

Sub-region Profile
Counties: Washington

5.11. Downeast Maine

Background

Downeast Maine is an important fishing area. Over 500 individuals selected fishing as their primary occupation during the 1990 U.S. Census. At least that many more participated part-time in the industry. In truth, 500 is a very conservative number for those who fish as a primary occupation.¹ Even the Federal 1997 permit files listed 218 vessels with addresses in Washington County.² Furthermore, the State of Maine issued 556 commercial fishing licenses (held by 336 individuals) in Cobscook Bay alone in 1998. The largest number of these were for lobster/crab, but eel/elver, scallop, commercial shellfish, commercial fishing, sea urchins, marine worms, seaweed, mussels and mahogany clams were also represented.³

Unlike some other sub-regions in New England, no single port dominates the fishing scene Downeast. Communities in this region most closely fit the idealized NRC model, with a high degree of insularity and multi-generational dependence on fishing as a way of life. The isolation of Washington County has contributed to its dependence on the marine environment. In addition, this county is the poorest county in the New England region and the second poorest in the United States.⁴ Nevertheless, generations of Downeasterners have lived close to the coast, using their skills, talent and regional knowledge to make a living from marine and other natural resources.

The geography and topography of the Downeast region have contributed to its uniqueness. Cobscook and Passamaquoddy Bays are noted for their extreme tides and strong currents. Passamaquoddy Bay, an inlet of the Bay of Fundy, lies between Maine and New Brunswick, Canada. Its immense tides do not flood or ebb at a constant rate, but are described by the "Rule of 12ths" over a 6 hour period.⁵ The name Passamaquoddy is based on an American Indian term meaning, "place where pollock leap out of the water." Eastport is located on Moose Island in the junction of Cobscook Bay and Passamaquoddy Bay before the waters empty into the Bay of Fundy.

The average tide in Cobscook Bay is 18 to 20 feet, though the spring tides near 30 feet during extreme weather. The strong tides and cold, nutrient-rich ocean waters that move in and out of the bay support an extraordinary number of different marine species, enhancing habitat for shellfish and other marine invertebrates, and influencing the success of aquaculture in the bay.⁶ It also, however, affects the gear needs and techniques used by local fishermen.

During its heyday in the 19th and early 20th century, the Cobscook Bay area boasted 40 sardine factories. With the demise of that lucrative industry, families turned to clam and sea urchin harvesting, lobster and other fishing, and salmon aquaculture. Blueberry harvesting and forest products (logs, pulpwood and wreaths) are the other natural resources the communities rely upon.⁷

Nevertheless, some of the Downeast communities are sliding away from the NRC end of the spectrum towards a more gentrified DSP character, driven by a variety of social, cultural and

¹ Of the 17,858 people over 16 who worked in 1989 in Washington County, 1009 were employed in "agriculture, forestry, and fisheries" according to the U.S. Census 1990

² As noted before, the federal permit files do not include anywhere near all fishing vessels in the county since many (if not most) Maine fishermen hold only state permits.

³ http://www.cobscook.org/Reference_Materials/98_Licenses/state.htm

⁴ Dyer, Poggie and Hall-Arber 1998

⁵ 1/12 in the 1st hour; 2/12 in the 2nd hour; 2/12 in the 3rd hour; 3/12 in the 4th hour; 2/12 in the 5th hour and 1/12 in the 6th hour in the 6 hours from low to high tide.

(<http://www.crescent.willowdale.on.ca/teachers/taylor&nic/passbay2000/tidesinfo.htm>)

⁶ http://www.cobscook.org/Cobscook_Bay/Soundings/art2-tid.htm

⁷ http://www.sustainable.org/casestudies/MAINE/ME_af_cobscook.html

economic factors. The largest public employers in Cobscook Bay area are the public service fields and light manufacturing. However, Downeast communities remain the most ‘fishery-dependent’ communities of all the sub-regions in New England.

Thus, for the eleven sub-NRRs in the New England region, Downeast Maine (DESR) is the least gentrified, most isolated from economic externalities, and provides the closest examples of pure Natural Resource Communities. Like comparable communities in Newfoundland and Labrador in Canada, the small coastal communities of Downeast evolved as an economic response to fishing opportunities in the northern Gulf of Maine and the adjacent inlets, coves, and rivers of the region. On the three dependency indices, it ranks a strong first of all the sub-regions in overall dependency on fishing. To emphasize this point, the second ranked sub-NRR, Upper Mid-Coast Maine, is significantly below Downeast Maine at 36 (A), 2.0 (B), and 171.05 (C), respectively, for each of the three dependency indicators. Downeast is also significantly above the average for the region for all three indicators.

Sub-NRR	A. % Related Occupations	B. % Of Total Employed	C. Alternative Occupation Ratio Summary
Downeast Maine	45	3.6	255.54
Average for NRR	17.2	.75	66.58

Washington County, incorporated in 1789 and named for President George Washington, is Maine’s easternmost county. The glacial till and wetlands that make up the region provide modest agricultural productivity. Maine’s other great natural resource—pulp and wood products—that provides the economic base for some of the counties in the interior, traditionally required access to major water ways and railways. In Washington County, only Eastport had rail access, a factor distinguishing it from most of the coastal towns in Maine. Consequently, most of Downeast Maine depended heavily on marine and coastal natural resources, supplemented by some forestry-based work. Fishing vessels from a variety of Downeast ports for many years traveled widely seeking groundfish and other species. Thus it was a tremendous blow to the traditional “way of life” when prime fishing grounds just offshore were designated as Canadian under the 1984 decision by the International Court of Justice (known as the World Court) in The Hague, the Netherlands.

The region’s proximity to Canada has been a mixed blessing. The loss of fishing grounds when the Hague Line was drawn was clearly a blow to the finfish-harvesting sector. In addition, Canadian processors provide stiff competition and draw some of the economic benefits of “value-added” processing away from Maine. On the other hand, access to a variety of marine suppliers and gear manufacturers relatively nearby makes the fishing industry of Downeast less isolated than it might otherwise be.

Today, the traditional dependence on the fishing industry is being transformed in some places by externalities of technology, economy, and culture (e.g. ecotourism), while in others, it remains essentially intact, with fishermen hoping that their sons and daughters can continue the fishing way of life. Understanding the dynamics of these processes of change is crucial for anticipating the impacts of changing fishing regimes on communities and households. Also, these processes do not confine themselves to the independent level of community but also influence the regional networks of capital flows.

Notable Downeast ports include Jonesport/Beals Island, Cutler, Eastport-Perry, and Lubec. Two types of changes are occurring today. Some communities are beginning to display an economic mix characterized by a slow transformation towards modest tourism. Others, though retaining their dependency on fishing, are changing the nature of that dependency. Specifically, there is now a

much greater specialization in lobstering rather than the more traditional mix of finfish fishing, fish processing, and shellfishing. Furthermore, in the border region with Canada, salmon aquaculture is developing as an alternative economy. Cobscook Bay is also the site of an effort to enhance shellfishing (especially clams).

The abundance of lobsters that was felt in the Western Gulf of Maine a decade ago was noticed in Eastern Maine only in the past few years.⁸ East of Cutler, lobstering is fairly limited because of the geography and habitat, though Lubec residents had 53 licenses in 1998, Eastport and Perry had 15 and 17, respectively, other Cobscook Bay communities had the remaining 48 licenses.

Maine lobster landings in 1999 were worth \$184.6 million.⁹ Abundant and generally disease-free, lobsters are attracting an increase in effort in Maine.¹⁰ The increase is attributable to fishermen changing from part-time to full-time lobstering; switching over from finfish fishing to lobstering; and some influx of newcomers "from away."¹¹

When some of the lobster zones imposed limitations on the numbers of allowable traps, some small-scale operators suddenly expanded, purchasing the maximum number of traps allowed, in order to conserve their options for the future. Other local fishermen switched over to lobstering because of the decline in the availability of finfish through stock declines and/or regulation. Newcomers, both local and from away, are attracted to the industry because of the robust condition of the stocks and the high local, regional and international demand for lobsters.

Five lobster zones have a one-year license moratorium in place and statewide the industry is currently (2000) debating about various forms of limited entry.¹² Already in place to control new entry is the requirement that anyone entering lobstering must spend 200 documented days and 2 years as an apprentice to gain a license. Thus, existing social capital networks place some controls on who gets in and who doesn't. At the same time, newcomers are inculcated with the local folk mores and values of fishing, and where existing, conservation measures.¹³

While the increase in trap numbers is partially a response to the healthy lobster stocks¹⁴ and partially an artifact of the recent trap limitations, it is anticipated that the limits will eventually result in the decline in lobster trap numbers by region. Some research indicates that reducing trap numbers will not necessarily decrease productivity over time. Acheson (1998) notes that in the three years before Swan Island set trap limits, lobstermen there caught 3.32% of the state catch, and three years after trap limits were established, the catch was virtually unchanged at 3.33% of the state total.

Isolation is an historical factor, and is maintained in part by the lack of a major thoroughfare through the region. Only U.S. Route 1, along the coast, and Maine Routes 9 and 6 inland traverse Washington County. Some of the residents in sites like Cutler rarely leave their region, and reflect a cultural uniqueness born of their dependence on the natural resource opportunities presented by fishing the coves and coast of Downeast Maine.

⁸ Key respondent interview

⁹ "1999 Northeast revenues top \$1 billion" in *Commercial Fisheries News*, August 2000.

¹⁰ Maine lobsters have not suffered from shell rot disease and inexplicable lobster die-off cited in Connecticut, and, to a lesser extent, Rhode Island and Massachusetts

¹¹ An influx of newcomers to the Downeast lobster fishery is not yet common.

¹² "Think long, hard about lobster limited entry" Editorial. *Commercial Fisheries News*, August 2000.

¹³ Acheson (1998).

