfish, but this effort represents a significant decline from about 30 boats that were dogfishing less than five years ago. Lobster boats range from 19 to 42 feet in length, and draggers 45 to 55 feet in length.

Support Services

Fishing infrastructure is adequate to maintain the local fleet, and includes air fill stations and back yard bait houses. A couple of trucks also make bait available, one coming in daily from Boston or Sandwich. The docking facilities include draggers at the town dock and lobster boats on moorings. Originally the town dock was reserved for boats over 40 feet in length, now there are a few offshore lobster boats that over-winter. The majority of the lobster fleet heads up to nearby Brant Rock in winter because the harbor does not freeze.

There are five boat yards dedicated to the recreational fleet, but there are no commercial boat builders in town. One key respondent indicated that his father, grandfather and great grandfather used to build boats locally. Boat repair is carried out by a local welding service with two professional boat welders. There are two marine railways/haul-out facilities but no local commercial boat dealers. Local lobster fishermen can search for boats in the Massachusetts Lobstermen's Association journal or through other trade papers for used craft. One fishermen's association represents the industry in town meetings, and fishing supplies are available through two dealers. Two diesel fuel stations plus a diesel truck keep the fleet fueled.

Evidence of fishing heritage shows in two local fishing monuments, but there are no fish processors, fish auctions, fish brokers, or icehouses. Nearby Hull has a bookkeeper specializing in the fishing industry.

The local catch can be sold to three fish and lobster retailers. However, few sell directly to them unless they bring in a catch that is too small to bother shipping out, or it includes at least 40 lbs. of scallops for the local restaurant trade. Local draggers used to sell the whole lot but now that the amount they catch is relatively small, they truck it themselves in order to make an extra \$.25/lb profit. There are two trucking operations from Boston that will also pick up product. Two wholesale companies purchase seafood from Plymouth's fleet. Reliable Fish Company buys both fish and lobster, The Lobster Pound buys lobster only. Both also supply bait to the fishermen who regularly sell to them.

Five fish and tackle dealers support recreational fishing, with the target species being striped bass. Two hotels /inns front the water, and a total of approximately 450 recreational craft fill the local marina. Twelve seafood restaurants also grace the town, and visitors can take advantage of the ten local boating tours and six whale watching tour operations.

Although, it closed for reasons unassociated with fishing, fishermen miss the 1620 Restaurant where fishermen used to gather. There are no places now near the pier where you "can walk in with your boots on," no longer is there a place that provides a "working man's setting." The prices of drinks are higher, "that's Dukakis' fault, he outlawed 'happy hours'!" In addition, because of the fishing ground closures, boats from outside Plymouth rarely come in anymore. It used to be that the inshore fishing grounds would open on November 1st and the Cape Cod Bay fleet would assemble. An unfortunate side effect is that fishermen have little opportunity to meet and relax with fishermen from other communities or fishermen who use other gear, etc. in a social setting. Conflicts that may have been worked out in the past over a beer cannot be easily resolved. There are in general, fewer opportunities for social interaction among the fishermen and their families.

Employment (year-around and seasonal)

Key respondents estimated that there are 200 households directly dependent on the fishery and another 50 to 100 indirectly dependent, with 75% of fishermen living in the immediate town area.

Besides fishing, tourism employs many local residents, as does a nearby industrial park.

Species, Seasonality

Lobster makes up the primary catch in Plymouth today, with finfish species remaining important, though many fewer boats purse finfish than did so in the past. Local species fished include cod, flounders, dabs, winter flounder, yellowtail, gray sole, tuna, striped bass, dogfish, skate, monkfish, bluefish, scallops, and seaweeds (rockweed and Irish moss). The market for lobster has remained steady and the market for crab has improved.

Key respondents noted that the mix of species caught in lobster traps has changed over the years. These days one is more apt to see "southern" species such as scup and butterfish, and there seem to be more monkfish. "Maybe it's the temperature (global warming) or maybe it's the lack of cod."

The annual round is to fish virtually all year, weather and DAS permitting, perhaps taking one month off. It used to be that most fishermen would do some cod fishing, gillnetting, even jigging, when not lobstering, but restrictions have meant that most fishermen rely solely on lobsters now.

