

Sub-region Profiles
 Counties: Knox, Hancock and Waldo

5.10. Upper Midcoast Maine

Fishing Dependency in Upper Midcoast Maine

Even a passing glance at the geography of Maine offers an obvious rationale for state's historical reliance on the sea. The rocky promontories and long peninsulas extending into the bays, the convolutions of the coast, and the diversity of marine life direct the human population seaward. While roads and transportation have radically improved in the last century, access between human settlements often remains faster and easier by boat than by road. This is particularly true for fishing communities that are found on the ends of the peninsulas. What might be a half-hour boat ride across a bay can be a two-hour drive up and down peninsulas. Consequently, while what we are referring to as Upper Midcoast Maine includes Knox, Waldo and Hancock Counties and the communities in these counties share many characteristics, they are not necessarily in close proximity or frequent contact.

There is a high degree of fishing dependency in this sub-region that is acknowledged by many of the residents. The picturesque aspects of the fishing industry are also cited in web sites and in tourist-related literature. There has been some effort to diversify the economy, however, so that opportunities for employment outside the industry do exist.

Nevertheless, the first set of indices (looking at employment) indicates that Upper Midcoast Maine is ranked second only to Downeast Maine in degree of fisheries dependency.

Table 5a. Comparative Fishing Dependence Indices for Two Sub-NRRs

Sub-NRR	A. % Related Occupations	B. % Of Total Employed	C. Alternative Occupation Ratio Summary
Downeast ME	45	3.6	255.54
Upper Mid-Coast ME	36	2.0	171.05

The second set of indices that measures degree of fisheries infrastructure differentiation ranks Stonington/Deer Isle (Hancock County) and Rockland (Knox County) 7th and 8th respectively, showing significant differentiation.

The third set of indices that measures gentrification shows that this sub-region has examples of both high and relatively low gentrification. Rockland (Knox County), for example, is ranked 5th among 36 ports (along with Newport, RI and Vineyard Haven, MA) for gentrification. On the other hand, Stonington/Deer Isle (Hancock County) is ranked 28th out of 36 (see Table 4h).

The profiles of Rockland and Stonington/Deer Isle support the indices indication that this region remains active in fisheries, but has also made some accommodation to other industries. The people of the Stonington side of Stonington/Deer Isle are particularly loyal to fishing as a "way of life." When groundfishing became increasingly difficult, particularly for the gillnetters who were severely restricted due to increased marine mammal protection, many switched their gear and target species to urchining and/or lobsters. Wives have traditionally played an active role, sometimes as shore captains and often as part of the "value-added" sector of the industry. Lobstermen would bring in whatever crabs showed up in their traps and their wives (or mothers, sisters or daughters) would pick out the crabmeat for additional income.

Stonington fishermen have developed various niche fisheries to make up for the downturn in groundfishing. Besides urchins, clams, sea moss, snails, hag fishing, oysters and sea cucumbers are sought. All respondents agreed that fishing is “very important” to Stonington and Deer Isle. It is a matter of local pride that fishermen developed conservation-management practices long before it became a state or federal matter. They still take the initiative in trying to improve management and support local fishermen.

In Knox County, on the other side of Penobscot Bay from Stonington, Rockland is redefining its role in Maine’s fishing industry. Though it has lost its status as one of the region’s significant groundfishing ports, Rockland too has turned to other species to maintain its standing in the fishing industry. Now, lobsters and herring both figure prominently in this community. In both cases, the landing, marketing, and shipment of the species seem to constitute a larger portion of the fishing-related activities for Rockland residents than do harvesting or processing. Particularly noteworthy is the network of economic contacts generated by the sale of herring for lobster bait to the islands and other coastal communities in Maine.

Diversification of the economy has also been the rule. Both tourism and service-based industries have increased in Rockland. Like Boston, Rockland may have sufficient economic activity to survive without the fishing industry, but considering the role it has in landing, marketing and shipping of bait in support of the lobster industry, one could argue that Rockland is an **essential provider** for the fishing industry in Maine.

Upper Mid-Coast Maine
County Statistics

5.10.1. Hancock County

Hancock County, 1,522 square miles, was incorporated in 1789. The city of Ellsworth is the county seat. Hancock County has the longest coastline of any Maine county. Commercial fishing and tourism are the county's most important industries. Hancock County is home to Acadia National Park (the state's and New England's only national park) and Cadillac Mountain (the highest point on the Coast). Jackson Laboratory, noted for cancer research, is located in Bar Harbor. Two marine-related colleges are located in Hancock County— Maine Maritime Academy at Castine and the College of the Atlantic at Bar Harbor. Hancock County was named for John Hancock, the first governor of Massachusetts.

The 1990 Census counted 46,948, though the 1998 population estimate is 49,932.¹ The gender division was 22,996 males, 23,952 females in 1989. Ninety-nine percent of the population was white (46,446), 121 American Indians, 249 Asians, 79 Blacks and 52 "other."

Sixty-six percent of the population of Hancock County are Mainers by birth, 3 percent were born outside the US.

Of the 31,475 persons over 25 years old, 83% (26,214) had a high school degree or higher. Twenty-one percent had a Bachelor's degree or higher.

Of employed persons 16 years and over, 1108 indicated involvement in the "agriculture, forestry and fisheries" industry, though 1206 indicated "farming, forestry and fishing occupations." As noted earlier in this report, the U.S. Census data is not dependable for determining the numbers of individuals involved in the fishing industry. Only firms with 10 or more employees must report their numbers, as well as firms paying workmen's compensation insurance. Because the majority of fishermen in Maine are considered self-employed, the statistics underreport fishing employment.

Median household income in 1989 was \$25,247. Social security income was received by 5560 households (30%) and retirement income was received by 3312 households (18%).

There were 30,396 housing units, 13,876 owner-occupied and 4,466 renter occupied. The median year structures were built was 1964 and their median value was \$86,200.

Towns include: Amherst, Aurora, Bar Harbor, Blue Hill, Brooklin, Brooksville, Bucksport, Castine, Cranberry Isles, Dedham, Deer Isle, Eastbrook, Franklin, Frenchboro, Gouldsboro, Great Pond, Hancock, Lamoine, Mariaville, Mount Desert, Orland, Osborn, Otis, Penobscot, Sedgwick, Sorrento, Southwest Harbor, Stonington, Sullivan, Surry, Swans Island, Tremont (Bass Harbor), Trenton, Verona, Waltham, and Winter Harbor.

Of these towns, Cranberry Isles, Deer Isle, Frenchboro, Gouldsboro, Southwest Harbor, Stonington, Swans Island and Tremont (Bass Harbor) were identified by a key respondent as fisheries dependent. Bar Harbor, Brooklin, Brooksville, Hancock, Lamoine, Mount Desert, Penobscot, Sedgwick, Sorrento and Sullivan were also noted as having either significant fishing activity or a significant number of people who fish. Winter Harbor's fishing activities were once dwarfed by the economic activity associated with a naval base, but now that the naval base has closed, fishing activity will most likely be the dominant economic activity in the community.

¹ <http://www.supt.sad37.k12.me.us/Maine/Counties/Hancock.htm>

Community Profiles
Hancock County
Upper Mid-Coast Maine

5.10.1.1. Stonington/Deer Isle

Background

Viewed from the widow's walk of a hotel overlooking the waterfront, Stonington appears idyllic. Lightly colored houses climb the rocky, hilly coast next to the gently rolling main street that runs parallel to the shoreline. In the calm water of the harbor, lobster boats bob gently at their moorings and a few small rocky islands are visible through the slight mist of early morning. Later on a sunny summer day, the waters froth in the wake of racing lobster boats and the fish pier is lively with families laughing at the antics of dory-rowing and survival suit race contestants. Crab-picking demonstrations, displays that include a beautiful quilt made by the fishermen's wives, and a late afternoon barbecue attest to the enduring fishing community.

Schooners from the Penobscot Bay windjammer fleet stop in Stonington Harbor and yachts and sailboats visit, but the commercial fleet dominates the harbor. Three excursion companies do offer cruises around the islands surrounding Deer Isle as well as trips to Vinalhaven, North Haven and Isle au Haut. A few seasonal gift shops, art galleries, restaurants and a bookstore cater to the visitors from away. Some of the residents fear the "influx of 'come-from-aways'" that are causing shifts in the businesses and land-use in the town.

Stonington is home to *Commercial Fisheries News*, an excellent monthly trade journal for the industry. Also at home here is the former Commissioner of the Maine Department of Marine Resources.

The Stonington-Deer Isle Chamber of Commerce's web site describes the island as a whole as "Downeast Maine at its best: an island, reachable by automobile over a high narrow suspension bridge, a cluster of quiet communities where fishing is the mainstay of the economy. The spruce-crowned pink granite ledges, quiet woods and open fields, vistas of islands and sparkling water lure visitors from nearby and far away."²

The description continues, "For more than a century, artists have come to Deer Isle." "Internationally known Haystack Mountain School of Crafts has brought many craftspeople..." "Writers, photographers and musicians add to the creative mix and often share their talents at public events."³ "Art and craft galleries display work produced by some of the most accomplished artists in the country." "Antique, gift and bookshops invite leisurely browsing. The island has a wide variety of lodging accommodations, including B&Bs, motels and campgrounds with full hookups."⁴

While the description from the Chamber of Commerce quoted above describes the seasonal tourist attractions of the area, the reality, according to key respondents, is that what the island has year around is fishing. Stonington/Deer Isle has long been known as the place where "true fishing communities" can be found. Like communities Downeast, Stonington and Deer Isle residents have few alternatives to fishing. They express concern about their children's futures—if there are too few fishing jobs, the children will have to leave to make a living.

² <http://www.acadia.net/deerisle/>

³ <http://www.acadia.net/deerisle/>

⁴ This glowing picture of available accommodations was contradicted by a resident who said that there is a chronic shortage of seasonal housing in the area.

*Demography*⁵

Population

The population of Deer Island/Stonington was recorded by the 1990 Census as 3,081 with 1,504 males and 1,577 females.

Age Structure

The count of total children (3 to 19 years) was 660; 547 were enrolled in school.