¹⁴ Key respondent, Stonington Maine, Maine Lobsterman's Association

Downeast Maine
County profile, statistics

5.11.1 Washington County

Washington County consists of 2,528 square miles with the county seat at Machias. The county had a population of 35,308 in 1989, it was estimated as 35,502 in 1998. Gender in 1989 was 17,308 male and 18,000 female. The population is predominantly white (33,704) and of British Isles ancestry (51%). In addition, the county identified 1436 American Indians, 6 Aleut, 88 Asians, 54 Blacks and 20 "other." Mainers constitute 72% of the population (25,390), only 7% (2457) were born outside the U.S.

The elementary and high school student population was 6,399 in 1989. There are 16,895 residents who completed high school or higher; 2,928 who had a Bachelor's degree or higher.

Of the 17,858 people over 16 who worked in 1989, 1009 were employed in "agriculture, forestry, and fisheries." The median household income was \$19,993, with 9131 households (68%) earning income, 4675 households (35%) receiving social security and 2403 (18%) receiving retirement income. Per capita income was \$9,607.

The median value of owner-occupied housing units was \$53,100 in 1989, and the median year the housing units were built was 1960.

The county's two cities are Calais and Eastport.

Towns include: Addison, Alexander, Baileyville, Beals, Beddington, Centerville, Charlotte, Cherryfield, Columbia, Columbia Falls, Cooper, Crawford, Cutler, Danforth, Deblois, Dennysville, East Machias, Harrington, Indian Township, Jonesboro, Jonesport, Lubec, Machias, Machiasport, Marshfield, Meddybemps, Milbridge, Northfield, Pembroke, Perry, Princeton, Robbinston, Roque Bluffs, Steuben, Talmadge, Topsfield, Vanceboro, Waite, Wesley, Whiting, and Whitneyville

Plantations are Baring, Codyville, and Grand Lake Stream.

Two hundred and eighteen boats had 1997 federal permits with addresses in Downeast Maine. Towns with vessels associated include: Addison (18 boats), Beals (72 boats), Columbia (1 boat), Columbia Falls (3 boats), Cutler (14 boats), Dennysville (1 boat), East Machias (1 boat), Harrington (5 boats), Jonesboro (3 boats), Jonesport (32 boats), Lubec (9 boats), Machias (5 boats), Machiasport (10 boats), Meddybemps (1 boat), Milbridge (14 boats), Pembroke (1 boat), Perry (3 boats) and Steuben (25 boats).

Federal landings for 1997 identify only Beals Island (358,713 pounds), Cutler (61,278 pounds), Jonesport (5,286,579 pounds), South Addison (1,215,167 pounds), Steuben and "other" Washington County (4,404,410 pounds). Most of the landings are of lobster, ocean quahog, urchins, crab, periwinkles and sea scallops. Other Washington landings also include soft-shell clams, herring, sea cucumbers, worms, conch, bluefin tuna and small quantities of groundfish.

Community profiles
Washington County, Maine
Downeast region

5.11.1.1. Beals Island and Jonesport

Background

Beals Island is connected to West Jonesport by a bridge. A smaller bridge connects Beals to Great Waas Island. In winter, Beals presents itself as a charming, classic fishing village with light-colored houses, a plethora of lobster pots piled on piers, and a couple of draggers nestled in the harbor. Even after a closer look, one “from away” is struck by the continuity of a way of life devoted to the sea made evident by the old, but well-kept houses overlooking the water, the lobster ponds and fishing gear, the working trucks and purposeful activity.

Much larger than Beals Island, Great Waas Island has a couple of miles of undeveloped forest on its east coast with relatively low rock formations along the shore. Towards the southern end of the island, pink granite looms as high as 20-25 feet. At the tip, hundreds of seals congregate.¹⁵

In 1997, over half the federally permitted vessels from Washington County listed addresses in Jonesport, Beals and Addison. In addition, the area boasts at least one source of each of the services needed by the local fishing industry. However, the local inhabitants are neither insulated from change, nor trapped in an isolated outpost.

Change is inherent in the fishing industry. Fishermen commonly talk about the cycles of prey and predator that change the mix of the available species and consequently, the gear and techniques used to catch them. Years ago, the coast of Downeast Maine was prickly with weirs, nets attached to poles set in a labyrinth pattern that led fish into a large trap. When purse seines became popular, the fish less frequently found their way into the fixed gear along the shores. Now that midwater trawls are becoming increasingly popular, the purse seiners are finding it more difficult to find and encircle schools of pelagic fish. So too, the stories relate, when cod and pollock were plentiful, the lobsters were not. Now that groundfish stocks are depressed, the lobsters have fewer predators and are growing to legal size in great abundance. Fishermen have always adapted to the conditions they find, some more successfully than others have.

The fishermen of Beals-Jonesport and Addison are now taking advantage of the wealth of lobsters, landing them year-round, though naturally the highest landings are in the fall. Quahogs, crab, clams, scallops and urchins are also actively fished.

Change is evident in the support sector as well. Boat building is a family tradition in the Jonesport/Beals Island area. When lobster boats were wooden, the traditional form evolved out of those built in this area. Generations of fishermen were also boatbuilders. Some names are famous and their boats recognizable. Now boatbuilders have switched to fiberglass, but they continue to build or finish boats in the winter. Lobster boat races originated in Jonesport/Beals as a way of demonstrating and advertising the latest designs. The races are still held every summer in varying locations around Maine.

Despite the small size of this area's population, it is by no means economically homogenous. Some of the fishing families, who are descendents of several generations of fishermen, are doing very well financially. Several have diversified their activities so that they can fish different species (some hiring captains to take out additional vessels) or have vertically integrated so that they obtain additional value for their catch by packaging and/or freezing, marketing and trucking it as part of the family's business. These fishing families also tend to have economic capital links that extend well beyond Beals-Jonesport-Addison.

¹⁵ <http://csisler.com/Reports/Maine/19990720JonesportME.htm>

Other fishing families, in some cases by choosing what they view as more environmentally sound practices, maintain a more modest standard of living. Such fishermen tend to own and operate their own vessel, fish smaller numbers of traps, are less likely to have diversified into various forms of mobile gear fishing. Their economic capital links are more likely to be less diversified and closer to home than are those of the larger-scale fishing families.

While there is some rancor evident in discussions between the small-scale and larger-scale fishermen, there are unifying forces as well. The social capital and human capital links crosscut the economic differentiation. High school sports, especially basketball, create one of the strong bonds among families in the area.

Also uniting the different fishing families is a concern about their children or grandchildren's ability to continue in fishing. While some say that it is too hard to make a living in fishing now and the regulations constrain choices too much, all key informants who fish love their occupation and would have liked to have been able to encourage their children to continue the tradition. In most cases, though, children are being encouraged to pursue an education and jobs out of the industry. This creates another worry—since there are few jobs in the area that are not dependent on the fishing industry, families must face separation.

Finally, another concern expressed by many of the families is the potential effect of an influx of people "from away." Real estate prices are beginning to reflect a higher demand and some fear the consequences.

*Demography*¹⁶

Population

In 1989, Beals Island had a population of 651 persons; 310 male, 341 female. Jonesport had 1,525 people; 721 male, 804 female.

Age Structure

There were 95 children on Beals Island, 88 of who were enrolled in school. Jonesport had 280 children, 214 enrolled in school.

Education

Among persons over 20 years on Beals Island, 186 were high school graduates, 69 had some college and 59 had a college degree or higher, 171 had not completed high school.

In Jonesport, 463 were high school graduates, 163 had some college and 119 had a college degree or higher, 342 had not completed high school.

Housing

Of the 318 housing units in Beals, 210 were owner-occupied; 29 rented; and 79 units were vacant during the Census. Median housing value in 1989 was \$48,056.

Of the 851 housing units in Jonesport, 469 were owner-occupied; 117 rented and 265 units were vacant. Median housing value was \$54,151.

Racial and Ethnic Composition

One hundred percent of the population of Beals in 1989 was white. Jonesport had 1,500 white people, 2 Black, 16 American Indian and 7 Asian or Pacific Islanders.

Economic Context

Income

Median household income in Beals was \$17,138; per capita income was \$9,143. Percent of persons in poverty was 21.66.

¹⁶ <http://govinfo.kerr.orst.edu/sddb-stateis.html>

Median household income in Jonesport was \$15,574; per capita income was \$7,597.

Employment

Of 321 in the labor force (persons 16 and over), 278 were employed; 34 unemployed.

There are about 5 garages in the Addison-Beals-Jonesport area. Real estate agents and lobster pounds employ quite a few people. One processing plant employs 10 people year round, up to 60 seasonally. Nursing employs 60-70 people in the area.

Transportation and Access

Beals and Jonesport are accessible via Maine's Route 187, approximately 12 miles south of U.S. Route 1.

Hospitals, schools, libraries

Machias has a hospital. There's a nursing home near Beals, a clinic in Jonesport.

Fisheries Profile

Community

Both Beals Island and Jonesport fulfill the definition of fishing communities on the basis of the Sustainable Fisheries Act's National Standard 8. In addition, the minimum requirements of fishing community developed by the Atlantic States Marine Fisheries Commission's Committee for Economics and Social Sciences are also met. Specifically, 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.

As noted earlier, Beals-Jonesport ranks as highly dependent on fishing according to the ratio discussed in Chapter 3 of this report. Just as importantly, people of Beals Island and Jonesport recognize and acknowledge the critical importance of fishing to their communities.

Commercial fishing and fisheries-related employment

Harvesting structure

Lobstering dominates fishing on Beals Island year round. Ocean quahogs were second in landings recorded by NMFS (1997) data. Mussels are also important. Both dragging for wild mussels and bottom culture, in which case wild seed is dragged, dumped and harvested later.

In NMFS permit files, Beals is given as the address for 72 vessels, the most by far of any town in Washington County. In contrast, Jonesport was provided as the address for 32 vessels. However, Beals' landings, according to the federal records, are dwarfed by Jonesport's.