One fisherman harvested mussels, but that has not been commercially done since 1994. There is no commercial shellfishing in Plymouth. The fishermen commented that it is a lot easier to enforce closed areas than to monitor compliance with regulations in open areas. Evidently, there has not been a request to the state to test the shellfish areas, so they remain closed.

Recreational fishing and employment

Recreational fishing and boat excursions (ten local boating tours and six whale watching tour operations) are popular tourist attractions. The boat ramp has a constant stream of recreational boats using it in the summer.

Cultural role of fishing*Kinship & family*

The majority of fishermen in Plymouth were born to fishing families, or at least families involved in some aspect of the industry. Fewer children seem to be going into the business now, however. Parents are encouraging their children to finish high school, pursue some higher education, than decide.

"Fishing is not as fun as it used to be – is changed a lot. My father, grandfather and great grandfather used to build boats out of here, but no one does that anymore. Where there used to be lots of local bars and places where people went after fishing there is only one left now, and I don't see any local generation coming up from behind to keep it going."

One respondent did point out that further education would also help with collaborative research. Fishermen would find it easier to understand the scientists and the research results if they had more formal education.

Sharing

There are small groups of friends who will regularly share information, perhaps 8 or 9 groups in Plymouth. If there are hazards, however, such as a submerged log, "we'll throw it on the radio. We do look out for each other, even those we don't particularly like or get along with."

This sense of community sharing and helping may be diminishing with the younger generation. One respondent pointed out that it could be that with the safer gear, etc., “they haven’t gotten themselves into a hard fix yet.” Another said that he can’t see any younger guys bringing him fish once he’s retired, as he has done for some of the old fishermen. It’s not that there is such a lack of fish, it seems to have more to do with a change in society, and “you don’t give anything away.”

Perceptions of the Fishing Community²¹

Importance of fishing to the community

The local harbor master responded that fishing was “very important” to Plymouth, but several key fishermen respondents said it is “not important”, claiming that it was more significant in Provincetown “*where it’s a pride thing and people come out for a blessing of the fleet.*”²² Other fishermen respondents pointed out that fishing is “very important” to Plymouth because of its role in attracting tourists. One said, “the bycatch of commercial fishing is tourism!”

Boundaries

Capital contacts can be divided up into those encompassing social capital (e.g., visit friends, go for recreation, go for vacation, visit relatives, socialize, go to church); economic (e.g., sell fish, offload fish, buy fishing gear, haul out for boat repairs, go to the bank, go shopping), and human (e.g., go to school, go for childcare, go for health care, go for retraining).

Sell Fish	Plymouth-2 buyers at the Town dock
Offload Fish	Town dock
Buy Fishing Gear	Plymouth, Maine, Rhode Island, Cape Cod
Buy Ice	Trucked into Plymouth
Buy Fuel/ Oil	Plymouth
Haul out Boat Repairs	Plymouth
Bookkeeping	Plymouth
Banking	Plymouth (95%)
Shopping	Plymouth
Go to Church	Plymouth
Got to School	Plymouth
Go for Health Care	Plymouth
Go for Childcare	Plymouth
Visit Relatives	Close by
Go for Vacation	Atlantic City, Florida, hunting/skiing
Go for Recreation	Local bar
Socialize	Local bar

Communication Issues

Communication with local and state officials is noted to be “*Very good; they are accessible. They do not do a lot but they are here.*” Communication with federal officials is rated as “good” or “very good,” but infrequent, since most local fishing areas are in state waters:

²¹ Based on key informant interviews

²² Perhaps this a case of the “grass being greener on the other side.” The Provincetown fleet is in poor physical shape, and the fishing community there claims they get little support from the town to maintain the industry.

"I don't know if I ever saw a fed here. I called the Feds the other day to ask if I needed to renew my permit. "No you don't have to do it. Why? Is it good through today? It might be good through tomorrow." At least they have a sense of humor."