Education

Of those 20 years and over, 928 were high school graduates, 468 had some college, 361 had at least a Bachelor Degree and 524 had no diploma.

Housing

There were 2,331 housing units in 1989. At the time of the Census, 1,245 were occupied; 988 by owners, 257 by renters and 1086 units were vacant. The median housing value was \$76,339.

Racial and Ethnic Composition

In 1989, 3,034 persons (99.09 percent of the population) were white. Six Blacks, 1 American Indian, 2 Asians, and 19 Hispanics also lived in the area.

Economic Context

Income

Median household income in 1989 was \$20,824 and per capita income was \$10,619.

Employment

There were 1,416 people in the labor force including 105 unemployed.

Transportation and Access

At the southern end of Deer Isle, Stonington is accessible via Maine's meandering Route 15, a very slow 36 miles south of the intersection of Route 15 with U.S. Route 1.⁶ (Also, accessible via Route 172 and Route 15, about 36 miles to Ellsworth.)

Stonington has a general aviation airport with a runway that was repaved in 1997.

The Isle au Haut mailboat provides service between Stonington, ME and the town landing at Isle au Haut, with summer service to the Acadia National Park campground at Duck Harbor. A seasonal excursion around Penobscot Bay is also offered.

Downeast Transportation operates bus services to Ellsworth from Stonington, Bucksport, Otis, and Winter Harbor.

Tourism services

There are two motels in Stonington, on Main Street. In season, there are a number of B&Bs, art galleries and shops, and six restaurants. What was lost, however, when the tourist-oriented businesses came in, were some year round businesses including a clothing store, a hardware store, and one grocer. A liquor store closed, but that was in accord with state policy. Liquor can now be purchased at the grocery. Furthermore, the new businesses employ only a few locals.

⁵ <http://govinfo.library.orst.edu/cgi-bin/sddb-list?state=me&report=default&d1=Deer+Isle-Stonington+CSD&c1=>

⁶ While 36 miles sounds relatively short for those accustomed to highway driving, it takes at least an hour to travel this distance.

Hospitals, schools, libraries

Island Medical Center is in Stonington. It is now part of Blue Hill Memorial Hospital, a Critical Access Hospital that is 25 miles away. Complicated cases must go to Bangor, 75 miles away. Three doctors and a physician's assistant work on Deer Isle. Fortunately, Blue Hill Memorial Hospital is committed to rural, decentralized health care, but the system is fragile. The majority of the hospital's work is reimbursed by Medicare or Medicaid, but the state's rate for Medicare reimbursement is extremely low and residents are concerned that the hospital may eventually have to close the center.

Stonington and Deer Isle both have small public libraries. Stonington appropriates perhaps \$500/year to the library. Residents often go to Bangor or Blue Hill for books.

Children from Deer Isle and Stonington attend a consolidated high school. The island has gone into debt to build a new elementary and middle school, "but the teachers are not up to date," according to some key respondents. Also, there are more children with emotional and behavioral problems in the schools, attributed in part by some respondents to the increase in pressure on the fishing industry.

Fisheries Profile

Commercial fishing and fisheries-related employment

Harvesting structure

Like the majority of the villages along the Maine coast, Stonington and Deer Isle are now primarily lobster-fishing communities, boasting approximately 285 lobster boats.⁷ About three or four of these boats regularly go shrimping in the winter, more do so if shrimping is good. There are about 25 boats that re-rig for scalloping (dragging) during the December-April season. The town is a major center for urchin fishing—both lobster boats that rig to drag or carry divers and urchin boats and fishermen from out of town who base their operations from the Fish Pier when there is supply and market in a given year. There is one purse seiner and 2 bait carriers that operate out of Stonington. At least 100 clambers also work on flats around the island.

Groundfish gillnetting was an important component of the industry until about five years ago with at least 14 or 15 active vessels. In 1998 there were only 3 gillnetters left to conduct a small gillnet effort April to June. By 2000 only one gillnetter remained and he goes netting only for a few weeks annually.

Before the federal groundfish regulations became so restrictive, there were 5 to 10 groundfish draggers in the 40 to 55 foot category whose captains have since converted to lobstering.⁸ Most of the fishermen who gave up groundfishing in the 1989-94 period did so as a consequence of the downturn in stocks. The effect of the downturn was exacerbated by the regulations that drove fishermen "from away" to fish much harder in the Gulf of Maine than they traditional had.⁹ In addition, fishermen in this area were precluded from fishing on their seasonal grounds by Harbor Porpoise closures. Despite the fact that gillnetters in Stonington initiated research on pingers, there were not allowed to use them.¹⁰ More recently, other effects of regulations such as the "unbearable" requirement to discard bycatch (of cod, for example) has kept those who would prefer to groundfish in alternative fisheries.

⁷ These estimates were offered by key informants and included all vessels that typically fish out of Deer Isle and Stonington. Much more modest numbers of vessels have federal permits. Deer Isle is listed as the address for 18 vessels, Stonington for 34. In fact, all of Hancock County is listed as the address for only 170 vessels. This is a reminder of the bias induced by looking only at federal data files.

⁸ The boats themselves are gone.

⁹ Days-at-sea (DAS) regulations, for example, encouraged vessels to fish closer to their port of landing so as not to use up their days steaming to more distant fishing grounds.

¹⁰ Pingers are devices that use sound to dissuade harbor porpoises from approaching the gillnets.

Ninety-five percent of the approximately 300 fishing vessels are fiberglass, 1 is steel and the rest are wood. The size ranges 35 to 45 feet and age, 6 months to 30 years old. Gillnets, long lines, traps (for lobster and/or crab), trawls, seines and stop seines are all used.

Federal regulation in the last 20 years has resulted in a far less variable annual round of fishing than existed previously. Today "you are locked into whatever you were doing [when the control dates were decided upon]." The result of this is that local fishermen have very few options to fish outside the three-mile limit and must make most of their living in state waters. There are very few federal groundfish permits left in town. Scallopers are limited to 400 pounds from federal water. There are very few federal lobster permits (52 in Stonington and Deer Isle out of almost 300 boats). In some cases, these federal permits are held by fishermen who are now older, and no longer use them. Younger fishermen, as a result, are far more dependent upon lobstering, and have little experience with other fisheries.

The annual round of fishing still does include gillnets (for one person), longlines for halibut, traps for lobster or crab, and some purse and stop seining along with shrimping, urchining and clam digging. Stop seining for herring was once a part of everyone's year, but is considered a "lost fishery" in the area.

Processing structure

In 1998 the only processing left in the area was home-based (cottage industry) crab picking, along with occasional small-scale fish filleting. Recently, a new small-scale operation called Stonington Sea Products has developed a niche market for such specialties as smoked scallops, fresh and pickled halibut, paste and spreads and crab meat.

Fifteen years ago (around 1984) there was a sardine factory that was kept in operation for ten years after its purchase by Connors. Later the plant became a lobster freezing facility, but that operation was short-lived.

Two mussel bottom-lease holders sell their product to Great Eastern Mussel Farms, Inc. Others collect wild mussels and pickle them at home. Some clam dealers shuck out clams and some clambers shuck and peddle their product door-to-door. Stonington's clams are known for their good yield when shucked out.

Support Services

Stonington's Fish Pier was one of four fish piers in the state (including Portland's) that were built when Joe Brennan was governor, financed by a \$11 million state bond issue dedicated to preserving commercial access to the waterfront. The pier is heavily used and self-supporting through parking fees, dock fees and landing fees. That income, however, has diminished along with the groundfish landings.¹¹

Currently, several major dealers provide additional access to the waterfront, but fishing industry participants are concerned that as gentrification increases, the dealers will be enticed to sell. Their property is taxed at the highest potential use value, despite the differences between the potential and the actual use.¹² The industry participants are concerned since the fish pier would not be able to handle all the commercial vessels should the dealers sell or convert their property to non-fisheries related enterprise.

The harbor is filled with moorings. Bait from seven places including both coops and lobster buyers is available. In addition, lots of people obtain their own bait and keep it in their yard in old freezers or in floats in the harbor.

¹¹ Sheehan, E. and R. Moore. "Perspectives from Five Ports." Prepared for the Maine Dept of Marine Resources, May 1998.

¹² For example, waterfront restaurants or hotels ordinarily have much higher profit margins than do fish dealers, but the property tax is based on the property's potential value rather than actual use value.

Diesel fuel is available from all the bait houses, and the pier, plus other places. An icehouse and two marine suppliers are local, though the cut in groundfish landings has led one to diversify and purchase the town's auto parts store as well. One of the suppliers is owned by two fishermen's wives. Some supplies can be obtained from dealers, but they "no longer serve as the company store." Nevertheless, fishermen remain loyal and indebted to their dealers since the dealers provide access to bait and fuel.

There is at least one boat-builder and one boat-finisher on the island and two marine railways/haul out facilities. One of the marine railways is the largest employer and is a well-known company that draws customers from all over New England. They have refurbished or repaired such notable vessels as the Mayflower and various schooners. The local net-maker taught everyone how to make their own nets and has since retired. One net-maker remains in Sunshine (Deer Isle). Several people provide seafood trucking services.

While there are no fish retail establishments, per se, there is a door-to-door seafood peddler. The peddler has a half dozen trucks, fillets some of the fish and sells it roadside. The supermarket sells lobsters.

There is one local air fill station for divers and another about 40 minutes away.

Employment (year-around and seasonal)

Given the estimate of 300 boats with 1 or 2 crewmembers on each, plus numerous shellfishermen, informants estimated that there are about 900-1200 fishermen living on the island, most of whom were born near Stonington/Deer Isle. In addition, at least 20 percent of the other year round residents are substantially dependent on the fishing industry.

Considerable quantities of crab are landed in Stonington and crab picking was a traditional occupation for many fishermen's wives. Recently, HACCP regulations have determined that crab-pickers must have a separate kitchen with stainless steel sink and numerous other restrictions to be permitted. The costs of complying with the regulations are proving to be prohibitive for many individuals in this cottage industry. In 2000 crab from the island has a national reputation due in part to two dealers who provide seafood only to top chefs and have helped the island's crab producers achieve a high standard of quality. The home-based crab picking, however, is being phased out. The town had looked into the feasibility of providing HACCP-approved space for the women to use, but found that space outside individual's homes did not meet their needs. In addition, a fear of the town's potential liability if they provided such space discouraged the undertaking.