Most of the vessels tend to be in the 40-50 foot range, but beamy. "We don't have the docks, facilities or depth of water to take real large boats...the moorings couldn't hold them."

Processing structure

One local processor-dealer handles lobsters, crabs, soft-shell clams, and scallops depending on the season and their availability. Whelks were not available in 1997 due to problems with red tide. Product for processing is purchased wherever it's available. Two buyers work out of Milbridge and Cutler.

Ten jobs are provided year round; August to November, up to 60 people are employed. Ninety-five percent of the workers are from Beals, Jonesport and Jonesboro. Few people in Washington County have one full-time job, most work in different fisheries or even different occupations at times during the year.

When the company began, it was handling primarily live seafood, now it freezes product for sale anywhere in the U.S. Food service companies such as Sysco and Jordan's purchase the frozen product. Live product is sold primarily in Maine and Massachusetts.

Support Services

A Jonesboro trucking company transports frozen seafood for local processors. Fish is offloaded and sold in Jonesport or in Portland, lobsters in both Beals and Jonesport; fuel and air (for divers) is available in Jonesport, boat repair is locally available, fishing gear is available in both Beals and Jonesport. Bookkeeping is often done by spouses, but some consult accountants in Bangor for income tax filing. (See introduction for discussion of boat building.)

Employment (year-around and seasonal)

While estimates varied about the numbers of fishermen, it was generally agreed that 50 to 75 percent of the people in the area are directly dependent on the industry, the rest indirectly. "If fishermen don't do well, no one does well." Informants estimated there are 1000 fishermen in the Downeast region (1999). In Beals, 12 of the lobster fishermen in 1998 were considered "big," fishing over 1000 traps. By 2000, permitted lobster traps were limited to 800.

Gillnetters have been put out of business, so they now go lobstering.

Off-season jobs may include carpentry, boat building, welding, mechanic, finfishing, digging for clams or "winkles," blueberry and/or cranberry-picking, tipping and wreath-making, snow-plowing.¹⁷ Security guard work, teaching and nursing are alternative occupations. A few people go into Ellsworth to work (over 50 miles). The Columbia Falls radar station employs some, services such as grocers, automobile sales, bowling alley and movie theaters provide additional employment.

Species, Seasons

Though there are lobster landings year round, landings tend to peak in October, with high volumes also in September and November. Quahog landings in Beals are highest in May and June, with significant volumes January through March. Digging clams or marine worms is common in spring, summer and fall. In the fall and winter, picking periwinkles off the ledges, dragging for scallops, diving for urchins, keeping lobster pounds provides fishing and/or fishing-related income.

Federal data for Jonesport shows landings of rock crab, lobster, ocean quahog, periwinkles, sea scallops and urchins plus a small quantity of groundfish. "Winkles" (periwinkles) are sold in town to a buyer who transports them to Boston or New York. Ultimately, they are sold as "bar food."

Lots of people gather ten-ridged whelks and pickle them, but these are for home consumption (they don't travel well).

Pollock was the principal groundfish landed before marine mammal protection measures forced gillnetters to change gear and before the market shifted in 1996 and supply contracts to the US government shifted to the West Coast.¹⁸ However, cod, white hake, haddock and cusk were also regularly caught.

¹⁷ It is estimated that 2-3 million Christmas wreaths are made each year in Maine, making it one of the largest seasonal industries in the state. It takes on an average of 3-5 pounds of brush to make one wreath. Fir and pine tips or brush are among the most in demand. The supply comes from both small and large woodland ownership. The harvesting of wreath brush or tips is commonly referred to as "Tipping".
<http://www.state.me.us/doc/mfs/ffchome.htm#Tips & Wreaths>

¹⁸ Sheehan, E. and R. Moore, 1998, "Perspectives from Five Ports." Prepared for the Maine Dept. of Marine Resources by Coastal Enterprises, Inc. May.

Landed species typically include:

Groundfish: cod, grey sole, hake, halibut, plaice, pollock, winter flounder, yellowtail flounder

Small mesh: whiting

Shellfish: clams, soft-shell and mahogany clams (quahogs); conch; mussels; periwinkles, sea urchin

Crustaceans: lobsters, crabs

Pelagics: herring, mackerel

Other: bluefish, monkfish, skates (no one targets), squid, striped bass, worms

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

Most lobster boat owners are owner-operators, though there has been an increase in the number of people who employ a sternman (formerly, most fished alone). In addition, there are a few well-to-do fishermen who own up to four boats and employ captains to run three of them, especially for quahogging or dragging.

Recreational fishing and employment

Mackerel, flounder, pollock, codfish are caught recreationally by local residents, but it is expensive to start a recreational fishing business. There are only two small charter boat operations, one of which is primarily for viewing puffins.

Cultural role of fishing

*History*¹⁹

Beals Island has always been a fishing community. *“The young guys used to start with a clam hoe, build boats, catch a few lobsters, build up to where they could really go fishing, make money. Then, after the foreign fleets were kicked out, the government decided that we should upgrade our fishing fleet, so they provided loans to anyone who wanted a boat. ‘Course that was the worst thing they could ever do. Only the hard workers, the best could make it [before]. If they left it like that, we’d have fish today. If I had a grandson, he could go out and feel that fish tug on the line.”*

“What gets me, if it comes to a war, they’re going to draft these boys and tell ‘em, go fight for freedom. What about their freedom? They have no freedom. They can’t go fishing like their fathers and grandfathers. A lot of ‘em can’t get into it. I feel for ‘em.”

Ethnicity in the fisheries

Most of the fishermen were born nearby. All are white.

Religion

Various Christian denominations including Methodist, Seventh Day Adventist and Mormon.

Kinship & family

Most of people in the fishing industry in the area are children or in-laws of fishermen. Unlike fishing families in the other sub-regions of New England, some of our informants indicated that they would not mind if their children chose fishing as a career.

Where fishermen go for coffee

Tall Barney’s Restaurant

Fishing related organizations and their roles in the community and fishery

Commercial fishing associations

Downeast Lobstermen’s Association

¹⁹ Davistown Museum has stories of Maine towns. See <http://www.davistownmuseum.org/bibMeTowns.htm>

Perceptions of the Fishing Community²⁰

Importance of fishing to the community

Very important, “if there was no fishing industry here, there would be no town here.” However, real estate is starting to be bought up by people “from away” with some negative consequences.

“The elderly people, they’re being pushed out of their homes. Can’t afford the taxes on them. ‘Cause it’s people from out of state saying, ‘Wow, isn’t this a quaint little town’ and they build these mansions and that ups the real estate and it ups everybody’s taxes and of course these people can’t stay in their own homes, they’re forced out of them, which is sad.”

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).

The people of Beals, Jonesport and Addison have the most contact with each other, but they have to travel quite a bit for many of their contacts—social, economic and human. Fish is offloaded and sold in Jonesport or in Portland, lobsters in both Beals and Jonesport; fuel and air (for divers) is available in Jonesport, boat repair is locally available, fishing gear is available in both Beals and Jonesport. Bookkeeping is often done by spouses, but some consult accountants in Bangor and Ellsworth for income tax filing. 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.

Economic capital contacts for dealers/processors tends to be more geographically dispersed. For example, plastic packaging may be purchased in Massachusetts, cardboard from Canada, cleaning supplies from anywhere, and CO2 used in freezing from New Hampshire.

Like processors, dealers have economic contacts that are more geographically dispersed than do the harvesters. At least one family business is vertically integrated; that is, they harvest, pack and truck product to different states. They truck to New York themselves, send product to Pennsylvania and occasionally to Florida.

Shopping is done in Machias for groceries, Ellsworth and Bangor (80 miles-Penobscot County) for clothes, etc. Some banking is done locally, but Machias is considered the business center.

Human capital contacts depends on the level needed. For example, elementary schools are local, but the high school is consolidated. Community health care is available in Machias where there is a hospital, there’s a new walk-in clinic in Jonesport, but one would go to Ellsworth for appendicitis and Bangor for “big problems.”

Social contacts include local churches, sports events (especially high school basketball), movies in Milbridge or Ellsworth, vacations in New Hampshire or Florida (for the “high ones”—i.e., wealthy families), and weekends in Bangor; visit relatives locally and visit friends in adjoining states. Several informants mentioned that their favorite leisure time activity involved going out in their boat with their family to explore, maybe picnic, on different islands along the coast.

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.

²⁰ Based on key informant interviews

Communication Issues

Views on communication were at opposite poles. Some said it was poor, others claimed it was good. "Nobody listens to an experienced old guy who fished and did know something, 'cause they knew it all theirselves."

"Communication is very good as far as having the chance to talk to local, state and federal managers and representatives. Whether or not they listen, it's hard to say. We don't get any feedback." In general, communication has improved greatly since the Downeast Lobstermen's Association was formed. (Small lobstermen did not feel that the Maine Lobstermen's Association represented them at all well. MLA was said to be more attuned to Portland and Midcoast Maine.)

Assessments

Bob Steneck does sound science. "Hands-on, he dives, goes down in submarines, goes out with fishermen, he listens to what we have to say...and then when he gets there, he says, 'oh wow, this is just like you guys said it was going to be.' So he works hand in hand with the community, but he's working on the science end of it." But he's the only one. "The rest of the scientists and fishermen are way out of touch, they strongly disagree"

"The lobster survey that they do is during the daylight. Lobsters are nocturnal. You dive in an area during the day and you'd say, 'oh wow, there's no lobsters here.' You go and dive that area at night and boy, there's some activity going on. I've done it...They're taking a survey during the day when everybody's in bed...so if they took that same survey at night, they'd get a much different result."