One respondent commented that any lack of communication with local and state managers or representatives have to be blamed on the fishermen. *"Most guys, especially the younger ones, won't go to meetings."*

Assessments

Key respondents indicate that fishermen and scientists "strongly disagree" with fisheries data:

"In the last 5 years, we have seen more egggers than we have in a long time. Scientists play with numbers too much; it's one or two. You can make numbers look like anything you want. There is a scientist, "Bob", who actually comes down and get his hands dirty, maybe I like him because he says what I want to hear. The others just crunch numbers. They look at catch reports. I got into a disagreement with Andy Rosenberg of NMFS. Draggers catch lobster but NMFS says that it is only .01%. It is the difference between being reported and not being reported (suggesting draggers used to not report any lobsters caught). I think lobstermen are pretty honest. The new program (the special pots where lobsters are tallied once per month) makes sense. I told the state for years that I would take them out lobstering."

Grant money for cooperative research is one key to improving the assessments. Now the scientists have to talk to fishermen if they want to obtain research funds, one respondent noted.

Local management practices

The enduring presence of lobstering in Plymouth has resulted in some local folk traditions aimed at conserving stocks and reducing fishing conflict. For example, both fishermen and lobstermen use the middle of the bay off Plymouth during whiting season, and they have a gentleman's agreement to not fish in each other's area during peak harvest season. But this agreement was derailed when the state went to a licensing system and was then slow in getting whiting permits out. When permits were finally issued, they overlapped with the peak lobster season and the informal folk management system broke down. Before this interference, lobster fishermen reported:

"We accommodated each other, the whiting boats just sat inshore and waited for the permits instead of going out (and making things hectic for us)."

Economic Change

Ten years ago, stocks were up but prices down, and one respondent noted, *"There is more money now than ten years ago because prices are higher. There is a smaller season (May to November) but people are still making a living. It was kind of a different fishery 20 years ago, nobody really lobstered all year round, they switched fisheries."*

Five years ago, the condition of stocks was in-between ten years ago and now, but today the stocks and economic conditions related to their harvest are consider "good," *"as long as we can keep fishing."*

"Canada shuts down its fishery and pays for the people to stay home. If I was offered a buyout, I would take it, a temporary buyout (say for five years). Yeah, if they pay me \$35-50,000 and move me to a non- fishing occupation, I won't street clean though. I don't want a free handout. At 40 years old, what can I do besides fish?"

"The other day, the Feds sent me a 165 manual on the new lobster management plan. I have not read 165 pages in many years. I read the book, read it in 20 minutes. I read what I

found interesting. (About the language): If you dazzle the brains, dazzle it with bullshit (i.e., the language was too technical)."

Today life is considered by key respondents to be better than five years ago because of the higher prices they get for their product. Life is "worse" than five years ago because there is less satisfaction in the act of fishing due to the multiplicity of rules and "government indecision."

Five years from now, respondents suggested that fishing would still be "good." People are more conscientious now than in the past. They are more aware of conservation practices; little things like not throwing plastic overboard are adhered to.

Effects of recent management

Recent fishery regulations having the most impact are groundfish closures, which has forced some fishermen into the lobster fishery.

The impact of regulations are wearing on those in the local fishery and the reaction is expressed by this key respondent:

"I enjoy fishing but capriciousness of regulations are making some tired of lobstering. I don't mind the fishing part, I don't mind not catching anything, I don't mind the price, and I don't mind losing gear. It is just that you don't know what is right or wrong anymore. You don't know what tomorrow will bring. Do I go out and buy hooks for dogfish? They might close the fishery next year. Lobster is the same way. They are going to close lobster down, I don't care what anybody says. Those that say it won't happen to us; draggers are at 88 days. Nobody would have believed that. Scallops at 34. They say it won't happen, bullshit. [Others say] It cannot happen to me. Good, we will get rid of that fishery, well guess what? When they get done with them, we are next."

There is some concern about the marine mammal protection regulations for lobstering. Sinking ground lines have to be used and a 500 pound breakaway buoy. There are several means to comply, (6 or 7 devices have been approved), but each requires retrofitting, some added expense and some anxiety about the potential impacts on the management of gear (i.e., if it increases the risk of recreational boats cutting off buoys and thus trawls being lost).

Characteristics of local fishermen

Love of the sea, natural ability, instinct, perseverance, the acceptance of the good with the bad and a sense of humor are some of the characteristics of "good" fishermen. Fishermen are very good at what they do; they know everything about adapting, hands-on learning, survival in rough weather.