A review of the impacts of Amendments 5 and 7 to the Northeast Multispecies Fisheries Management Plan points out that the loss of 14 to 15 gillnet vessels, even if all switched to lobstering, translates to a loss of at least 42 jobs. Gillnet vessels require a 3 to 4 men crew compared to a 1 or 2 men crew for lobstering.¹³

The biggest employer on the island is Billings Diesel with 60 people. Other non-fishing jobs include construction, tourist services (e.g., cleaning, shop attendant, restaurant), employment by the school system, nursing and nursing home administration. The hardware store and post office provide other options. There's tipping (cutting the tips of evergreen's branches) and wreath making. Off island, people can rake blueberries. MBNA in Belfast (Waldo County) has begun to attract some of the young professional people in the area, causing some to move out of Stonington to be closer to work.¹⁴

¹³ Ibid.

¹⁴ MBNA is a credit card company with telemarketing facilities in the Mid-coast area.

*Sales/revenue*¹⁵

The urchin market is an export market. Varying numbers of buyers come to the pier, inspect the product and agree on a price. The price, however, is extremely volatile.¹⁶

Species, Seasons

"Years and years ago, lobstermen would traditionally fish for a good chunk of the year and then take most of the winter and early spring months off to repair their gear. It's back to that cycle rather than rig up for scallops in the winter months." Some lobster year round, others take time in the winter to work on their houses or build boats in addition to repairing gear.

Some used to go scalloping from December to April, drag or tub trawl for groundfish in April, gillnet until August, and lobster until December. May-September 1997 a few vessels landed groundfish in Stonington and Deer Isle (Sunshine).

"Groundfish fishermen have been switching to lobstering, but they can't go out more than 3 miles. It used to be if you had a Maine lobster license and you wanted to go offshore, they would give you a stamp or sticker on your license.¹⁷ You didn't have to deal with the federal government at all. When the change came around, a lot of people couldn't prove their offshore rights, and there was a lot of bitterness over that."

Urchin diving is usually done in the winter when the quality and therefore price is apt to be the highest. Divers typically work around the islands and ledges along inshore areas, moving as deep as 40 feet. Dive gear costs anywhere from \$2500 to \$4500 including 4 or 5 air tanks (\$120 each). Vessels (tenders) cost up to \$100,000.¹⁸

Besides urchins, niche fisheries include sea moss, snails, hag fishing (slime eels), oysters, mussels, clams and sea cucumbers. "In truth, the non-Federal species (clams, urchins and mussels) are keeping the fishing community alive."

Landed species include:

Groundfish: cod, cusk, flounder, haddock, hake, plaice, pollock, witch flounder

Crustaceans: lobster, crab

Shellfish: clams, scallops, mussels

Pelagics: herring, mackerel

Small mesh: shrimp

Other: dogfish (bycatch), monkfish, redfish, skate (bycatch), striped bass, wolffish, worms, seaweeds

HMS: tuna

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

The majority of the vessels are owner-operated.

Recreational fishing and employment

There is little recreational fishing. Most is done from the wharves, targeting mackerel.

¹⁵ This category is a placeholder. The revenue generated by seafood sales is critically important to the context, to the impacts of management and the course of individuals' decision-making. Because this research is a companion piece to research focusing on the economics of fishing, we did not spend a lot of time gathering specific revenue data. This will be needed, however, for social impact assessments.

¹⁶ Molyneaux, Paul. 1999. "Raking in the Urchins" in *National Fisherman*, May, p.28-29.

¹⁷ According to one respondent, a lot of people did not obtain the stamp or sticker.

¹⁸ *Ibid.*

Cultural role of fishing*History and museums*

- At the Stonington Fish Pier is a granite carving dedicated to fishermen lost at sea.
- There is a museum dedicated to the granite industry in Stonington.
- The Island Historical Society's building is in Deer Isle.

Cultural events

The annual Fishermen's Day centers on the Stonington Fish Pier with dory racing, crab-picking demonstrations, a variety of booths offering food and/or information, etc.

Ethnicity in the fisheries

Like the general population, the fishing industry is predominately white, mixed "Yankee" heritage. The mixture includes Scottish, Norwegian and Italian ancestors who originally came to quarry granite in Stonington.

Religion and values

Various Christian denominations—"there are tons of churches!"

One key informant noted that the "come-from-aways" were trying to change the traditional values of the locals.

Kinship & family

Families are still quite devoted to the fishing industry in Stonington/Deer Isle. Young family members often go out with lobster fishermen to fill the bait bags, band the lobsters, etc. until they are old enough to help haul the traps.

Where fishermen go for coffee

Harbor Café, Island Fishing Gear and all the dealers. The dealers became more popular as gathering points when smoking was banned in the restaurants.

Where fishermen go for beer

In Stonington, fishermen go to each other's homes as there are no bars. In Deer Isle, where the sale of liquor is allowed in restaurants, some go to The Clam Digger.

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

Stonington Fisheries Alliance
 Stonington Lobster Cooperative
 Downeast Lobstermen's Association
 Lobster Zone Council (Zone C)
 Deer Isle-Stonington Clam Committee

Fishermen's Wives associations

Island Fishermen's Wives

Fishing-related programs and services*Health and safety*

Health care for members of the fishing industry is particularly precarious. Although some fishermen have been able to obtain health insurance under a "small business" policy, most fishermen have no group affiliation that makes insurance available at a group rate. As Maine

fishermen are most often categorized as “self-employed,” if they do obtain health insurance, they pay the highest rates. Despite being in one of the most dangerous occupations in the country, all too often fishermen forego health insurance due to its high cost.

As wives of fishermen have begun to seek work outside their traditional activities in support of the family fishing business, jobs with corporations that offer health benefits is often a high priority.

Training institutes

Most fishermen learn their trade from their father or other relative. Now, however, lobster licensing requires a two-year apprenticeship. The way the apprenticeship program is designed, those who complete their apprenticeship before they are 18 are favored. This may be unfortunate since some of the industry leaders who have encouraged the development of sustainable fishing practices are those who have gone on to obtain advanced degrees and returned to fishing with greater understanding of both ecology and economics.

Perceptions of the Fishing Community¹⁹

Importance of fishing to the community

Fishing is considered “very important” to Stonington and Deer Isle. Or as one key informant responded on a one to 5 scale (not important to very important), the island should be classified as “6.”

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). Most of the contacts involving all three categories of social, economic and human revolve around Stonington, Ellsworth is mentioned only occasionally.

Economic contacts are primarily in Stonington/Deer Isle, though there is some variation associated with the species landed. Lobsters are generally landed and sold to dealers in Stonington who then ship them out. Urchins are landed in Stonington, but trucked to Portland for sale. When finfish were landed in Stonington, they were often trucked to the Gloucester auction, which was said to provide better service and prices to gillnetters than the Portland auction. Prices for fish caught by gillnetters are lower than those for dragger caught fish in Portland, whereas in Gloucester, they receive high prices. The Gloucester auction used to send a truck to pick up the fish from Stonington. However, now that the Gloucester auction has been sold (2000) and since there are few active gillnetters in Stonington, this may no longer be true.

Fishing gear, ice, boat fuel and oil, and haul out for boat repairs are all commonly obtained in Stonington/Deer Isle, though gear is available statewide, so may be bought in Blue Hill, Ellsworth, Hamilton or Searsport. Family members usually handle the bookkeeping. There is one bank in Stonington, another in Deer Isle and 2 grocers; clothes though are usually purchased in Ellsworth or Bangor. Other shopping may occasionally be done in Bucksport, Portland, Rockland or Augusta.

Church, school, childcare, visiting relatives and friends, and health care are commonly on the island. Retraining is in Ellsworth at East Maine Vocational. There are no bars in Stonington, one in Deer Isle; social drinking is at each other’s homes or at dances at the Deer Isle Recreational Center (formerly the American Legion Hall). If someone goes on vacation, he or she is likely to go somewhere warm such as Florida or on a cruise. There is “not much” in the way of recreation facilities and movies are an hour away in Ellsworth, and hour and a half in Millbridge, or an hour

¹⁹ Based on key informant interviews

and 45 minutes away in Bangor, so people tend to create their own fun. In the summertime, the Stonington Opera House shows films. Ice fishing, boat picnics and four-wheeling are popular pastimes.

Technology is affecting the patterns of contact. With computers and the Internet, as well as cell phones, fishing industry participants are less isolated, even while working.

Communication Issues

Communication with the harbor masters and other local managers or representatives is regarded in general as "good," though, according to key respondents, "many fishermen don't seem to know what is going on and there is a lot of misinformation."

Communication with state fishery managers or representatives was characterized as "poor" to "fair." Some confidence in an individual state representative or two was expressed and in those cases, communication was classified as "good."

Communication with federal managers was most frequently characterized as "poor" or less than "poor." As one informant said, "Very, very poor!" One key informant who had worked as a panel member with federal managers said that the communication depended on the situation, but sometimes was "good."

When fishing, informants said they would share information with family and friends, particularly with those fishing the same gear. If they shared information over the radio, it would be in code. Cell phones are used to talk to dealers, family, and other fishermen.

Assessments

Fishermen in general "strongly disagree" with the assessments. "Assessments are not equivalent to science."

"Fishermen know that you have to go to a different spot this year than last. I understand they need continuity in order for their formulas to work. They don't take other factors into consideration, so the fishermen don't trust the science. There's a place we fish, really deep water on one side, not much there. Right next to it, you catch fish steadily anytime you set a net out...you could be 50 feet from the biggest school of fish you've ever seen in your life, and you don't know it's there."

Others noted that scientists frequently don't agree with each other and that they are usually reluctant to take information from fishermen. Interestingly, the high school now offers a marine science course, which is very popular.