Local management practices

Maine has long had v-notching and minimum and maximum sizes. Some of the lobstermen Downeast take the conservation measures a step further on their own. For example, when they catch a female with eggs, they handle her gently and ease her back into the water. Furthermore, it's not uncommon, if they see a 3 or 4 pound, broad-tailed female, even if it has not been notched and isn't berried-out, they are likely to return it to the water.

"And I'm not a wealthy man. I'll look at it, I'm looking at \$15 to \$18 maybe, but I'll cut it and throw it back 'cause I know it's a breeder. This kind of lifestyle means much more to me. It's my future [I'm protecting]."

People in the area are also careful about what else they throw into the water (e.g., no oil filters, etc.).

Economic Change

Ten years ago, during the measure change, the economic condition of the lobster industry was poor. Five years ago it improved to "average" because the lobsters had grown and you could catch them legal size. Today, it's poor again. With the trap limit, there are too many traps spread through the water and too many lobstermen. It's anticipated that five years from now, it will also be "poor."

It is harder to make a living, there are too many greedy people and not enough conservation. There's also a decline in the quality of living, wives working full-time; stress, violence, alcohol and guns have increased.

Changes in fishing effort

Fishing has changed drastically; haulers went from winchheads to 14-inch hydroslaves. Boats have improved, you don't have to haul out your boat and paint it every year 'cause everybody's got fiberglass and they last forever. You can fish heavier weather; you don't have to worry about beating your boat apart. Engines have gone from gasoline to diesel. Now all the big fishermen have at least one sternman, some have two. Wire traps also changed the fishery.

For quahogging, the dredges have been redesigned and are now much more effective (i.e., efficient). What used to take 24 or 25 boats to land, 6 or 7 boats can bring in now.

Effects of recent management

Trap limits put more traps in the water by 50 percent. When the limit was set at 1200, people with fewer thought they better buy all the tags they could and are now trying to build up to the limit. Several new trap shops have opened, "they're tickled to death."

Cod and other groundfish are said to be coming back to the Gulf of Maine. Lobster fishermen note that that may be bad for their industry since codfish eat lobsters.

Zone management is the best thing that has happened to us. For example, southern Maine catches the bulk of their lobsters by October. Downeast, the bulk of lobsters is caught between September and November, so southern Maine lobstermen may be finished at the time we're just getting started. Also the southern Maine lobstermen tend to fish many more traps than are generally fished Downeast. "They fish trawls, 20 to 50 trap trawls. Here we fish 10 to 20 trap trawls, or single pots. One captain was complaining about what a bad year it was last year, that their sternman made only \$30,000. That's what the people [owner-operators] up here make, if we're lucky."

Some fishermen who quahogged in the past did not learn about limited entry requirements in time to qualify or apply for a license. Evidently there was some confusion among the fishermen about the Maine vs federal requisites. Some probably could have successfully appealed the denial, but it is expensive to attempt.

Regulations restricting the use of gillnets in order to protect harbor porpoise forced gillnetters out of finfishing.

Other

There is a change in the ecosystem. It is much warmer now than it used to be. We regularly had seven or eight feet of snow, now the water doesn't even freeze. The water is warmer along the whole coast. Stripped bass, pogies, tuna are all more common. We used to get shedders in July; they now are caught in June.

Characteristics of local fishermen

A good fisherman looks ahead, is conservation-minded, and loves the ocean.

Safety

Fishing is much safer now. "Hardly ever hear about someone losing their fingers."

Job satisfaction

Ninety percent of the fishermen wouldn't do anything else. "It's easy to love, you're outdoors, your own boss in the most beautiful place...." "It used to be at least, if you wanted to work hard, you could get ahead."

Nevertheless, some informants noted that many fishermen feel that there's too much gear around, too much gear conflict. "The big people don't want to cut back unless the little guy does and the little guy don't want to cut back 'cause he don't figure he's the problem."

Fishing families

While children often help with lobstering, going out as sternmen during summers, the general consensus that seems to be evolving is that fishing is not a job that parents want to see their children do. "There's no future in it, it's slowly being pushed out." Most children are continuing with school through college or going into military service. Fifteen years ago 50 percent of the children in fishing families would get lobster licenses, now perhaps two out of 30 or 40 do so. Unfortunately, there are few job opportunities other than fishing in the area. "You can build a restaurant, everybody's got to eat," but generally, "you're either a fisherman or you're gone."

Some women take a bus to Milbridge to work in the factory packing sardines, though most that still do are getting old, no young people are involved anymore. It was hard, smelly work. You had to learn to cut and pack fast in order to earn more than minimum wage.

Some women do crab-picking at home, but the HACCP regulations force them to have a separate room with stainless steel sink and other equipment, no animals around, etc. Not all the regulations make sense and many women cannot afford to comply with all the requirements, so few are able to maintain their place in this cottage industry.

Perhaps as many as 60 or 70 people, mostly women, work as nurses or nurses' aides in the area if you include the hospital in Machias, the nursing home in Milbridge, boarding home, the Alzheimer place and home nursing.

Washington County, Maine
Downeast region

5.11.1.2. Cutler

Background

Cutler has a deep harbor with an island lighthouse at its mouth. Steep cliffs, few harbors, huge tides, deep water and its proximity to the Hague Line are defining characteristics. It is a small fishing village with a population of 779, a small general store-restaurant and an historical commitment to fishing. In fact, fishing, lumbering and other resource extraction activities such as growing and harvesting blueberries provide just about the sum total of Cutler's economic opportunity.

Cutler is representative of the highly specialized fishing communities with small populations and limited occupational options found in Downeast Maine. People do their own book keeping, entertain themselves at home, save money and leftovers of anything and everything, and maintain a sense of self-reliance that harkens back to an era when rural America was where most Americans lived and small town values guided peoples lives:

"You have to do everything and anything to make a living around here – there are all kinds of opportunities – heck yes – when I was young fella around here – when someone got a pile of wood in their doorway – people would ask to cut peoples wood on their porch – kids do know the value of the dollar – today kids don't have no choice – they don't have cows and chickens, We had wood to cut, we had water to haul, we had hay to cut- kids don't have it today, so they are lost, now today in this town there is not a house. There is nothing for the kids to do – the videos are the worst thing to happen the country – kids are spoiled by that damn mess- keeping things up yourself – doing your own work – need to save things. If you don't do it, there will be no jingle in you pocket."

There is no town center to Cutler, and it exists as little more than a curve in the road linked to a small cove, with docks for local lobster crews and a small storage warehouse for their gear. It is a true NRC with a strong connection to local fishery resources. Cutler ranks 32 on the infrastructure differentiation scale, having little beyond what is necessary to support their small lobster fishing operations. It also ranks 35th on gentrification, meaning little movement towards alternative economies threatens the small-scale town and its fishing occupations. There are no bars, specialty restaurants, marinas, dockside hotels, or other resources to support a local tourist industry. However, Western Head and Cutler Coast trails do offer hiking along the rocky coastline and there is one Bed & Breakfast. Furthermore, "ten miles off Cutler is Machias Seal Island, a mecca for birdwatchers and photographers during the summer with large populations of puffins, razorbills, terns and other birds. A charter service is available from Cutler to Machias Seal Island."²¹ Cutler is thirteen miles off U.S. Route 1 via Maine Route 191.

Talking with locals means talking about lobsters, about independent thinking and action, self-reliance and little direct interaction with the outside world. Although the primary fishing activity now is for lobster, with some occasional urchin fishing, crab fishing, and shellfish fishing, locals talk of the time not more than ten years ago when cod, flounders, and other finfish could be regularly caught nearshore and added to the local catch of lobsters. Any fish caught nowadays are often kept for local in-house consumption. Key respondents see declines in finfish as one reason why there are so many lobsters. Finfish prey on lobsters, but with their decline, the lobster population has exploded in nearshore waters off Cutler.

Key respondents also report that for the Cutler region changes have been noted in the weather, which seems to be more extreme over the last ten years, particularly with precipitation events and winter storms. This is consistent with the trend reported by Quayle (1998) that shows an anomalous increase in severe weather events in New England over the last decade.

²¹ "Machias Bay Area" 1997 (brochure) Machias: Machias Bay Area Chamber of Commerce.

Demography

Population

1997 population was 779.

Education

Cutler has an elementary school; the high school (Washington Academy) for the area is in E. Machias.

Governance

Board of Selectmen and town meeting

Economic Context

Alternative job opportunities

Maine Wild Blueberry Company of Machias became the largest single processor of wild blueberries in Maine. Independent growers specialize in gourmet grade blueberries, sold through Fresh-Pack Cooperative in Machias.²²

Woodlot owners supply lumber and paper mills and a seasonal wreath industry is centered in the Machias Bay region.

Fisheries Profile

Commercial fishing and fisheries-related employment

Harvesting structure

Cutler has approximately 25 fishermen, and a local representative of the Maine Lobstermen's Association. The average boat is 35 feet in length. There are two 40 footers that go 9-10 miles off shore. Trap numbers set by fishermen range from 180 to 800. Three individuals are known to scuba dive to harvest the modest population of sea urchins. Eleven vessels appear in the federal permit files of 1997 with Cutler addresses. In 1997 scallop and quahog draggers shared the harbor with the lobster boats.²³

Support Services

Cutler has a harbormaster. Divers must go to Lubec or nearby Jonesport to get their air tanks filled. Although the icehouse closed years ago, and locals must go outside for fishing supplies to Machias, the importance of lobstering is apparent in the presence of three bait houses. Locals fish from a common wharf connected to five small docks.

Two local dealers buy lobsters and the occasional finfish and sea urchins, and fishermen on the wharf can sell to anyone who passes by. Lobsters are offloaded locally and shipped in crates. Lobsters are sold wholesale or retail, and can keep for two days if shipped in wood crates and are kept moist using flake ice shoveled on top of crates.

Fishermen do local boat repairs themselves, or boats are repaired by one individual who has a small wharf that can handle boats up to 50 feet in length.

Employment (year-around and seasonal)

In the winter, those who don't fish sea urchins may work lumbering for home firewood.