"When people get shut down, they are in trouble. Dragger crews don't have any social skills. They are not going to work in a factory. They have been with the same group of guys since they were fourteen. They know their job really well. They, if you tell them that they have to be punctual, forget it. If my sterny is a little late, I yell at him but he is not fired. It is not the end of the world; tomorrow I may be late. You gotta take this into consideration."

Job satisfaction

Most are satisfied with their work, and most fishermen were born here. *"Satisfied, yeah, you don't get laid off; you don't have to put up with a boss. There are good sides too. Most of us are uneducated so there is not much else we can do. I threaten to leave but I would end up in Seattle and fish anyway."*

Fishing families

Many more spouses are also working outside the home than five years ago to pay the bills, and some respondents believe that the quality of family life has therefore diminished. But,

most agree that most spouses work for “benefits,” and that this choice probably has more to do with today’s society than anything to do with fishing.

A consequence of the decline in the number of fishing families is the breakdown and reorganization of social capital. Ten years ago fishing families could socialize within a network comprised mostly of other fishing families. Now, they report, they are socializing much more with groups outside the industry.

Boston Area Sub-region
Plymouth County

5.5.2.2. Scituate

Background

Incorporated as a town in 1636, Scituate is a small to mid-sized seacoast community located equidistant between Boston and Plymouth. In the 375 years since its incorporation, it has evolved from a summer colony to a residential community but has managed to retain some of the flavor of its past. Ocean-related recreational activities make it a very desirable place in which to live and to raise families.

Scituate's town pier accommodates a working fishing fleet and that, coupled with three business areas, represents commercial interests in the town. Scituate also has a strong sense of its history and commemorates its founding in August each year via the celebration of "Heritage Days". Historic points of interest include: Scituate Lighthouse, The Old Oaken Bucket Homestead and Well, The Lawson Tower, Stockbridge Mill and the Cudworth House as well as the Little Red School House which is the home of the Scituate Historical Society.

Residents pride themselves on the strength of their school system and on the achievements of the great percentage of students (85%) who go on to higher education from Scituate Public Schools. The Town of Scituate is a "delightful mix of rural, suburban and seaside lifestyles within a 25-mile ride to the City of Boston."²³

Governance

Board of Selectmen, Town Administrator, Open Town Meeting

Demography

Population

According to the 1990 U.S. Census, Scituate (CDP) had a population of 5,180, with 2,428 males and 2752 females.

Age Structure

There were 1351 children or 26 percent of the population (under 21) in 1989, 2977 adults (21-64) or 57 percent and 852 seniors (65 or older) or 16 percent of the population.

Education

Of persons 25 or older, 253 had no high school diploma, 927 had graduated from high school, 1200 had some college and 1215 had a Bachelor's or higher degree.

Housing

There were 2088 housing units counted in 1989, 1923 were occupied and 165 vacant. Of those occupied, 1425 were owner-occupied and 498 were rented. The median value of owner occupied housing was \$200,200 and the median year housing structures were built was 1955.

Racial and Ethnic Composition

Less than three percent of the population was non-white in 1989. There were 5016 whites, 22 Blacks, 23 Asians and 119 "other" according to the Census. Ancestry cited was most often Irish, English, German and/or Italian. Most spoke English at home, those who didn't (in rank order) usually spoke Spanish, Portuguese or French.

²³ <http://www.state.ma.us/dhcd/iprofile/264.htm>

*Economic Context*Income

The median household income in 1989 was \$50,250 and the per capita income was \$19,297.

Employment

INDUSTRY

Universe: Employed persons 16 years and over

Agriculture, forestry, and fisheries (000-039)	85
Mining (040-059)..	4
Construction (060-099)	147
Manufacturing, nondurable goods (100-229).	95
Manufacturing, durable goods (230-399).	200
Transportation (400-439)..	43
Communications and other public utilities (440-499)..	81
Wholesale trade (500-579)....	102
Retail trade (580-699)....	331
Finance, insurance, and real estate (700-720)..	260
Business and repair services (721-760)...	97
Personal services (761-799)..	52
Entertainment and recreation services (800-811)..	23
Professional and related services (812-899):	
Health services (812-840)...	220
Educational services (842-860)...	252
Other professional and related services (841, 861-899).	384
Public administration (900-939)..	136