Local management practices

Long before state (and zone) regulations on lobstering were passed, a few locals instituted their own conservation measures. For example, the lath on wooden pots was lifted so that juvenile lobsters could escape. The v notching of females originated with lobster fishermen. The lobster seed fund buys egged-out females from pounds, v-notches them and returns them to the water. These were informal limits or measures taken at the local level, but state mandates were needed for broad implementation, some informants suggested.

More recently, shrimp fishermen have taken the initiative in trying to modify their gear for increased selectivity. Finfish fishermen tend to use 6 and a half-inch mesh to target larger (older) fish. One key respondent claimed that local urchin fishermen have always targeted 2 inch and larger urchins, even before regulations made that a requirement.²⁰ In addition, there has been

²⁰ Another respondent did not think that this was true.

some efforts trying scallop enhancement and clam bed reseeded, as well as trapping cod to sell live (a form of value-adding). “The government comes up with ideas years after fishermen come up with ideas.”

Clam diggers also organized and approached the towns to ask for an ordinance regulating the opening and closure of flats, instituting rules for nonresidents and they hired a warden. Deer Isle leaders initially opposed the effort, but it has since been instituted.

Economic Change

Ten years ago (around 1989) the economic condition of the groundfishing portion of the industry was characterized as “good,” as was lobstering. Five years ago when fishermen were both lobstering and groundfishing, the condition was also characterized as “good.” Today, lobstering is also characterized as “good” to “excellent.” It is hard to plan for the future however since fishermen are “at the mercy of the government.” Some hope that groundfishing will again be allowed and viable. In 1998, many lobstermen believed the economic condition would be worse for them because of the proposed regulations that were going to require an increase in vent size. Some fishermen believed the increase would cost them 10 percent. By 2000 everyone had accepted the change with little if any ill effect on his or her economic condition.

For individuals, most said that their standard of living was neither better nor worse than five years ago, but that it was a struggle to keep it steady, particularly since there are so many unknowns with the fishing industry. “The house we bought was going to be a starter home, it was okay that it wasn’t finished because we were only going to be in it for a little while. We’re probably going to be in it until we’re installing an elevator to get to the second floor.”

Other individuals commented that they were still accumulating assets and creating stability in their lives. One noted that his son makes more money than he does, but does not have as good a life. Several lamented that there is no alternative industry “Downeast,” so there are few options if children are not interested in pursuing fishing.²¹

By 2000 lobster fishing was creating extraordinarily high incomes. Three times the historical average income was not unusual. The problem noted by those who have experienced boom and bust periods of fishing is that the young people in lobstering have been acting as though the return they are currently experiencing will continue indefinitely. Consequently, there is a huge explosion in the debt level among the young. The explanation for this could be that it is an example of the dominant social paradigm (or values of those “from-away”) encroaching on the community. In other words, the sometimes-lamented materialism and lack of savings associated with today’s youth elsewhere may have found its way Downeast. Alternatively, it could be a failure of the replication of cultural capital, i.e., fishermen did not communicate sufficiently about what they have learned through experience.

Changes in fishing effort

Regulations have forced a change in effort, especially reducing the opportunities for fishing in federal water. Fishermen who grew up targeting groundfish are now most commonly lobstermen, shrimpers, urchin fishermen or clam diggers. Most importantly, the limited entry regulations have diminished the flexibility of fishermen both in the yearly cycle and over the course of a fisherman’s lifetime. This has also changed fishermen’s business strategy and with it their ecological stance. Skills seem to be less important than investment in technology. Nevertheless, communities need access to the fisheries for their young families.

Days at sea regulations limit groundfishing effort, urchining is limited to a 120-day season, and lobstering is limited for some to the 3-mile state waters.

²¹ While most of the published literature refers to Stonington/Deer Isle as Midcoast Maine, some of the fishermen referred to the area as “Downeast.”

The mix of fish has changed with less hake now, but pollock and haddock seem to be rebounding in the deep water. There is cod in the shoals, but regulations keep the fishermen from targeting cod.

The most noticeable change is that “nobody’s going [fin] fishing!” One key informant said that he had been on Cashes Ledge for two weeks without seeing a boat. He also commented that regulations have been driving out the owners who don’t fish, but did not explain why that was so.

Some people have moved into lobstering and others are turning to shellfish such as clams, mussels and oysters and to seaweed harvesting. Scalloping however is not an option for most. Only two or three Maine vessels have federal scallop permits and the stocks of scallops in Maine waters are depleted. Outside of 3 miles, those without scallop permits are limited to a catch of 400 pounds.

Shrimping remains an option, but conditions and closures limit their availability. In addition, few fishermen out of Stonington/Deer Isle now have dragging gear.

Changes in the lobster industry center on the increasing numbers of people and volume of gear. Wire traps, the technology on the boats (including Loran and GPS) is much more effective, but has also increased costs dramatically. You used to be able to outfit a boat for \$30,000, now it costs \$160,000 to 200,000. Whereas the catch has doubled, the costs of boat and gear have one up 7 or 8 times.

“My rope bill alone is \$2-3,000 per year and bait is \$13/bushel. Traps cost me about \$15,000. It takes at least 50% of my gross to stay in business.” Nevertheless, “lobster is carrying the community.” “The lynch pins have been pulled out,” but the economic return from the lobster fishery is masking the serious impacts of regulations and depletion in other fisheries.

Effects of recent management

For the several boats that are still targeting groundfish, the effect of management has been to force smaller vessels to fish farther out than they would if they didn’t have to avoid cod. Reportedly, those who fish closer to shore quickly catch their cod quota, so in order to continue fishing they must either discard large quantities, change gear, or seek alternative grounds where the cod are less likely to be aggregated. Now some fishermen take 2- or 3- day trips, going out 75 miles to fish in vessels no larger than 40 feet.

The negative effect that was mentioned most often in 2000 was regulatory discards of groundfish. The rationale for throwing already dead fish overboard escapes most fishermen’s comprehension. This is as true in Maine as it is in the rest of the New England NRR.

In lobster, according to some observers in 1998, restrictions on the numbers of traps caused an increase in the overall numbers of traps deployed. Because some of the fishermen who had been fishing a small number of traps before the institution of limitations were anxious to create a record of fishing the maximum number in case further restrictions on trap numbers ensued, the overall numbers of traps increased. By 2000, key respondents indicated that the overall numbers of traps in Zone C were down. The fishermen are limited to 800 traps.

The marine mammal regulations also concern the lobster fishermen and they fear severe negative impacts. The uncertainty revolves around efforts to decrease entanglements of whales. The protection of the right whale is apparently driving the move to impose gear restrictions or new designs that would more easily release any entangled marine mammal. The fishermen anticipate that the changes will be costly (for purchases of new gear), may result in increased loss of gear (if breakaway buoys marking a trawl are required), and may increase time required to set and retrieve pots.

Characteristics of local fishermen

A good fisherman is a hard worker, loves the sea and is committed to the way of life. He must be intelligent though “not in a book-reading way,” but rather quick-thinking, able to be by turns a mechanic, gear manufacturer, wood and glass worker. A fisherman must “pay attention to the finest of details, learning to read the ocean’s signs to become successful. Experience with fishing different depths, summer fog, running by instruments is important.”

Safety

While the safety equipment improvements are noted, regulations cause some to take risks by fishing farther offshore in small boats than is truly prudent. The increased costs of gear and technology also have caused a need to generate revenue, so fishermen also go out on days when they wouldn’t have had to in the past (e.g., during 30-35 mph winds). Even the high cost of the safety equipment puts pressure on fishermen to go out during unsuitable times. Life rafts cost \$3000 with a \$300 annual inspection, EPIRB (automatic emergency signal) costs \$1000, life jackets; survival suits (including light and battery), VHF with auxiliary backup, flare kits \$100. However, most Stonington fishermen now stay within the 3-mile limit of state waters and therefore are not required to have the full complement of safety equipment required in federal water.

Job satisfaction

Most fishermen are satisfied because they are their own bosses and they are happy to still be fishing. This is incredibly important to the majority of fishing families. While there is the usual spectrum of rags to riches—fishermen barely above welfare levels to aggressive businessmen with luxurious vessels and homes, the typical fishermen loves what he does and the families consider their lifestyle “great.” They look at MBNA and scoff, “that’s the alternative.” Fishing has always offered participants challenges and choice. Now, some raise the question, “is skill or capital going to be rewarded?”

Fishing families

A couple of women fish, urchining and lobstering. Some girls go fishing with their fathers. Spouses also work on gear (knitting heads or helping build nets), fillet and candle fish, take care of the bookkeeping, and/or paint buoys. The ideal non-fishing job for spouses is one with health insurance coverage, though not many of those are available.

Some informants suggested that the insecurity associated with the fishing industry has had the consequence of increasing the numbers of women seeking employment outside the home and fishing industry.

Most of the key informants said that they learned fishing from their father or fathers-in law. Some commented that they would like to see their children go into something else, but that they probably would end up in the fishing industry.

Upper Mid-Coast Maine
County Statistics

5.10.2. Waldo County²²

Waldo County, incorporated in 1827, was once considered Maine's agricultural county, particularly known for poultry farming in the 1950s and 60s.²³ Four state parks — Fort Knox State Park in Prospect, Moose Point State Park in Searsport, Lake St. George State Park in Liberty, and Warren Island State Park near the island of Islesboro — are all located in Waldo County. This county also has a rich maritime history reflected in exhibits at the Penobscot Marine Museum in Searsport. "During Searsport's early history, its major industry was shipbuilding and cargo handling. The seaport town was famous for its sea captains in the mid-1800's and was once home to ten percent of all American deep-water shipmasters. Today, fuel, lumber, paper, and chemicals still move through the port."²⁴ Waldo County was named for General Samuel Waldo, the "prime commercial agent" for pine masts.

MBNA, the credit card lender, opened the operational headquarters for its Northern Region in Belfast, Maine in 1996. With other offices in Brunswick, Camden, Orono, Portland, Presque Isle, Fort Kent, Farmington, and Rockland, Maine, as well as Dover, New Hampshire, it employs about 3,700 people. The company's presence has had major impacts in Maine, providing alternative job opportunities for young professionals and contributing scholarships, internships, and grants to a host of community programs as well as encouraging their employees to volunteer for literacy programs, etc. Some respondents noted that there are negative impacts as well. The international company has exceedingly "deep pockets" and is able to out-compete small local companies for competent employees, (as long as they don't have a strong Maine accent). Furthermore, the company attracts outsiders with different values and some say, has caused real estate prices to escalate.