Nearby Salmon Nordic, a Norwegian corporation, runs aquaculture pens. Employees from Cutler monitor the pens and harvest the fish when ready, using large dip nets.

In the summertime, one lobster fisherman will take the occasional visitor whale watching.

²² Ibid. Maine wreaths hold over 20% of the entire wreath market, selling about 3 million wreaths and making millions of dollars over an approximately 8 week period.

²³ Ibid.

Species, Seasons

Summertime is the height of the lobstering season, and most folks have little time for recreation: *“Most of us, especially in the summer, don’t take vacation – that’s when we make our money”.*

Out of the 25 fishermen, maybe 15 fish in the spring. As a rule only one or two will fish in the winter. Only some landings of urchins and quahogs were recorded in the federal landings data for 1997.

Landed species include:

Crustaceans: lobsters, crab

Pelagics: herring

Shellfish: urchins, quahogs

Other: striped bass, sea cucumbers, seaweed (Irish moss)

Cultural role of fishing*Religion and values*

There are only two churches in Cutler, one Baptist and one Methodist.

Like a Midwest farming community, the work ethic and related Protestant values are strong in Cutler. Those who don’t work in Cutler find little else to do. They often will join those who become “from away”- the young seeking new opportunities, those who decide to retire in Florida, or those for whom there simply is no room to stay. Fishing – and hard work - will certainly remain the primary option here:

“When I got 65, my doctor asked me if I was going to retire, and I said no – so he said thank God – I have people coming in here who retire and then have all kinds of things wrong with them, well I don’t feel good here and I don’t feel good there. I tell them, well, when you were working there was nothing wrong with you – do you think I can put you back together with pills? Do that for yourself- go out there and work— as long as you keep these things busy (your hands) your head is OK – don’t let your head get ahead of your hands.”

Training

As younger folks come into the fishery, lobstermen are mentoring them through an apprenticeship program. Yet, the experience gained through many years fishing is often hard to impart in the span of a year, and as conditions change, what fishermen think and know and predict today about fishing conditions, weather, and the tides can change with time:

“Fred was sitting on his doorstep when a guy with New York plates come up and says he wanted to know all there was to know about fishing. What Fred told him was that all he knew was that it changes from year to year – you can fish one area one year and do real good- and next year there may be nothing...All I can tell you is that from year to year things change, but we somehow make a living – my philosophy is to spread my traps around – not put all your eggs in one basket. – No one man can tell you all there is to know about fishing – fish traps in different areas – since lobsters move about from year to year.”

Perceptions of the Fishing Community²⁴

Importance of fishing to the community

Fishing is very important to Cutler.

²⁴ Based on key informant interviews

Boundaries

Going out of town means going to Machias – shopping, banking, eating, visiting friends and relatives, going to the doctor, all take place in Machias. Social and family networks are abbreviated in Cutler, and few extended families are around to help with activities such as childcare and health emergencies. However, many of the existing families are related to each other by common descent. They also share a small common place and space that leaves life in the open. As one key respondent said, *“You have to be careful what you say- everybody will hear it”*.

Sharing of information at sea is a common activity. Lobster gangs in Cutler consist of 4 to 5 people, who will share information on lobster densities, weather and the tides. Because there is a 3-4 foot tide and rough water off Cutler, that doesn't leave much time to engage in casual chat over a cell phone, and most conversations are short and to the point. : *“We don't say much because with the tides at 3-4 feet you must really work when the traps have to be taken out – most of the time you are so busy there is no time for talking – you only have time for your work.”*

Communication Issues

Cutler is geographically and politically isolated from the mainstream of fisheries politics in Maine. Local fishermen complain about poor communication with regional managers, with a major complaint being proposed changes in the vent size on lobster traps. On 1-5 scale, communication with fishery managers rates a '3', with state managers a '2', and with federal managers a '1.'

Assessments

Fishermen and scientists are said to “strongly disagree” on the science of local fisheries. The complaint given is that they rarely go out to see *“ changes that occur from day to day – sometimes these changes are good – sometimes they are bad – but they occur very quickly – faster than the scientists can measure them.”*

Local management practices

Locals attribute the disappearance of groundfish stocks to the intrusion of large trawlers in nearshore coves and inlets. Prior to the regulations that encouraged larger vessels to fish in grounds closer to shore (e.g., DAS), these populations were always underfished. Traditionally, they were taken with small net gear and hook and line, never in large tonnage. This was part of a mixed fishing strategy that changed with the season and included shellfish (clams and mussels), lobster, halibut, cod, and other species such as sea urchins and quahogs.

Economic Change

On a one to five scale, fishing was ranked as average (3) ten years ago, five years ago was good (4), and good today due to the abundance of lobsters. There is concern that this abundance can't last, and that five years from now the fishery could collapse.

Other changes include a decline in squid and shrimp, taken by purse seiners out of the local bays. A collection of other species are caught in small quantities, including crab, herring, striped bass, and sea cucumbers. Seaweed and Irish moss are also harvested around Grand Manan Island. With the exception of lobstering, all other fisheries are rated on a one to five scale by key respondents as a “one”.

Changes in fishing effort

Some significant changes in the coastal fisheries have been noted over the last ten years, and these have resulted in changes in the seasonal strategies and aspirations of local residents. The biggest change noted has been an increase in the numbers of lobsters and a decrease in the availability of codfish:

“I think that the codfish is like a vacuum cleaner. I think that when there were so many codfish here, they ate a lot of the lobsters. Once there was trawler offshore of the lake. These were big fellas

(boats) – they pretty much cleaned out the Bay of Fundy and the cod there have never bounced back. I remember one guy took 20,000 pounds off the mouth of the lake. Fishing after that was never the same. This is because the head of the Bay of Fundy was a great spawning ground for big codfish – some weighing 50 pounds apiece. Another thing that has increased is the number of seals. Seals can eat a lot of lobster and finfish. Around here on the point you can sometimes see up to 75 seals on the rocks.”

Another noted increase has been in the sea urchin population. There is an active market for urchin roe overseas, and the sea urchin population is still abundant in Cutler waters because the roughness of the water and topography of the bottom make it difficult to trawl for urchins here as is done elsewhere. The best way to get the urchins in Cutler is hand picking them by diving over the bottom for them.

Characteristics of local fishermen

“What makes a good fishermen is a fellow who is a good worker – somebody who is willing to get out of bed in the morning. To be successful as a fisherman you have to be willing to work – if you are just in it for the dollar – you won’t do any good. You must be careful to put some things away for a rainy day – because they will come – Work is the spice of life – work is what keeps your body in shape.”

Safety

Changes in fishing technologies and gear have made fishing safer, but the increasing competition and increasing number of pots used have put fishes farther out for longer periods in sometimes bad weather. Fishing characteristics of sharing information through the use of cell phones has made it easier to contact others when you are in trouble – either other fishermen or the U.S. Coast Guard if it is a real emergency. Unlike the days when your gear could kill you, things are now a bit easier.

Fishing families

Women will raise children until they are old enough for school (it goes only to the eighth grade locally, with high school in Machias), and then seek shoreside employment, usually in Machias, as clerks, bank tellers, or in other comparable jobs.

In Cutler, there has been good recruitment into the fishery in recent years, and with the good quality of environment and a healthy fishery, there are younger fishermen in Cutler and the surrounding region than in many other parts of the coast. Thus, the social, cultural, economic and human capital of the region are being replenished and sustained by a local robust lobster fishery (biophysical capital).

Washington County, Maine
Downeast region

5.11.1.3. Eastport

Background

Founded in 1780 and known as Plantation 8, incorporated as a town in 1798, and incorporated as a city in 1893, Eastport is an island city—comprised entirely of the islands of Moose, Carlow, Dog, Treat, Burial, Spectacle, Matthews, Goose, Dyer, and numerous islets. Moose Island is connected, by way of a tidal-dam causeway to Carlow Island, which is in turn is connected to Pleasant Point Passamaquoddy Reservation on the mainland.

“During the War of 1812, the islands and mainland of the area were claimed by both Great Britain and the United States. A shotless battle occurred at Eastport’s then-existing Fort Sullivan, when the British Navy sailed in. With overwhelming troop strength, and without a shot fired, they seized the fort and Moose Island. After being held by British troops for four years, the Treaty of Ghent settled the boundary between Canada and the United States, making Eastport American, once again.”²⁵

Eastport represents an intra-regional port of the Downeast sub-region. This most eastern city in the US is a frontier (border) community with a history of mixed adaptations and economy, including boat building, lumbering, fishing, and shipping. In 1883 Eastport was the second busiest port in the US, with 1,820 entries of which 1,784 were foreign vessels. Shipping by water stalled in the 1940s with the end of the Eastern Steamer line during WWII. Today, the municipal pier is again being utilized by ocean-going freighters to transport products to foreign ports. The vast majority is forest products such as paper and paper pulp.²⁶ This provides important income to dockside stevedores, although income varies with international market demand for paper products. In the first part of 1998, there was an average of three vessels per month calling in Eastport, serviced by two tugs in the port, and the port authority is striving to gain new shipping contracts. In order to provide even more service, a new port facility is currently under construction at Estes Head on Moose Island, which will be able to simultaneously accommodate two ships at that location.

Citizens of Eastport, both now and in the past, survived and prospered by mixing occupational strategies and roles. Because of this mixed economic activity, fishing represents a seasonal and variable part-time activity. According to key respondents, twenty years ago, before the advent of layers of regulations, and with healthier inshore fisheries, some Eastporters did survive by fishing full-time, but never on just one stock. Seasonal switching of fishing could include groundfishing, scalloping, clamming and a small lobstering effort. In addition, many fishermen would tend coves for herring using stop seines or weirs, of which a dozen are still in operation. This included the use of spotter planes to identify shoals of herring in tended coves.