OCCUPATION

Universe: Employed persons 16 years and over

Managerial and professional specialty occupations (000-202):	
Executive, administrative, and managerial occupations (000-042).	540
Professional specialty occupations (043-202)..	510
Technical, sales, and administrative support occupations (203-402):	
Technicians and related support occupations (203-242)..	92
Sales occupations (243-302)...	380
Administrative support occupations, including clerical (303-402).	367
Service occupations (403-472):	
Private household occupations (403-412)..	21
Protective service occupations (413-432).	80
Service occupations, except protective and household (433-472).	152
Farming, forestry, and fishing occupations (473-502)..	63
Precision production, craft, and repair occupations (503-702).	178
Operators, fabricators, and laborers (703-902):	
Machine operators, assemblers, and inspectors (703-802)..	57
Transportation and material moving occupations (803-863).	13
Handlers, equipment cleaners, helpers, and laborers (864-902).	59

CLASS OF WORKER

Universe: Employed persons 16 years and over

Private for profit wage and salary workers.	1655
Private not-for-profit wage and salary workers..	247
Local government workers..	222
State government workers...	98
Federal government workers.	24
Self-employed workers..	255
Unpaid family workers..	11

Transportation and Access

Eastern Massachusetts is bordered by the Atlantic Ocean on the east and north, Marshfield on the south, Norwell on the southwest, Hingham on the west, and Cohasset on the northwest. Scituate is 18 miles northeast of Brockton, 23 miles southeast of Boston, and 227 miles from New York City. Principal highways are State Route 3A and State Route 123, which connects with the Southeast Expressway (State Route 3) in the nearby town of Hanover.

Museums

Scituate Historical Society
Laidlaw Historical Center

Fisheries Profile

Community

Scituate sits on the edge of a harbor, once filled with commercial fishing vessels, but now being transformed into a gentrified community with a struggling fishing presence.

Commercial fishing and fisheries-related employment

Harvesting structure

Four mid-sized stern trawlers, 2 full-time and 2 part-time, hail from Scituate. Two of these are wooden boats, one steel and 1 fiberglass. The largest of these is 62 feet, one is 55 feet and the other two are in the 50-foot range. There are 5 active full-time gillnetters and one part-time. About 50 lobster boats are also based in Scituate. Before the groundfish regulations were implemented there were 15 to 18 draggers and many of the vessels that now go lobstering were hook boats. Recently two big, offshore draggers were bought by one individual. Although they tie-up at the pier, to the chagrin of some of the fishermen who consider these boats too large for Scituate, they fish offshore and are not considered truly a part of the Scituate fleet.

Marshfield has 75 to 100 including 15 charterboats. All are small boats, less than 45 feet long, as the channel into Green Harbor is very narrow. The boats are primarily tuna, lobster, or combination boats (lobstering, scalloping, dragging depending on the season. Dogfish was a staple for awhile, but recent regulations have ruined that fishery.

Processing structure

There is no processing in Scituate, though one market sometimes cuts groundfish for the local restaurant trade.

Support Services

Scituate dock sits on the landward side of two protected coves, and has little remaining fishing infrastructure. There is no fish processor, ice house, bait house, fish auction, boat builder, net maker, or seafood broker in Scituate. The pier is state-owned with space for 15 boats (\$1000 annual tie-up fee). One section of the moorings is for commercial boats at \$3/foot annually. Commercial docking facilities account for less than 5% of all docking space.

Nevertheless, Diesel fuel is available on the pier and via trucks. There are no bait houses left for hook fishermen but there is competition now among suppliers of bait for the lobster fishery.²⁴ There is a boat welder, a couple of people who do minor boat repairs, fish retailers, and five fishing associations (two for lobster fishing, and the other three for

²⁴ Channel Fish used to send one truck, now a variety of trucks show up each morning and try to sell their bait.

finfishing) to which fishermen from Scituate belong. Though there is no marine railway in Scituate, there is a public ramp adjacent to property which boat owners are permitted to use to work on their boats.

Scituate ranks 28th on the fishing infrastructure scale, while nearby Hingham ranks 25th. For Scituate, fishermen's supplies are available in the small neighboring town of Marshfield or in Hingham, and there are two local trucking operations that take fish to Boston. The local icehouse closed just two years ago, and the presence of two fishing monuments speaks to a fishing past greater than the present.