Belfast, Maine in Waldo County is the home office for "ContiSea LLC that has two wholly owned subsidiaries in Maine: Atlantic Salmon of Maine LLC, which produces about 7,000 tons of farmed salmon per year, and Ducktrap River Fish Farm LLC, which produces value-added seafood products."²⁵

Waldo County's 724 square miles had a population of 33,018 in 1990, estimated to have grown to 36,465 by 1998. Ninety-nine percent of the population (32,812) is white, of predominantly English, Irish, Scotch ancestry. In addition, there are 74 American Indians, 57 Asians, 35 Black and 40 "other."

Seventy percent of the county's population (22,996) consists of Mainers and only 744 individuals were born outside the U.S.

The elementary and high schools had 6122 students in 1990. Of persons 25 and older, 77% have high school or higher degree (21,295), 17% (3,586) have a Bachelor's Degree or higher.

The median household income in 1989 was \$23,148; per capita income was \$11,047. There were 8,932 households with wage or salary income, 3,678 received social security and 1,737 received retirement income.

²² <http://www.supt.sad37.k12.me.us/Maine/Counties/Waldo.htm>

²³ Aroostook County rivals Waldo as Maine's agricultural county. "Aroostook County is called the *Potato Empire of the World*, since it boasts the largest potato production in the world. It's also a major growing area for grains and commercial vegetables, such as broccoli and processing peas. In addition, it has the highest concentration of beef production in Maine." See <http://www.umext.maine.edu/counties/arostook.htm>

²⁴ <http://www.acadia.net/searsport/sphis.html>

²⁵ <http://www.maineaquaculture.org/new/merger.htm>

Of the 16,181 housing units in the county, 10,028 were owner-occupied, 2,387 were renter occupied. The median value of owner-occupied housing was \$72,000 and the median year the housing units were built was 1964.

The county seat is in the only city, Belfast. Towns include: Belmont, Brooks, Burnham, Frankfort, Freedom, Islesboro, Jackson, Knox, Liberty, Lincolnville, Monroe, Montville, Morrill, Northport, Palermo, Prospect, Searsmont, Searsport, Stockton Springs, Swanville, Thorndike, Troy, Unity, Waldo, and Winterport.

Upper Mid-Coast Maine
County Statistics

Knox County

Knox County, with an area of 374 square miles is Maine's smallest county, but has the largest commercial fishing industry.²⁶ It was incorporated in 1860. The city of Rockland is the county seat. According to the 1990 census, the county has a population of 36,310 (estimated as 37,847 in 1998).

In addition to commercial fishing, shipbuilding and limestone are important to Knox County. Maine's state prison was built in Thomaston in 1824 overlooking Route 1. It is scheduled to be moved to Warren, Maine in 2001 once a new facility is completed.²⁷ Thomaston still has the largest concrete industry in New England. Knox County was named for Henry Knox, the first U.S. Secretary of State.

Towns include Appleton, Camden, Cushing, Friendship, Hope, Isle au Haut, North Haven, Owls Head, Rockport, Saint George, South Thomaston, Thomaston, Union, Vinalhaven, Warren, and Washington. Plantations: Matinicus Island.

All of the islands are fishing communities. Fishing is significant to Friendship, Isle au Haut, North Haven, Owls Head, Saint George, South Thomaston, Vinalhaven and Matinicus.

²⁶ <http://www.supt.sad37.k12.me.us/Maine/Counties/Knox.htm>

²⁷ <http://rockland.k2bh.com/Community/Story.cfm?StoryID=3882>

Community Profiles
Knox County, ME
Upper Mid Coast Maine

5.10.3.1. Rockland

Background

First known as “the shore” or the “Shore Village,” the area was called East Thomaston until it was incorporated as the city of Rockland in 1854.²⁸ In the late 19th century, Rockland was a leading port for the export of lime rock.²⁹ Rockland’s lime was used for masonry and plaster walls all over the world.

Between 1881 and 1899 the Bodwell Granite Company built a breakwater that was almost a mile long to protect the harbor. Much of the 697,627 tons of granite came from Vinalhaven. In 1902, a few years after the breakwater was completed, a permanent lighthouse replaced the small moveable beacon that had been marking the end of the breakwater.

Rockland was an important groundfish harvesting and processing port in the past. Two offshore fleets based here (O’Hara and National Sea Products) fished in Canadian water until 1984 when the Hague Line, the international boundary established by the International Court of Justice in The Hague, the Netherlands, led to the exclusion of U.S. fishermen from Canadian fishing grounds. Groundfish processing plants that relied primarily on Canadian fish continued producing product for U.S. government contracts until the early 1990s. In the 1970’s the city also had a major shrimp plant and served as a primary herring-processing center with two sardine plants, the last one of which closed about 12 years ago.

Today, herring and lobsters are the dominant fisheries of Rockland. The city boasts of being the “Lobster Capital of the World.” In addition, a major sea moss plant is located here. Opinions differ among key respondents about the city’s dependence on the fishing industry. Some believe that the city is inevitably moving towards a tourism-based economy though others suggest that once fish stocks rebuild, the city will again be dominated by the fishing industry. Nevertheless, fishing retains a significant presence in the economy and culture of Rockland and all respondents considered fishing “important” to “very important.”

Judging from the role Rockland plays in the landing, marketing and transport of herring for lobster bait, as well as the transshipment of lobsters, Rockland must be deemed an *essential provider* to the fishing industry.

In 1995 Rockland was named “50th Best Small Town in America” in Norman Crampton’s America’s 100 Best Small Towns.

Governance

Mayor and City Council

*Demography*³⁰

Population

Rockland’s population in 1990 was 7,972 with 3,699 males and 4,273 females.

²⁸ Information found at <http://www.tiac.net/users/buster/shorevillage/>

²⁹ Rockland Breakwater Light, “History” (4/3/00) at <http://www.lighthouse.cc/rocklandbreakwater/history.html>

³⁰ Census information can be found at <http://venus.census.gov/cdrom/lookup/>

Age Structure

There were 1379 children under 12 years old, 1394 individuals over 65, 707 teenagers (12 to 18) and 4505 between 19 and 64 years old.

Education

The educational level of the SAD#5 School District (Rockland, Owls Head, S.Thomaston) was cited as 74.8% high school graduates and 35.5% had at least some college.

Housing

Rockland had 3719 housing units in 1990, 1776 were owner-occupied, and 1547 were renter occupied. The median value of the housing is \$73,300. The average selling price for a home in 1999 was \$93,800.³¹

Racial and Ethnic Composition

Only 63 out of Rockland's 1990 population of 7,972 were non-white.

Economic Context

Income

Median income for all households was \$23,528.³²

Employment

Rockland area was said to have a labor force of 23,580 and only 2% unemployment.³³

Major companies include Fisher Engineering, founded in 1948, a "leading manufacturer of snow and ice removal equipment;"³⁴ and MBNA, which is bringing in 300 jobs. Nautica (clothing) is based in Rockland, as is FMC Biotech Division, employing 70 people and other small industry. There's also an increasing number of year-round retail stores. In December 1999, Wal-Mart was requesting a rezoning to allow an expansion of their existing store, creating a "supercenter" in Rockland. They anticipate employment of 350 people, 80 percent of whom would have full-time jobs. Increased traffic was a major concern voiced at a public hearing on the proposal.

MBNA has donated funds to the school system, library and the local art museums. While their office in Rockland is said to be relatively small, MBNA has considerably larger operations in Camden and Belfast. Though some local people have been hired, the Maine accent is said to preclude some from job opportunities. The other reported downside of the influx associated with MBNA is that real estate prices have jumped.

Transportation

Knox County Regional (RKD) airport supports general aviation.

The Maine State Ferry Service operates the following ferries on a year-around basis:

- Rockland - Vinalhaven
- Rockland - North Haven
- Rockland - Matinicus Island

Maine's Department of Transportation is considering bringing in the Cat Ferry, and rail service is being opened.³⁵

³¹ "Relocation in and around Rockland Maine" at <http://kelmscott.org/%7Ertacc/relocate.html>

³² Ibid.

³³

³⁴ <http://www.fisherplows.com/>

³⁵ City of Rockland, "Message from the Mayor" found at <http://www.ci.rockland.me.us/citycouncil/mayor.html>

Hospitals, schools, libraries and museums

- The Knox County Regional airport is the home of the Owls Head Transportation Museum featuring classic and/or unique motorcycles, cars and airplanes.
- Rockland has three art museums, the best known of which is the Farnsworth Art Museum with a noted collection of paintings by Andrew Wyeth, a former resident of the town.
- Shore Village Museum, Maine's Lighthouse Museum, has a collection of artifacts of the US Coast Guard, Civil War memorabilia and has one of the largest collections of lighthouse material in the U.S.³⁶ Three lighthouses in the Rockland area are accessible by car and foot: Rockland Breakwater Light, Owls Head Light and Marshall Point Light.
- Rockland has a public library.

Fisheries Profile

Community

Rockland as all the characteristics of a fishing community identified earlier in this report. Specifically: fish are legally sold ex-vessel to a dealer, processor or the public; fishing support services are provided; public-use facilities are available to launch vessels or provide dockage; fishing people satisfy daily or weekly social and/or economic needs in Rockland; local residents name Rockland as a fishing community and some fishermen participate in resource management.

Nevertheless, the character of the town has changed dramatically over time. With a very limited processing sector (one groundfish, one seaweed, no sardines), the town serves principally as a depot for the transport of fish to other places. In addition, various services for commercial vessels are available.

Public facilities

In 1999, the Harbor Management Commission and Harbor & Waterfront Department included in their goals: Development of a "three year plan for capital expansion at municipal fish pier in cooperation with current operations and management lessee."³⁷ The City Council also included in their 1999 goals: "Continued Focus on Harbor Maintenance and Improvements."