The opinion of several key respondents is that people can do quite well for themselves if they are willing to work hard. Finfish such as mackerel, cod, flounder, and others now represent a minor catch effort in comparison to fishing for lobster, clams, sea urchins and sea cucumbers. In the winter, boats go out into the local bays to drag for scallops and sea urchins. Sea urchin roe is sold to Asian markets, and scallops go south to a dealer in Milbridge.

Although 12 weirs are still in operation for herring, the canning of herring as sardines has collapsed as a local industry. The last remaining U.S. company (Stinson Seafood) was bought out in 2000 by Connors Bros., a Canadian company that is a division of Westin Corporation. Connors Bros. still has canneries in Lubec, Bath, Belfast, and Prospect Harbor (Maine) and in New Brunswick (Canada). In 1882, Eastport had 18 canneries. In 1904, 87,224,524 pounds of

²⁵ Chamber of Commerce web page

²⁶ Chamber of Commerce web page

herring were packed out of Eastport. By the 1960s, the canneries had been reduced to two, and by 1983, the last cannery in Eastport, Holmes Packing Corporation, closed its operation. The loss of herring processing has been replaced to some extent by salmon aquaculture. Key respondents estimated that 150 people work in salmon aquaculture, a third of whom are women, compared to 75 in fishing. Another sea farming operation, the first commercial Nori seaweed (used in sushi) production and processing facility in North America resides here.

Aquaculture was introduced here in the 1970s, with the first home-style salmon pens put in place in waters off Eastport. In March 1982, Ocean Products came to Eastport and set up pens in Deep and Broad Coves. By October, they were breeding some 20,000 salmon hybrids for market. In 1983, they expanded their operation with acquisition of a freezer plant. In 1999, Ocean Products was gone, but has been replaced by Maine Aqua Foods, a British Columbia-based operation and other smaller firms. You can now see extensive salmon pens at several points around Eastport, and salmon farming has expanded into other areas such as Deer Island, Machias Bay, Campobello, and New Brunswick. The same strong flushing action of the tides in Cobscook and Passamoquoddy Bays that constrains the lobster fishermen works to the advantage of the aquaculturalists by removing wastes from around the floating pens twice daily.

Before the collapse of the nearshore finfish fisheries, tub trawling was a predominant fishing technology. In tub trawling, a groundline secured on both ends is set out on the bottom. The ground line could be as short as a few hundred feet or as long as a mile, with anchors at both ends that have lines to the buoys. Feeder lines called “snoods” or “gangions”, two or three feet in length with hooks at their ends, are attached to the ground line about six to twelve feet apart. The hooks are baited with anything from herring to cod. When the trawl is not in the water it is coiled in a tub – hence the name. Tub trawling occurred from the first of May until the middle of January. Two decades ago, tub trawlers could bring in several thousand pounds of fish, but today is no longer practiced.

Demography

Population

According to the 1990 census, Eastport had a population of 1,965, down from its peak of 5,300 in 1900.

Age Structure

Eastport had 426 children, 374 of whom were enrolled in school.

Education

Known internationally for its outstanding marine-oriented programs—especially boatbuilding—Washington County Technical College is a non-profit, residential, post-secondary, associate degree granting institution supported, in part, by appropriation from the Maine State Legislature.²⁷

Racial and Ethnic Composition

92.37 percent of the population in 1989 was white. American Indians (or Eskimo/Aleut) constituted 5.7 percent, 1.17 percent were Asian/Pacific Islander, and .76 percent were Hispanic.

Economic Context

Employment

Key respondents emphasized that most people were “doing well”, with fishing being only one option among a variety of diverse regional activities. For example, some fishermen work for the Federal Marine Terminal, where wood products are loaded for export. Besides the active port, salmon and nori aquaculture, and the traditional fishing industry, other industries include fiber extrusion and a textile mill. Other jobs include working in town (one in a hardware store), carpentry and painting of houses, and wood cutting – cutting wood for others on private lands.

²⁷ <http://www.wctc.org/about.html>

Transportation and Access

In the summertime, Moose Island is connected by way of toll ferry to Deer Island. For those travelling further, another toll ferry sails to Campobello Island, while a free government ferry operates between Deer Island and L'Etete on the New Brunswick mainland.

Currently under development is a proposed year-round car ferry between Eastport and Lubec, which would reestablish the former method of travelling between these two communities, and would compliment the number of existing ferries in the Quoddy Loop.

Fisheries Profile

Community

Eastport fulfills the basic definition of a fishing community developed by ASMFC since 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. However, fishing is just one of the myriad of activities individuals engage in to make a living.

Commercial fishing and fisheries-related employment

Harvesting structure

Approximately 75 individuals are employed full or part time in fishing. Twelve weirs are still in operation for herring. Only 2 vessels on the federal permit list of 1997 list Eastport addresses, but for 1998 the State of Maine listed 15 lobster/crab permits, 19 scallop permits, 6 commercial shellfish, 12 commercial fishing, 14 urchin, 4 seaweed, and 1 eel/elver in Eastport.

Processing structure

Engelhard's Specialty Pigments and Additive group maintains a production facility with 15 employees in Eastport for the manufacture of Natural Pearl Essence. The facility has produced their specialty effect pearl pigment from herring fishery by-products since 1933. The pigment is used in cosmetics, coatings, and plastics.²⁸

Employment (year-around and seasonal)

Fishing has never dominated the port as it does in Maine communities such as Beals Island. Instead, it exists as part of a mixed economy, with most fishermen having one or more alternate jobs besides fishing' *"No one here makes their living solely from fishing."*

Key respondents estimate that 150 people work in salmon aquaculture, of which a third are women. This contrasts with an estimate of only 75 individuals employed full or part time in traditional fishing.

Some of those who work for the aquaculture (salmon) industry use a boat (salmon tender) that removes fish from the pens. Using a floating net reel, the pen is raised up on all sides and then the salmon is dipped out into totes which are lifted by crane on a tender.

Clamming is enjoying a resurgence of interest. Cobscook Bay Resource Center has been working with local residents to increase the viability of local flats.

Species, Seasons

Scalloping is the dominant fishery in Cobscook Bay. However, because the season opens two weeks earlier here than in the rest of Maine, boats "from away" steam here to take advantage of the opportunity. Because the local vessels are used primarily as day boats and therefore cannot

²⁸ <http://www.cobscookbay.com/Eastport.htm>

travel long distances to explore alternative grounds, the local fishermen feel that the opening should be synchronized with the rest of Maine to make the local fishing sites less attractive to boats from away.

In Eastport lobster fishing is a minor part of a mixed strategy of adaptation to limited economic opportunity. The ecology of the bays is very different from that of other areas in Maine, so the fisheries options for these fishermen are quite different. Passamoquoddy and Cobscook Bays are not productive lobster habitat. The few lobster fishermen (there are 6 boats – but only two fish more than 50 traps) include two boats with 800 traps, though one normally only fishes 600 traps. The four 50-trap boats go out only on occasion, when there is nothing else for the owners, who all work other jobs, to do. Clams are still dug, and occasionally periwinkles, while harvesting sea cucumber is the most recent niche fishery. Recent efforts to rejuvenate clam beds have resulted in 1,000 acres of productive flats around Cobscook Bay, as local clam committees have taken a more active role in managing their own resources.²⁹ No landings were recorded for Eastport in the federal landings data for 1997.

Finfish such as mackerel, cod, flounder, and others now represent a minor catch effort in comparison to fishing for lobster, clams, sea urchins and sea cucumbers. In the winter, boats go out into the local bays to drag for scallops and sea urchins. Sea urchin roe is sold to Asian markets, and scallops are sold to a dealer in Milbridge.

Cultural role of fishing

History and museums

The Quoddy Maritime Museum

Festivals

The Salmon Festival is held the first Sunday after Labor Day.

Fishing-related programs and services

Training institutes

Washington County Technical College's Marine Technology Center is in Eastport. It offers courses in wooden boat building as well as marine technology and sciences.

Other NGOs

Sustainable Cobscook Community Alliance—volunteer group of citizens whose goal is developing sustainable communities on Cobscook Bay.

Perceptions of the Fishing Community³⁰

Changes in fishing effort

A major complaint is that all of the fisheries have declined, mostly due to over-fishing, and the influence, according to some, of large offshore purse seining and trawling operations on inshore fishery stocks.

Aquaculture and scallop management are issues significant to the Eastport fishing industry. (See Lubec profile for a discussion of scallop management issues.)

²⁹ Cobscook Bay Resource Center is working with residents in the area to reclaim clam-flats.

³⁰ Based on key informant interviews

Washington County, Maine
Downeast region

5.11.1.4. Lubec

Background

Lubec is the easternmost town in the United States of America, at the southern entrance to Cobscook Bay. Lubec is geographically a large area, divided into the 'village' to the east, North Lubec on a north-extending peninsula to the west of the village, and South Lubec to the south. Its population has hovered around 1,850 for the past decade. Lubec's history is rich with fishing. In 1880 the first sardine canning facility was built in Lubec, the Lubec Packing Company. Interestingly, this is also the only remaining sardine cannery in Lubec. At one point as many as 17 different canneries operated within the town of Lubec. The supply of herring for sardine canneries in Maine came from local weirs, fixed gear that corral schooling herring. While the herring industry in Lubec has been in decline for more than 50 years, aquaculture, lobstering and some other fisheries have grown, leading to a community that is once again on the up-swing. Groundfish are not targeted by many in the Downeast region. The most common fisheries are dragging and diving for both scallops and sea urchins and pot fishing for lobster.