Employment

Key respondents estimated 300 fishermen live in the area. However, there are fewer crewmembers than there were before since some of the fishermen fish alone or with one crewmember whereas two or three was the norm prior to the regulatory changes. At least another 100 households are indirectly dependent on the commercial fishing industry.

Species, Seasonality

Groundfish: cod, a little flounder now (used to have huge quantities of blackback and yellowtail in the spring), pollock, grey sole and hake (used to have a lot, now handfuls due to the closures). Monkfish gained momentum in the 1980s (summer).

No small mesh species or pelagics are landed.

Crustaceans: lobster and crab (when the market demands)

HMS: swordfish is no longer landed; though there used to be 3 sword boats out of Scituate. Just a few tuna are landed here and trucked to Marshfield. In contrast, Marshfield is a center for tuna landings. They have the entire infrastructure, including trucks prepared to transport the tuna to Logan airport.

Two niche fisheries were tried for awhile, that is, slime eels (hagfish) and live sea ravens. Neither is currently active. The dogfish fishery was also active for a time.

Before regulations changed the fishing patterns, flounders were typically caught February through April, and then January became a good month as well. Yellowtail flounders provided the most revenue. Flounder is generally sold in New Bedford where there is enough competition to insure a decent price. After markets for dogfish developed, they were caught June through November.

Revenue

In the SIA for Amendment 7, the landings in Scituate were said to be valued at approximately \$260,000. Key respondents said that that the landings of one boat alone could easily be valued at \$260,000. Clearly, economic research needs to be done.

Form of ownership (e.g., owner/operator; corporation)

Most are owner-operated.

Recreational fishing and employment

There are two or three charter boats and seasonal party boat operations. One of the charter boats goes clamming when there are no charters. There are several marinas including a town marina in Scituate. South River, Brant Rock and Marshfield also have marinas.

Cultural role of fishing

History and museums

There is a small museum with maritime artifacts in Scituate.

Ethnicity in the fisheries

The majority is classified as “Yankee” fishermen.

Kinship & family

While there are a few second-generation fishermen, Scituate is not like Gloucester or Chatham where fishing has been the occupation chosen by multiple generations.

Where fishermen go for beer

T.K. O’Malley’s

Fishing related organizations and their roles in the community and fishery

Commercial fishing associations

South Shore Lobster Fishermen’s Association
 Massachusetts Lobstermen’s Association
 Mass Bay Inshore Commercial Groundfishermen Association
 Massachusetts Commercial Fishermen
 Marshfield Commercial Fishermen’s Association

Perceptions of the Fishing Community²⁵

Importance of fishing to the community

A Selectman in neighboring Marshfield (Green Harbor) pointed out that fishing is the leading industry in Marshfield. Scituate, however, does not clearly recognize the importance of fishing to their community.

Boundaries

Capital contacts can be divided up into those encompassing social capital (e.g., visit friends, go for recreation, go for vacation, visit relatives, socialize, go to church); economic (e.g., sell fish, offload fish, buy fishing gear, haul out for boat repairs, go to the bank, go shopping), and human (e.g., go to school, go for childcare, go for health care, go for retraining).

Sell Fish	New Bedford (monkfish, flats); Gloucester (groundfish)
Offload Fish	Scituate
Buy Fishing Gear	New Bedford; Gloucester (nets hung); Marshfield for some supplies
Buy Ice	Trucked in; some buyers supply
Buy Fuel/ Oil	Pier; trucks
Haul out Boat Repairs	New Bedford; local boat ramp; Plymouth; So. River; Gloucester (Rose Marine)
Bookkeeping	Scituate (self/spouses)
Banking	Scituate
Shopping	Scituate
Go to Church	Scituate
Got to School	Scituate
Go for Health Care	Weymouth

²⁵ Based on key informant interviews

Go for Childcare	Scituate
Visit Relatives	Scituate
Visit Friends	Scituate
Go for Vacation	Fishing or hunting; lobstermen may go to south, e.g., Belize
Go for Recreation	Anywhere
Socialize	Brant Rock, Scituate, Marshfield for bars Scituate has several coffeehouses open early

Communication Issues

Asked how good communication was with local, state and federal fishery managers/representatives, one key respondent commented, "Oh, we can talk, whether they're doing something [in response to comments] is different."