Commercial fishing and fisheries-related employment

Industry structure

Lobstering and herring are the dominant fisheries now. About 30 lobster boats fish out of Rockland, 5 purse seiners fish for herring and a few other vessels use trawls and gillnets for groundfish.³⁸ In 1997, 17 boats holding federal permits listed Rockland as their address, though only 8 actually recorded landings in Rockland in 1997.³⁹ Herring comprises the highest landings by volume of any species. There are three fish pumps in Rockland. "In addition to the sardine canneries, the product goes to a million places for bait."

According to 1997 NMFS landings data, urchins dominated landings January through March, supplemented by some sea scallops. Landings of urchins were again strong September through

³⁶ Information found at <http://www.tiac.net/users/buster/shorevillage/>

³⁷ <http://www.ci.rockland.me.us/Harbor/goals99.html>

³⁸ Estimates by key informants.

³⁹ NMFS Landings and Permit Data, 1997

December. Herring landings began in April, were highest in August and ended in November. Groundfish landings began in May, tapering off in December.

Rockland also serves as a depot for transiting lobsters. Vinalhaven, an island off Rockland, lands between 8 and 10 percent of Maine's lobster landings. Aggregating landings from other nearby ports, Rockland serves as a central point in their transportation to local, regional and global markets.

One processing plant relies on frozen product that is reprocessed into fish sticks and packed for the retail market. Another plant produces marine colloids from seaweeds. Besides these producers, Rockland serves an important role as a waypoint for the gathering and shipping out of lobsters from the islands and elsewhere.

A rendering plant closed seven years ago (1992), ending an era of wags' comments such as, "Camden by the Sea, Rockland by the smell," but also shrinking a market for herring rejected by the canneries and other fish unsuitable for human consumption.

A dogfish plant that had produced a belly flap product for 10 or 15 years, closed about five years ago. Dogfish had been trucked to the plant from Portland, New Hampshire, Gloucester and even Virginia. The same plant now handles alewives.

The difficulty inherent in describing "the" fishing community of Rockland is illustrated by the diverse operations of one its companies that currently harvests fish on both coasts, markets fish globally, and sells bait and ice state-wide. The company owns three vessels on the West Coast that fish, pack, freeze and ship flounder to Japan. It also owns a share in a herring boat here on the East Coast, owns a scallop boat fishing out of New Bedford, and is a part owner of a ship yard.

The key positions in the company are held by individuals from Maine, including both family members and long-time employees. Besides fishing vessels, the company owns and operates delivery trucks and tractor-trailers, and maintains a distribution point in Biddeford for the ice portion of the business. The company established a marina on some of its waterfront property and plans for a restaurant are being developed. Wharf renovations for berthing 60-80 foot fishing vessels when the stocks rebound are also in the works. When the West Coast vessels are operating and bait, ice and marina enterprises are active on the East Coast, the company employs about 150 people. Their ice business ranks second in the state.

Diversification is one key to the company's survival for close to a century. The company began at the early 1900's on the Boston Fish Pier, buying and selling fish. By the 1940's, it had moved to Maine with operations in Portland, Eastport and Rockland. It owned five fishing boats and a processing plant. As the fish stocks diminished and the drawing of the Hague Line limited accessible fishing grounds, the company retrenched, leased its plant, sold a couple of vessels, and sent a couple to Alaska. The company has handled a variety of species over its history and continues to seek new avenues to explore.

Notably, apart from those involved in the grueling factory-trawler work in Alaska, there is little turnover among company employees. Two employees are in their '70's, several are in their '50's—the majority started young, doing the "dirty jobs," and worked their way up.

Employment (year-around and seasonal)

Estimates varied widely from 40 to 250 fishermen in Rockland and the vicinity. Another 2500 are believed to live in Knox County. One company employs 150 people, though not all are employed in Rockland, or even Maine. Employment that is indirectly dependent on fishing is high, trucking

of supplies and bait, for example, is a crucial support. One of the town's shipyards specializes in the repair, restoration and construction of wooden vessels.

Most fishermen are satisfied with their work primarily because they feel in control of their own workday.

Species, Seasonality

Rockland was renowned for redfish before that stock collapsed. Redfish cuttings were used for lobster bait. Herring now is the most commonly used lobster bait, though some redfish is imported from Canada for bait use.

Other groundfish, particularly flounders, were an important portion of the landings in Rockland until the downturn in the stocks and resulting regulatory change diminished the catch.

"Rockland has a fair number of sea urchin divers." In the last few years, sea cucumbers have begun to attract attention with the development of such products as "sea jerky" and an arthritis pill that has received FDA approval. But cucumbers and periwinkles landings are more significant farther Downeast.

Lobstering is the primary fishery in Rockland and the vicinity, supplemented by shrimping, scalloping and urchin fishing in the winter. Fishermen may also seek elvers in the spring, or go clam digging. "Fishermen do a number of small things" to make the year's pay.

Those with 45-50 foot boats and a groundfish permit have developed an innovative technique of having different gear available at sea ready for rapid changeovers. They go with nets to fish their allotment of groundfish, then detach the nets, attach buoys with snap cables and sink the net until its again needed, taking up either scallop or shrimp gear for a time. Scalloping is generally done November to April, shrimping December 15th to end of May. During the overlapping time, 5 days may be spent shrimping, 2 days scalloping. Medium to large size lobster boats may also fish the same way.

A number of women had a cottage industry of picking crabs, but their enterprise has been impacted by stricter regulations associated with HAACP.

Aquaculture

Aquaculture centers on shellfish, mussels primarily, although there is some culturing of oysters. Sea trout was attempted.

Species often landed:

Groundfish: cod, summer flounder, dabs (American plaice), winter flounder (some), yellowtail flounder (little), pollock, halibut, gray sole (witch flounder), hake (silver), cusk, wolffish

Small mesh: Shrimp, squid (bycatch only)

Pelagics: herring, mackerel (rare)

Crustaceans: crab (rock), lobster

HMS: tuna (occasionally)

Other: stripped bass, dogfish (bycatch), redfish, skate, sea urchin, monkfish, elvers, bluefish, whelks, sturgeon, softshell clam, mahogany clams (quahogs), periwinkles, mussels, slime eels (no longer actively fished here), seaweed, menhaden (cyclical, not in '99)

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

The majority of lobster boats are owner-operated. Purse seiners also tend to be operated by their owners, though some individuals own two vessels and must hire a captain to run their second vessel. Midwater trawlers are most often run by hired captains.

Recreational fishing and employment

Shore-fishing for mackerel, striped bass and bluefin is known but is “not of any consequence.” Unlike Bar Harbor, Rockland is not considered a recreational fishing center primarily because of the distance to the fishing grounds.

Cultural role of fishing

History

Twenty years ago, 3 sardine plants operated in Rockland and the canneries were the largest employers. At that time, many women worked packing fish, but they aged and their children were not interested in the same kind of work. The canneries eventually moved to smaller communities.

*Cultural events*⁴⁰

Rockland has hosted the Maine Lobster Festival annually for 52 years. The festival celebrates the sea-faring history of Rockland with demonstrations, entertainment and seafood.

Schooner Day celebrates Maine’s long tradition of shipbuilding with displays of graceful sailing vessels. While not fishing-related, the schooner Stephen Taber is the oldest documented sailing vessel in continuous service in the U.S. and is now a popular excursion boat. Other windjammers and traditional schooners in Rockland include: Schooner *Isaac H. Evans*, the *American Eagle*, the *Heritage*, Schooner *J & E Rigg*, Schooner *Nathaniel Bowditch*, Schooner *Kathryn B*, Schooner *Wendameen* and The *Victory Chimes*.

The North Atlantic Blues Festival is also a popular East Coast event staged in Harbor Park.

Ethnicity in the fisheries

The vast majority of those involved in the industry are Maine “Yankees.”

Kinship & family

At one time, family members were employed in a variety of fisheries-related jobs. With the uncertainty surrounding fisheries now, many young people are not going into any aspect of the fishing industry. More are pursuing college and seeking alternative occupations.

Nevertheless, spouses of fishermen are often involved as “shore captains,” arranging for gear and supplies, repairs when needed, providing bookkeeping or arranging for a bookkeeper, etc. Others have sought work in the remaining support industries or work as representatives of vessels in management venues.

Fishing related organizations and their roles in the community and fishery

Commercial fishing associations

Associated Fisheries of Maine
Maine Lobstermen’s Association

Aquaculture

Maine Seaweed Council is a “coalition of seaweed industry representatives, seaweed farmers, researchers, educators and government officials dedicated to the health of the Maine seaweed resource.”⁴¹

Fishing-related programs and services

Training institutes

When the fishing family assistance center was operational, the office was in Rockland.

⁴⁰ “Local Events”—City of Rockland at <http://www.ci.rockland.me.us/Events.html>

⁴¹ <http://w3.maine.com/algaetech/gateway/msc.htm>

Extension programs

Maine Sea Grant Program in collaboration with Cooperative Extension at the University of Maine has an active outreach program that works with fishing industry participants on a variety of endeavors.

NGOs

The Island Institute, founded in 1983, is a "membership-based community development organization focusing on the Gulf of Maine and the 14 year-round island communities of the Maine coast." The institute "serves as a voice for the balanced future of the islands and waters of the Gulf of Maine... guided by an island ethic that recognizes the strength and fragility of Maine's island communities and the finite nature of the Gulf of Maine ecosystems."⁴²

The Conservation Law Foundation (CLF) maintains an office in Rockland. While noted for its bringing a suit against National Marine Fisheries Service to force stricter regulations on groundfish, CLF has a history of working closely with the fishing industry on such common interests as blocking gas and oil exploration on fishing grounds.

The Coastal Waters Project is promoting a marine protected area long the Hague Line.

Government

National Marine Fisheries Service maintains an office in Rockland.

U.S. Coast Guard maintains a station in Rockland.

Perceptions of the Fishing Community⁴³

Importance of fishing to the community

Fishing is considered important to very important to Rockland. "Herring landings sustain the fish pier." Lobster landings are the highest in the state.

Boundaries

Rockland is the county seat, so most of the communities in the area have contact with Rockland. Residents of Rockland may have the most contact overall with Camden, but the majority of day-to-day tasks are accomplished in Rockland. Other communities of contact include Bangor for shopping at the "big box stores," Augusta for government business and Portland for visiting "the big city."