History of the Sardine Industry

The sardine canning industry was created in the Quoddy region by Julius Wolff, a German-born New York sardine importer. During the Franco-Prussian War of 1870, his supply of French sardines diminished. Then, when a gold-based government duty was imposed on imports he began looking for alternative sources of sardines and found the Passamaquoddy area to be an abundant supply of superior product.³¹ He established the Eagle Preserved Fish Company at Eastport in 1875, packing and selling 60,000 cans the first year. As other importers became interested, new canneries were built and by 1880 there were 18 factories in Eastport and one in Lubec. In the following two decades, 23 sardine plants started up in Lubec.³² The original West Indies market for sardines began to decline, but was quickly replaced by growing sales to the American West, and as a food source for cotton workers and coal miners.³³ The herring industry boomed around World War II when sardine purchases by the Federal government to feed US troops accounted for 80 percent of the industry's annual pack.³⁴ There were 50 plants along the coast of Maine in 1950. As markets developed for herring by-products such as fish oil, pearl essence, pet food and lobster bait, 16 more plants were constructed. But by the 1960s, the domestic market for sardines had diminished, production was low and stocks were depleted by foreign fleets. Cheaper imports and costly mandatory pollution controls further constrained the industry. By 1975 only 15 packing plants were left in Maine.

Aquaculture in the Area

Salmon aquaculture first began in Canada and quickly spread southwest to the United States during the mid-1980s. Pen aquaculture succeeded in the region in large part because of the flushing action provided by the unusually high tides (>20 vertical feet) in the region. These tides are a product of the synchronous timing of the lunar tides and a seiche caused by the unusual geography of the area. The flushing limits accumulation of harmful waste materials from the aquaculture sites.

The technology of aquaculture was first adopted by families and small groups of individuals who built pens by hand and undertook the experimental phase of establishing aquaculture as a commercially viable marine enterprise. They were helped initially by the high prices pen-raised Atlantic salmon garnered in the marketplace. As aquaculture flourished in Maine and other areas, including Chile and Norway, the price of Atlantic salmon decreased and the profit margin was too narrow to run pens on a

³¹ *Lubec Herald* article

³² <http://seagrant.gso.uri.edu/region/noreaster/noreasterFW97/Sardine.html>

³³ Informal interview

³⁴ Kaelin, J. 1996. *The Maine Sardine Industry*. January.

small scale. This led to the buy-out of pens, aquaculture leases and businesses by Canadian corporations who compensated for the small profit margin by handling large volumes. The current owners in the Lubec area are Maine Aquafoods (a division of International Aquafoods), Stoltz Seafarms, Atlantic Salmon of Maine and Heritage Salmon (formerly Connors).

Five to seven years ago, R. J. Peacock Co. processed for 10 salmon farms. Since some of the companies have moved, there are fewer to process for. Peacock currently processes for 2 farms, owned by Maine Aquafoods. The Medric 2, a pen-tender made from PVC, holds the contract to unload the pens and deliver the fish to Peacock's Cannery. The fish arrive at the cannery where they are filleted to order and quick-frozen using a patented process involving propylene glycol. The product of this processing method is marketed under the name 'Tru-Fresh', and is considered a superior value-added product because the process does not cause cell damage to the fillets during the cryogenic process. Peacock processes 10,000 fish per day, three days per week. Hannaford Bros., a grocery chain in Maine and up state New York, buys the entire production by Peacock from Maine Aquafoods.

Salmon, steelhead trout, mussels, and oysters are currently produced in Maine, as well as some seaweed. Three vertically integrated companies are responsible for ninety-five percent of the state's cultured production. Halibut, clams, groundfish, urchins and scallops are "in development." Most shellfish farms are family-owned and operated.³⁵

Sea Urchin Industry

Sometime in the 1980s, Japanese came to Lubec looking for an alternative source of sea-urchins should their preferred choice, the red urchin of the west coast, become unavailable. They experimented with the local sea urchins and kept the industry active. Soon, diving for wild sea urchins became a sustainable business. The harvested product was sold to buyers who took them to Boston or Portland for final processing.

Urchin harvesting is not as profitable today as before. There has been a decline in the quantity of sea urchins landed annually and the numbers of people harvesting sea urchins. Some of the buyers for sea urchins have gone out of business (although some say it was not for lack of urchins, but other reasons). R.J. Peacock Canning Company, which processes salmon from aquaculture farms, has a "special projects division" that is conducting a research program experimenting with raising sea urchins in an attempt to get them to marketable size as quickly as possible. They believe they have found a viable way to reduce mortality and increase the yield.

Another company, UniFarms, is attempting to increase the roe percentage in "junk urchins" (legal-sized urchins with low roe content) by holding them and feeding them in indoor tanks.³⁶

Acadia Seafood International is working on both increasing roe quality and replenishing the stocks through a hatchery and grow out program.³⁷

Annual Round

The annual round is still a way of life in Lubec. Most jobs do not provide year round employment. Jobs often need to be subsidized by seasonal work. As noted above, both urchin fishing and scallop fishing are seasonal fisheries limited to winter months. Lobster fishing is a year-round fishery, but is slower and more difficult in winter. Cannery work exists all year, but not forty hours a week. Non-fishing-related jobs have become part of the annual workload for many people, both those involved in fishing and those not. In August and September people are hired to rake blueberries, still the only means of harvesting them. It is common for people to actually leave their other jobs until blueberry season is over. In fall people work cutting 'tips', pine boughs, and making wreaths from them for sale throughout the country. This is usually done in addition to another job. Additionally, some people

³⁵ <http://www.maineaquaculture.org/industry/profile.htm>

³⁶ <http://www.bangornews.com/specialreports/gulf/lubec.html>

³⁷ http://www.mainescience.org/quest_success.01.ASI.html

supplement their income in various parts of the year by digging for soft-shell clams or collecting periwinkles. Both species are sold to local buyers who then sell most of the product outside the local area. One key-informant described the harvest of periwinkles as 'cigarette money'.

Demography

Population

According to the 1990 Census, 1,833 persons lived in Lubec.

Age Structure

The Census counted 389 children, 347 enrolled in school.

Housing

The median housing value of the 1,014 houses was \$53,305 in 1989.

Racial and Ethnic Composition

Of the population of 1,833, 98.8 percent were white. A very few blacks, American Indians and Hispanics composed the remainder.

Economic Context

Income

The median household income was \$14,398 and the per capita income was \$8,761 in 1989. According to the Census, 25.9 percent of the population lived in poverty.

Employment

Though marine-related employment dominates in Lubec, non-fishing-related jobs are part of the annual workload for many. Blueberry harvesting, tipping and wreath-making are popular seasonal jobs.

Transportation and Access

Lubec is 11 miles from the intersection of US Route 1 and State Route 189, across a portion of Cobscook Bay from Eastport and a bridge from Campobello Island, New Brunswick.

Fisheries Profile

Community

Lubec is a community that is very dependent on fisheries. The three major employers in the town are Lubec Packing Company, R.J. Peacock Canning Company and three aquaculture farms, which together provide about 250 jobs.

Commercial fishing and fisheries-related employment

Harvesting structure

Groundfish are not targeted by many in the Downeast region. The most common species landed are scallops, sea urchins and lobster. Seven vessels in the federal permit files for 1997 list a Lubec address. There were no landings listed for Lubec in the 1997 federal landings data. However, according to State records, Lubec shows 53 lobster/crab licenses; 57 commercial shellfish licenses; 43 scallop permits, 32 commercial fishing licenses, 42 urchin licenses, 3 permits for marine worms, 7 eel/elver permits and 6 seaweed licenses in 1998 (243 total). In 1999, there were 50 lobster/crab licenses, 89 commercial shellfish, 54 scallop permits, 38 commercial fishing, 42 urchins, 2 marine worms, and 2 eel/elvers for a total of 278 permits.

Scallops are harvested in state waters by divers using scuba or by small (<50') boats towing dragging a steel dredge. Dragging is by far the more common method. Scallops are fished in winter, with the exact dates of the season set annually by the Maine Department of Marine Resources.

Sea urchins, called “whore’s eggs” in Maine, are harvested using the same methods as scallops. Indeed, there is some overlap in the fisheries. Initially, the same dredges were used for both scallops and urchins. Only within the last few years have specialized dredges for urchins been developed, which do less damage to the fragile urchins. The seasons for both are controlled by DMR and roughly the same, but have slightly different dates. Further, while the same gear is used to harvest both species and both species regularly come up in dredges, fishermen are only allowed to fish for one species or the other at a time. Opinions differ on whether dragging urchins or manually harvesting urchins is more effective and economical. Some contend that urchins are so sparse now you must drag to cover enough ground. Others say there are still enough areas thick with urchins to make diving more lucrative. The “dwindling wild urchin population and lower quality roe—or uni— compared to that sold by California exporters to Japan” is being addressed by a least two companies who are experimenting with feeding urchins and developing a hatchery.

Herring is caught in local weirs in the summer.

Lobsters: Lobster fishing is a year-round fishery, but is slower and more difficult in winter. Unlike southern/western Maine where it is common to fish trawls of 10-15 pots, Lubec area lobstermen fish ‘doubles’ and ‘triples’, i.e., only two or three traps per set of buoys. The environment around Lubec limits the number of traps that can be efficiently handled in a trawl. Lobstermen here typically put 100 lbs. of weight in a lobster trap to keep it from being moved around the bottom by the unusually high tides and strong currents. These same tides and currents limit lobstermen to a window of about 45 minutes to pull traps outside of Passamaquoddy Bay. The currents are so strong that the trawl buoys are irretrievable except in slack water. These conditions make it difficult to fish large numbers of traps.

Rockweed: Some Canadian processors have shown increasing interest in harvests of seaweed.

Processing structure

The Lubec Canning Co. is strictly a processing facility, working under contract to companies who provide the herring and packaging and market the product. Until recently the Lubec Canning Co. was under contract to the Connors Bros. of Canada. When Connors Bros. elected to move their operation to Canada, Stinson Seafood of Prospect Harbor, Maine contracted to buy Lubec Canning. Connors Bros. is now in the process of buying Stinson. During the summer herring comes from local weirs. When the herring migrate south seasonally they are trucked to the cannery from wherever they are caught in S. New England. This results in year-round operation of the cannery, leading to about 180 working days.