Assessments

Fishermen and scientists strongly disagree on assessments. One respondent noted that the proof of there being a discrepancy occurred when the NOAA vessel *Delaware* fished with their small mesh alongside a commercial gillnetter using 8 inch mesh (100 nets). The Delaware did not catch anything to speak of but the commercial boat landed 2000 pounds.

"Market cod is now being caught in lobster pots and recreational fishermen are catching cod cast-fishing from the shore. One fisherman can catch his 400 pounds of cod with one tub of gear (hooks). You can walk on the dogfish."

Local management practices

Gulf of Maine Fishermen's Alliance agreed to reduce the number of nets (gillnetters), hooks, and restrict dragnets to 12-inch roller gear in a specific area to reduce impacts on the bottom. The Trawler Survival Fund, however, has sued to be allowed to use larger gear. "They could annihilate the area in a week." The small boats of Scituate and others agree that 1000 lbs/day and 7 inch mesh would save fish (eliminating discard while allowing boatowners to survive).

Economic Change

Ten years ago, the economic condition of the fishing industry was rated as "excellent." "We were making a lot of money on dogfish, everyone had the freedom to fish and some of us chose to take the pressure off groundfish." Five years ago, the economic condition remained excellent. Today, due to the 6 month closures (blocks 124 and 125); the economic condition for the small boats out of Scituate is poor. A lot of the boats are gone; the industry has been devastated by the regulations and politics. Five years from now, anyone marginally involved will be gone; anyone who doesn't already own a boat will be gone, out of business. Even those with their own boats will have to pay attention.

Changes in fishing effort

A lot of boats have gone out of business. Some have switched from finfishing to lobstering. Some would like to switch to skate, but the regulations are going to be too stringent. "They're going to regulate jellyfish next." Commenting on gear, one respondent noted that gillnetters are careful with their gear, they "can't afford to lose nets and they don't want to leave them out too long because the quality of fish is ruined and so is the price."

Some fishermen in small boats are trying to get more involved in research and/or experimental fisheries.

Effects of recent management

The closures have had the most impact on Scituate fishermen. They were supposed to last 3 years, it is now the beginning of the fourth year (2001). The closure of Blocks 124 and 125 put Scituate boats at a disadvantage. A steam “around the corner” takes four and a half-hours. If a storm comes up, there’s no place to run. Chatham is too treacherous for anyone unfamiliar with the constantly shifting sandbar.

The effect is much more serious than simply economics. It is far-reaching—affects fishermen’s mental health. Family members argue more, fishermen argue with fishermen. Of course, a lot of people went out of business, as well.

The dogfish regulations do not make sense to some of the Scituate fishermen. You can’t maximize every species, so it would seem to be appropriate to fish down the predator fish to allow the comeback of cod and pollock, for example. Dogfish eat anything; they’ll even eat each other. They affect baitfish and recreational fish as well. Sheer numbers of dogfish force other fish to flee. One respondent noted that he could anticipate the arrival of the dogfish in June when their nets had a “great blast of pollock.” The gillnets would be solid with dogfish right afterwards.

The tendency for regulations to have a harsher impact on the small boat fishery is also counter to common sense. “Small boat fishing reduces the pressure on the stocks since they are weather dependent and they are inefficient but they provide fresh fish for the local markets.” There’s room for the large draggers offshore. But “money is power.”

Characteristics of local fishermen

Most of the Scituate fishermen are locally born and bred. A good fisherman “loves working on the water, having the freedom of the last frontier. It’s in your blood.” Small groups of fishermen commonly share information.

Job satisfaction

Fishermen love to fish, they do not want the government supporting them with welfare payments, they just want to go on fishing and being productive.

Fishing families

Some of the fishermen in Scituate are from fishing families, but not all. Spouses often took care of local errands, made lunches, phone calls, a few worked on the boats. Many spouses now work outside the home both because of “the times” and because many of the fishing families need the income and/or benefits. “Fishermen used to make adequate money to support their family.”

Not too many young people are looking at fishing. It’s tough to get decent help. Only those “going nowhere” are apt to try to find a site.