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). For fishing industry participants in Rockland, capital contacts are most commonly reported as being in Rockland with the exception of offloading and selling groundfish (Portland), health care (Rockport, Penobscot Bay), vacation and visiting friends (varies). However, this list of contacts is misleading. As noted above, an important company in Rockland has economic capital contacts in Alaska, New Bedford, and all over the state of Maine. The sellers of herring have economic capital contacts strongly linking Vinalhaven with Rockland, Rockland with the canneries in Belfast, Bath and Prospect Harbor and "a million other places," where herring is purchased for use as bait by lobstermen.

Contacts between buyers and sellers of lobsters are usually reciprocal. Harvesters generally buy bait and sometimes fuel and other supplies from the company that buys their lobsters.

Eight to ten percent of Maine's lobsters are landed in Vinalhaven, transported to Rockland and

⁴² <http://www.islandinstitute.org/core/html/> Address: 410 Main Street, Rockland, ME 04841 (207) 594-9209

⁴³ Based on key informant interviews

shipped from there to both local and global markets.⁴⁴

Technology is affecting the patterns of contact. With computers and the Internet, as well as cell phones, fishing industry participants are less isolated, even while working.

Communication Issues

Local fishery managers and representatives in Rockland are the harbormaster, the manager of the town's fish pier and the shellfish warden. Respondents indicated that everyone knows the managers, agree that the town regulations are needed, and communication was very good.

Communication with both state fishery managers and federal was rated fair to very good, depending on the individual's perspective. One respondent pointed out that "you have to be proactive" to insure good communication. "The general population does not feel connected," so they rate communication as poor. Others who attend meetings and participate rate communication as "very good." In general, though, today's fishermen are thought to be more aware, better informed than they were even 10 or 15 years ago. Communication is also easier with new technology. Most fishermen, for example, have cell phones so word is more easily spread about regulations and changes.

Assessments

Fishermen and scientists "disagree" to "disagree strongly" on the federal stock assessments of groundfish, herring and lobsters. Interestingly, the fishermen fear that scientists are overly optimistic about the size of the herring biomass, while lobster fishermen are more apt to believe the scientists are underestimating the lobster population. There is more agreement between fishermen and state scientists on lobsters, however, and strong agreement between fishermen and scientists on shrimp. Notably, state scientists work closely with fishermen, incorporating their observations, as they analyze data to assess the status of lobsters and shrimp.⁴⁵

Local management practices

None have been identified in groundfish or herring, though some herring fishermen have requested an area "set aside" that would keep midwater trawlers out of an area above the 69-degree line. Lobster management has changed in the last few years to a form of cooperative management. State waters have been divided into zones that are controlled by elected representatives of fishermen. Several of the zones' boards decided (1998) to limit the number of allowable traps to 800, rather than the state permitted 1000.

Economic Change

Asked to rate the economic condition of the fishing industry ten years ago and five years ago, respondents said that fishing in general was "average" while herring was "good" in both 1989 and 1994. The industry had a larger role in Rockland's economy ten years ago with two herring canneries, a dogfish plant and a rendering plant; furthermore, menhaden was available and flatfish (flounder) was being landed. Five years ago, the rendering plant had closed, one of the canneries closed and the city's major groundfish company had sent its vessels to Alaska.

Today, lobster is "doing well" ("good"), but herring is "average." Rockland (and Knox County) remains the premier capital for lobster landings. New entrants in the herring fishery, especially those who fish with midwater trawls, have had some impact on those who have long been in the fishery. The strict total allowable catch (TAC) on herring may have a serious impact since NMFS

⁴⁴ Concerns about the herring TAC focus on the potential impacts on access to bait for lobstermen, particularly for those who work out of Vinalhaven and the other islands. Purse seiners are able to deliver bait directly to the islands, but if the TAC is taken too soon and Area 1A is closed, the purse seiners will be out of business. The smaller vessels cannot effectively fish on Georges Bank and will be unable to provide bait to the lobstermen. Some question whether midwater trawl vessels could fill the need, but more significantly, they see the midwater trawlers as threats to spawning fish.

⁴⁵ Both Dr. Dan Shick and Dr. Bob Steneck have reported on fishermen's observations that have influenced the direction of their own scientific research.

did not allow “days out” of the fishery which fishermen hoped would slow the catch sufficiently to stretch the TAC through the fishing year. Some lobster fishermen have felt constrained by the trap limits.

The standard of living is about the same as it was five years ago, but there is more concern for low-income people than in the past, so more services are available. The fishing industry no longer attracts as many young people as it did in the past, now the young people work in the tourist industry and/or go on to higher education.

“The demise of the fish factories has a lot to do with labor shortages. They used to hire high school kids. It was cold, wet and smelly. They had to work hard, but it was an honest living and there was a great camaraderie.”

Respondents felt it was impossible to predict five years from now since so much depends on management and regulations. However, one respondent indicated that non-fishing residents of Rockland are looking for a cleaner industry to promote. “Fishermen will have to fight for dock space in the future.” Federal dollars were used for the fish pier, though, so commercial marine-dependent use is required there.

Changes in fishing effort

As the herring industry has evolved, stop seining lost out to purse seiners. In the past ten years there has been a move from the use of catcher vessels (usually purse seines) and carriers (often owned by the canneries) to larger vessels (midwater trawlers). In consequence, the vessels tend to travel farther than they used to and they are forced to catch more to cover the costs of upgrading their vessels. The market has expanded in time as well: there’s now a winter market for herring as food in Canada. In addition, lobstermen of Vinalhaven have been keeping their pots out later in the year, so bait is needed.

The reports of an overabundance of herring by scientific assessments have encouraged new entrants into the herring fishery.

“New people were encouraged to come into the fishery and they all came to the Gulf of Maine. This has not been good for either the herring fishery or the Gulf of Maine. The piece of pie is smaller. Historic fishermen, who tend to be smaller, will be screwed.”

Effects of recent management

The management regulations that have received the most attention lately in Rockland are the limits on cod, the trap limits for lobstering, and the herring spawning closure. However, because Rockland was a major groundfish port for the two corporate fleets that fished primarily in Canada, the drawing of the Hague Line was also a regulation with critical impacts. The vessels initially tried fishing in the Gulf of Maine and on Georges Bank but the depletion of the stocks drove them to the West Coast. *“The decreases in the groundfish stocks had impacts on Rockland prior to the recent regulatory impacts. Some of the groundfish boats left for the West Coast before Amendment 5 to the Multispecies Management Plan was implemented.”* It is anticipated that both herring and lobster regulations will affect Rockland fishermen in the summer of 2000.

Though herring fishermen of Rockland have been fishing herring “forever,” former groundfishermen and fishermen of other regulated species have switched into lobstering when possible.

Characteristics of local fishermen

“A good fishermen must be persistent, they need to go all the time.” But, “you can’t just fish, the regulatory regime requires being involved, and in the present economy, you have to be an

accountant,” paying attention to all outlays and receipts. “Ambition and intelligence” are valued characteristics. It is also helpful to have family in the industry. A fishing heritage imparts knowledge about the industry and it is also “important for a fishermen’s family to accept him/her as a fisherman.”

Safety

Survival suits and improvements in gear have made fishing safer, though weather remains an issue. Regulations of days at sea could negative safety consequences if fishermen feel compelled to stay out longer or go out in poor weather conditions.

Fishing families

Spouses of those in fishing-related businesses do work outside the home. In the past, many women worked packing fish in the canneries, now women have a wide variety of occupations. On the islands, women tend to remain more involved in the fishing industry (e.g., filling bait bags, and picking crabs) or home crafts. The uncertainty associated with the fishing industry has certainly affected the decisions of some spouses to work, but equally important are the societal changes that drive most families in the U.S. to seek two incomes. “Since 1960, the participation rate of Maine women in the workforce has grown from 35 percent to 78 percent.”⁴⁶

While respondents involved in the fishing industry like the business, they question the wisdom of selecting it now as a livelihood. The conditions of the stocks and the insecurity associated with changing regulations combine to make the choice an “unsafe” one. Most discourage their children from becoming involved, at least in the harvesting sector.

Key respondents indicated that many involved in the fishing business do not have health insurance.

⁴⁶ <http://janus.state.me.us/spo/economic/mkane.htm> (January 4, 2000).

Community Profiles
Knox County, ME
Upper Midcoast Maine

5.10.3.2. Vinalhaven

Background

Vinalhaven is an island community, 15 miles off the coast and the largest of the 14 year-round island towns of Maine. Archaeological evidence found on the North and South Islands, as North Haven and Vinalhaven were called, indicate that the Pre-Indian Red Paint people were the first to visit Vinalhaven 3,800 to 5,000 years ago. Later, Abenaki and other Indians left shell middens, stone tools and skeletal animal remains.

European explorers visited in the 1500's and in 1603 the English Captain Martin Pring is said to have named the Islands, "The Fox Islands."⁴⁷ Permanent settlement began once the French and Indian Wars had ended in 1763. Francis Cogswell operated a sawmill on the southern shore of the South Island and in 1776 sold 700 acres to Thaddeus Carver from Marshfield, Massachusetts.

After the Revolutionary War the population quickly grew. In 1785 seventy-five settlers petitioned the General Court of Massachusetts to relinquish claim to the islands. By 1800 the population was 860 on both islands. Forty-six years later, the North Island was "set off" to become North Haven. The South Island, Vinalhaven, reached its peak population in 1880 with 2855 residents.

Fishing, farming, logging, boat-building and, for women, the knitting of fishnets and horse nets (to protect horses from flies) were the primary occupations. Then in 1826 the high quality of Vinalhaven's granite was discovered and the Island's 100-year period as one of Maine's largest quarrying centers began.⁴⁸ Immigrants from the British Isles and Scandinavia joined men from other states to work in the quarries. Granite was shipped for the base of the Brooklyn Bridge, customs houses and post offices, the Washington Monument as well as private mansions, monuments, bridges, dams, etc. until structural steel and concrete replaced granite as building material. The largest granite company closed in 1919. Paving blocks for the streets of many cities were produced until the 1930's.