In addition to cutting and canning herring as sardines, Lubec Canning also cans herring ‘steaks’ cut by machine at another facility. As a value-added process, Lubec Canning also packs sardines in a variety of flavorings including water, soybean oil, Cajun sauce and mustard. The Cajun sauce is bought from Louisiana and the mustard is purchased from Raye’s Mustard Factory in Eastport, Maine. Undesirable fish, cut heads and tails and herring not packed before spoiling are collected and sold as lobster bait or for processing into fishmeal. The herring oil is collected, pure, from processing and used in packing and burned as a fuel for heat.

A by-product of removing herring from weirs with suction pumps is that it removes their scales. This provides herring that are more marketable, and creates a side-industry utilizing herring scales for making mother-of-pearl and pearlescence for use in cosmetics. The scales from herring processed by Lubec Canning are sold to a pearlescence plant in Eastport, four miles away by water.

Currently there is one other processing plant operating in Lubec, the R. J. Peacock Canning Company, which no longer cans sardines, but instead exclusively processes pen-raised salmon. The Peacock family has owned a controlling interest in a Lubec plant since 1894. Currently the Peacock family is in a partnership with financiers from New York State and Morocco.

Support Services

Lubec lacks many of the commonly associated infrastructure elements of a fisheries-dependent community. This seems to be related to the proximity (4 miles by water) of Eastport, a fisheries-dependent city that provides many of the necessary services. Eastport is considered the main contact for purchasing fishing gear, followed by Harrington (50 miles south) or delivery from Bangor (100 miles west). While there is no bait seller in Lubec, the sardine cannery produces herring as bait that can be bought by locals in large quantities only. One respondent from the lobster fishery said that they drive to Blacks Harbor, Canada to purchase bait (2 hours away).

Most boats are not hauled out in the normal sense. In Lubec people take advantage of the large tidal range to beach vessels to work on them. The owners often do their own boat repair. New boats can be purchased in Harrington, or many other places in Maine, but most buy used vessels from other fishermen.

Catches are sold locally. Salmon from one company's aquaculture pens is offloaded at the Peacock Cannery where it is processed. A local trucker holds the contract for shipping all of the salmon production. Other species (scallops, urchins, lobster) are sold locally to dealers. In the case of urchins, these dealers are not local individuals, but people who come from southern Maine in season to purchase product that is then shipped to Portland for processing.

While one key informant did note the importance of tourism, citing the presence of at least six hotels and Bed and Breakfast establishments, there is a paucity of marine activities catering to tourists. Lubec has only one excursion boat. This is a unique case for a second reason as well. The owner/captain of the excursion boat was a fisherman who took advantage of a state-funded retraining program last year to earn his captain's license. There are no commercial ice sellers in Lubec, but the Peacock cannery makes ice for its own use. This is for sale, but there are very few buyers.

One cannery still packs sardines exclusively; the other exclusively packs salmon products.

Employment (year-around and seasonal)

There are approximately 100 to 125 fishermen in Lubec.

The Lubec Canning Co. currently employs approximately 120 people, half of them cutting and packing sardines, the other half in related processing roles. Contrary to popular belief, 'the problem in the area is not unemployment, but under-employment.'³⁸ The Lubec Packing Co. cannot find enough employees to work at full potential. It should be noted that a new group of employees is growing in the cannery- young fathers who are required by welfare to find employment. The majority of the employees are still women, ranging in age from 16-83. Employees are paid by the piece, with minimum wage (\$5.15) guaranteed. Employees working as packers almost always earn above the minimum wage, while other plant workers are constrained by the minimum hourly wage. In contrast to other employment opportunities in the area (restaurants, retail), cannery work is very difficult work for an equal wage. One tactic employed to gain and keep employees is the pick-up and return of employees by company van. Without the free transportation, no one would come to work.³⁹

The Peacock Cannery employs 75 people "full-time."⁴⁰ The aquaculture farms provide another 50 or so jobs.

³⁸ Peter Boyce, Manager, Lubec Packing Co.

³⁹ Key respondent interview.

⁴⁰ "Full-time" in Lubec means that the job provides the main source of income for the individual. It does not necessarily mean a 40 hour/week, 50 weeks/year job.

Cultural role of fishing*History and museums*

McCurdy's smokehouse, part of a defunct cannery, is in the fundraising stages of being restored as a museum.

Fishing-related programs and services*Training institutes*

The local high school has an aquaculture program with its own building. They are raising brook trout, a fresh water fish, and using the wastewater to grow hydroponic vegetables. In addition they have built a greenhouse that includes an algae culturing center used in shellfish projects and they maintain an experimental mussel lease site in Cobscook Bay.⁴¹ There are also technical programs offered at the Washington County Technical College.

A boat building class is held in Eastport. Other programs include motor repair and are offered at other campuses.

Perceptions of the Fishing Community⁴²

Boundaries

According to a key respondent, Lubec has the most overall contact with Calais (25 miles north), followed by Machias (25 miles south). Calais offers a much larger selection of clothes than does Machias. The key respondent generally goes to Calais to shop for his family. There is also a Wal-Mart in Calais perhaps owing to the fact that Calais sits on the border between the United States and Canada. There is also a specialty store that sell health food, one that our key respondent must go to in order to buy his tea and broccoli sprouts.

Lubec has two good size food stores though. There are a few gas stations with accompanying convenience stores as well. Lubec also offers at least three full service restaurants, one of which is fairly 'upscale' despite being called Uncle Kippy's. There is one small convenience store that serves mostly the employees of R.J. Peacock. The store has a card table in back where people sit down and order eggs and toast, which is prepared in the kitchen. The kitchen is part of the store and suggests that the storefront is also the owner's home.

Community Contact List

Sell fish	Lubec
Offload fish	Lubec
Buy gear	Eastport, Lubec, mail order
Buy bait	Lubec (cannery), Canada
Buy ice	Lubec
Buy oil/fuel	Lubec
Haul-Out	Self
Bookkeeping	Self
Bank	Lubec
Shopping-food	Lubec
Shopping-clothes	Calais
Church	Lubec
School (K-12)	Lubec
Visit relatives	Lubec

⁴¹ <http://www.maineaquaculture.org/new/lubec.htm>

⁴² Based on key informant interviews

Visit friends	Lubec
Go for vacation	Lubec (local beach)
Recreation	Lubec (hunting/sportfishing)
Socialize	Lubec (VFW/restaurant)

Economic Change

Reactions were quite different regarding perceived changes over time, depending on the occupation of the respondent. The plant manager at the sardine cannery was very upbeat about the economy. "The best in fifteen years," he said.

A key respondent was indifferent. His viewpoints were tempered by the industry he was in at the time. Ten years ago, he was still diving for scallops. He rated that period as "average" stating that the fisheries economy had "...never been great, supplies were high and price were low. Five years ago, he also rated as "average" suggesting that fluctuations always even the industry out, one up and another down. Today, the key respondent also rated as "average." The future was the worst rated among the time spans. Noting that the "volume of catches will decline and markets will be lost," he anticipated a rating five years from now as "poor." He continued to say "*fishing will be poor, but something else will make it up.*" He displayed a surprising optimistic outlook considering the rather bleak nature of the statement.

The key respondent said 'life is better now' if one is content about "living low." "If one owes a lot of bills, you are shit up a creek..." Life is worse than five years ago "because taxes are higher, prices are up and wages are not in sync with the rest of the country. Our prices go up with theirs, but not our pay." There is not much difference between the 'better' and 'worse' perceptions. Both rest on a rather negative perception that life in Lubec is good as long as there are no 'ifs.'

Effects of recent management

Herring: Currently the state government of Maine is/has deciding/ed to include weirs (fixed-gear) with mobile gear (purse seines and stop-seines) for management of herring in accordance with other states. Peter Boyce, Plant Manager for Lubec Canning, felt this was unfair, not based on science and would spell the end of weirs. The legislation for herring management concentrates on closed seasons to allow herring to spawn. Herring spawn offshore, away from all weirs. Further, because weirs are fixed constructs, rather than mobile gear, removing them from the water, or even dismantling their nets is a far greater burden (physical and economical) than shipping mobile nets. "It would be fair if they made the purse seiners take off all their gear, and winches and cable. That would take them about two weeks to take it off and put it back on, just like the weir fishermen." Mr. Boyce went on to comment that only Washington County would be affected by the legislation because all the remaining herring weirs are there. He felt that the state government was willing to sacrifice Washington County in political dealing with other states. "They (state government) think 'just send them (Washington County) their checks (welfare) and they'll be happy.'"

Scallops: A major point of contention in the fishery has been the practice of opening scallop season in the Downeast area several weeks before it opens in the rest of the state. This has led to great numbers of boats initially fishing the Downeast region until the rest of the state opens. At the opening, all but the local boats travel to new areas to fish. The local Downeast fishermen are left fishing the remainder of the season for the scallops not taken by the full force of the state fleet during the first weeks. Downeast fishermen feel this practice is not fair because they lack the ability/will to live aboard their boats and fish other parts of the coast. Downeast fishermen have repeatedly called for a synchronized opening to the scallop fishery throughout the state of Maine. This was to be the case last season until heavy lobbying from southern/western scallopers caused the DMR to change the dates.

Urchins: Major points of contention in the urchin fishery are the battle between wild harvesters

and those interested in sea urchin aquaculture, and between draggers and divers. Currently there is a moratorium on both new urchin aquaculture lease sites and diving permits. At least one individual who drags for urchins has attempted to swap his dragging license for a diving permit, contending it is less damaging to environment, but has been refused because of the moratorium. This person has attempted to work through local officials and has even called his Washington representative. He said that "they don't give a damn...a moratorium is a moratorium." This has left him quite critical of a system that claims to promote environmentally safe fishing but does not work with the fishermen.