Seafood has always played an important role in Vinalhaven's economy. Salted and dried fish, canned lobster, canned fish, fish glue, cut and packed fresh fin fish, canned herring, fresh lobsters, scallops, shrimp and sea urchins have been supplied to markets in Portland, Boston and New York. In the days of tub trawling and dragging, Vinalhaven was a major groundfish port. Fish drying, processing and shipping was a very significant part of their economy. Foreign distant-water fleets have been blamed for the demise of Vinalhaven's groundfish fishing industry. Currently, lobsters are being frozen for shipment around the U.S. and worldwide.

The 1200 year-round residents take great pride in their maintenance of multigenerational families and traditional industries. "The waterfront in Carver's Harbor wakes up long before dawn as the men and women who work aboard hundreds of lobster boats head out to sea... the wharves and docks of Vinalhaven are still piled high with fishing gear."⁴⁹

⁴⁷ "A brief history of Vinalhaven" at Vinalhaven Historical Society's web site
<http://www.midcoast.com/~vhissoc/vhistory.htm>

⁴⁸ Ibid

⁴⁹ From web site found at <http://www.foxislands.net/~vhcc/>

*Demography*⁵⁰

Population

The 1990 Census counted 1101 persons in Vinalhaven. Recent interviews suggested there are about 1200 residents who live on Vinalhaven year-round. As many as 2400 visitors come during the summer.⁵¹

Age Structure

There were 106 children under 12 years, 74 teenagers (12 to 18), 664 adults (19 to 64 years) and 164 over 65 years.

Education

Of persons 25 years and older, 150 had not graduated from high school, 359 graduated, 113 had up to an Associate's degree, 94 a Bachelor's and 38 had a graduate or professional degree.

Housing

There were 480 households in Vinalhaven in 1989. Of the 1029 housing units, 472 were occupied during the Census and of these 358 were owner occupied. The median year the structures were built was 1939 and their median value was \$76,200. The median gross rent was \$339.

Racial and Ethnic Composition

There are a few Vietnamese and blacks on the island now according to one interview respondent, but another explained that these were only plant workers who came in and out daily. During the 1990 Census there were 1098 whites and 3 American Indians.

Economic Context

Income

Per capita income in 1989 was \$11,702 while median household income was 19,706.

Employment

The 1990 Census counted 131 in the industry category of "agriculture, forestry and fisheries." The same number was listed in the occupation category of "farming, forestry, and fishing occupations." The number of lobster boats (300) and other fishermen, however, cast serious doubt on the validity of the Census count.

Transportation

State-owned and operated car ferries depart for Vinalhaven and North Haven from Rockland.

Hospitals, schools, libraries

There is one school for elementary through high school on the island.

Fisheries Profile

Community

Vinalhaven fulfills the definition of a fishing community on the basis of central place theory. Fish are legally sold ex-vessel to a dealer, processor or the public; fishing support services are provided; there are public facilities providing dockage; fishing people satisfy their daily and weekly social and/or economic needs here, and some fishermen and their representatives participate in fisheries resource management.

⁵⁰ <http://venus.census.gov/cdrom/lookup/978623516>

⁵¹ <http://www.foxislands.net/~twmotel/>

As noted in the section on “background,” Vinalhaven was a prominent groundfishing port before the foreign factory trawlers devastated the stocks in the 1960s. Tub-trawling, gillnetting and dragging were the techniques used.

Commercial fishing and fisheries-related employment

Harvesting structure

Two-thirds of the 1200 residents are members of fishing families. There is no groundfishing now, though some have gillnetted and tub trawled in the past. Two purse seiners land herring for bait in Vinalhaven. There are about 300 lobster boats in the 20 to 40 foot range, a few urchin divers, and the two purse seiners. In 1997, 58 vessels holding federal permits listed Vinalhaven as their address.

Fifteen or twenty women number among the fishermen. The majority are sternmen on lobster boats, but a few run their own boats and set traps.

Processing structure

The town owns a processing plant that they lease out to a private company. Known as “Claw Island,” in its heyday the plant had 70 employees, and ran 3 8-hour shifts. Now, it processes crabs or shrimp in winter, and lobster in summer.

Employment (year-around and seasonal)

Two-thirds of the employed are lobstermen, the other third work in the tourist industry (Bed & Breakfast’s, cottages), the one store, lumber (carpentry), or on the roads.

The majority of the lobstermen take their traps out of the water from December through April. Woodcutting, wreath making and blueberry picking are seasonally available.

Species, Seasonality

Eight to 10 percent of Maine’s lobsters are landed in Vinalhaven, primarily May through December, though some lobsters are landed every month. Besides lobsters, some rock crab and a few sea scallops are landed. Herring is landed year-round.

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

Most lobster boats and purse seiners are owner operated.

Recreational fishing and employment

There is little extra room in Carver Harbor, so there are a few sailboats, no charter boats in Vinalhaven.

Cultural role of fishing

Kinship & family

Fishing is the center of life on Vinalhaven. For those brought up on Vinalhaven the appeal of fishing transcends that of almost every other occupation. One respondent simply said that, “Some of the fishermen ‘go away’ and then they ‘come back’ to Vinalhaven. In other words, as in some other fishing communities, even when fishermen make an effort to change occupations, the call of the sea is often too powerful and they eventually return to fishing.

Perceptions of the Fishing Community⁵²

Importance of fishing to the community

Fishing is very important to Vinalhaven; "it's the backbone of everything."

Communication issues

Communication with federal fishery managers or representatives is considered poor.

Assessments

Fishermen are said to "strongly disagree" with the assessments. One key respondent noted that Carl Wilson has done a good job. And state samplers who come aboard the boats also "try to do good." New electronics may help improve assessments by making it easier for fishermen to keep track of their catch, noting shorts, v-notch, counters, and oversized lobsters along with the GPS coordinates where they were caught.

Local management practices

Fishermen have decided upon a trap limit of 800 for their zone. "Zones, that was good. Each zone has different issues, for example gear conflicts to the South and tides Downeast." Nevertheless, some practices should be uniform, "one species should be handled the same through all the states—v-notched lobsters should not be kept, lobsters should not be dragged, minimum and maximum gauges should be agreed upon. In any case, Maine's management "should extend out 12 miles, so the state would have more control."

"The offshore guys want to increase the gauge size, 'cause that's all they're catching. Should really close the offshore to lobstering because that's where the breeders are. The Federal waters don't have the double gauge (maximum as well as minimum size.)"

Economic change

For Vinalhaven, the fishing industry was "average" ten years ago, "good" five years ago; today it could be "the peak." Trap limits have caused an increase in the numbers of traps being set,⁵³ part-timers are fishing more now and waters are warming.

There is more money in lobstering now consequently many lobstermen have paid for new, good boats. "The change in the vent size did not hurt us as much as we thought [it would]." "Lobstering steadily got better. The last two or three years are probably the peak, it will probably go downhill, though I hope it doesn't. But everything has a cycle, doesn't last forever." "Fishermen can make \$100,000 a year now. The first few years, all money is poured back into the business. It costs \$150,000 to 200,000 for a good boat and engine and overhead is high." One issue of concern to thoughtful respondents is that young people, who've never been through a cycle of hard times, tend to spend themselves deeply into debt. "They buy expensive homes based on a large lobster catch, but they would have to leave them if the lobster ever fell apart."

Those who have been in herring awhile are "doing good," but you do need good equipment for herring fishing.

Effects of recent management

Trap limits were anticipated as the management measure likely to have the greatest impact on Vinalhaven, despite the belief that the limit to 800 traps was reasonable. "Upping the measure

⁵² Based on key informant interviews

⁵³ Presumably, this is a short-term phenomenon. Some lobstermen did not fish as many as 800 traps, but when the limit was set, they felt compelled to set the limit, so that they could keep their options open for the future. (They did not want to be at a disadvantage compared to other lobstermen if or when cuts in the limit were eventually decided upon.)

and increasing the vent size helped decrease mortality in the traps. We're seeing short lobsters egged out, so we know the stock is having a change to reproduce. Also, no one eats snappers anymore."⁵⁴

One respondent noted that the lobstermen should have the right to pass on their license to a family member, not to sell it, but just to transfer it. Zone C is trying to keep the fishery open for young people.

Some are concerned about herring management. There was a concern expressed about the government "inviting people into herring just to take the heat off groundfish because they screwed up groundfish management." Herring was healthy before, these informants don't want that to change.

"If you don't take care of the herring, it'll be bad for the islands. There won't be enough for bait. We used to catch too many herring. Half the herring catch had to be dumped because there was no way to handle it. Some purse seiners would share their catch with other boats if they had more than they could handle.

Now the inshore stocks of herring are not showing up. It used to be, in the 1950s and 1960s, that stop seines would be used to close off an inlet and the fishermen could catch as much as they wanted to (in the summer)." "The purse seiners caught them before they reached the inlets. Now the midwater trawls are the beginning of the end. They don't even have to see the herring! At least purse seiners could let go a lot of fish if they caught more than they could handle or nontargeted species, it's too late if they come up in a midwater trawl."⁵⁵

Characteristics of local fishermen

Most of the fishermen are satisfied with their jobs, particularly because they are "independent." "Lobstering is not so bad," though the limits on traps to 800 may be a problem for some, old timers will resent new fishermen. "How do you make it fair?"

Fishing families

Some women work because they want to. As many as 15 or 20 are "stern men," but "not many are captains." However, their numbers may increase. A lot of captains like taking women because "they are more dependable and they grumble less." Young people want to go fishing. They start out as a stern man, saving up to buy an outboard and then go out on their own. Most can make more money lobstering than they could doing anything else. But "it's good to go away for a couple of years, to see something else (go to trade shows or join the service)."

Fishermen stay even when conditions are difficult because "they don't know anything else."

⁵⁴ Mortality in the traps refers to the cannibalistic nature of lobsters that find fellow lobsters a delectable treat. "Snappers" are short lobsters that cannot be sold, but lobstermen used to bring home for their own use.

⁵⁵ Many of the midwater trawler's nets now have sensors that will alert the captain when his net is full.

