

Beals Island and Jonesport, Maine

2004 Community Panel Report

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Introduction

In Jonesport and Beal's Island, 50-75% of the population depends directly on fishing, and the remainder depend indirectly on fishing (Hall-Arber 2001). As in many other Downeast communities there is relatively little non-fishing related employment. Today, lobster fishing is the dominant fishery, but community members point out that their industry has a history of fishing a multiplicity of species. The only income apart from fishing-related business is seasonal tourism. The survival of the entire community depends on access to sustainable resources.

Panel members in Jonesport and Beals Island were interested in recording information both about the area's vibrant fishing history and their communities' continuing successful participation in the industry. They pointed out that regulator's "institutional memory" often starts at 1990 or later, so they have no idea what fishing communities were like or what social and ecological changes have already occurred. Countering that trend is a NOAA-funded pilot project, the Local Fisheries Knowledge Project <http://www.st.nmfs.gov/lfkproject/> that is using Jonesport-Beals High School students to record the oral histories of community members involved in fishing.

At present, Maine finds itself on the geographic margins of New England's groundfishery. This was not always the case as virtually all Maine harbors were once supported by numerous and diversified groundfishing vessels (O'Leary 1996; Wilson 1999). Particularly since the 1984 implementation of the Hague Line, however, Maine based vessels operate with the handicap of greater distance from both the most concentrated groundfish stocks within US waters (on Georges Bank), and greater distance from major urban markets and transportation networks (which extend south and west from Boston).

Partly because of market and transport obstacles, Maine's inshore fisheries have been dominated for over a century by a flexible and diversified fleet of small to medium-sized vessels. Not unlike the diversified livelihood strategies that have characterized northern New England households since colonial times (Vickers 1994; O'Leary 1996), Maine's inshore fleet traditionally relied on their ability to switch target species and gear in order to insure productivity. Panel members identified lobster, crab, sardines, groundfish and scallops as the major fisheries in the 1970s. Today lobster, quahogs and periwinkles are the dominant fisheries. Urchins were plentiful for a time, but are less so now. Other fisheries include worms, mussels, wrinkles, and alewives (for bait). Until recently, license moratoria and limited entry of any sort was fought by most industry members. Many believed that the moratoria would diminish their flexibility, concentrate access and make it more difficult for young people to enter the industry.

In addition to the desire to maintain the right to fish for themselves and their descendents, Panel members noted the importance of maintaining the infrastructure as well as encouraging flexibility and diversity in fishing. They are also interested in maintaining their community as a fishing community. Interviewees sometimes noted the irony of

people from away buying property near a working waterfront, only to complain about the diesel engines starting up in the morning or the smell of the bait house.¹

Property values have escalated rapidly. Property valued at \$10,000 ten or fifteen years ago is now said to be worth \$150,000. Those on fixed incomes are selling and moving inland or to elderly housing. One interviewee reported that waterfront property is valued at \$300 per running foot. “Even a half acre could be assessed at \$30,000. At 20 mills, that’s \$600 plus the house. You can see how if you’re on low Social Security, you get in a bind.”² Jonesport voted against construction of a septic system or sewers, both because of the expense and because they wished to restrain growth.

2004 General Assessed Values in Jonesport, Maine

	First acre	1 to 2.5 acres	Over 2.5 acres
Water frontage	20,608	18,135	10,304
	First acre	2nd acre	Over 2 acres
Creek frontage	9,660	8,500	4,830
Islands	10,300	9,060	5,150
House Lot Land	6,440		
Excess acreage	225		
Productive land	425		

Three threats to commercial fishing access identified by Sheehan and Cowperthwaite (2002) in Jonesport are higher taxes, deterioration of wharves and piers, and development pressures.

Project background

The research upon which this report is based is part of a cooperative research project entitled “Institutionalizing Social Science Data Collection,” funded by the Northeast Consortium and the Saltonstall-Kennedy federal grant program. David Bergeron, Executive Director, Massachusetts Fishermen’s Partnership; Dr. Madeleine Hall-Arber,

¹ See Moosabec brochure prepared for tourists and potential property buyers in Jonesport and Beals Island. (Written by Judy East, Washington County Council of Governments and the Beals-Jonesport Working Waterfront Brochure Committee, published by Maine Sea Grant.)

[http://www.omrn.ca/documents/Moosabec%20case%20study%20\(Maine\).pdf](http://www.omrn.ca/documents/Moosabec%20case%20study%20(Maine).pdf)

² A 2002 report by Elizabeth Sheehan and Hugh Cowperthwaite of Coastal Enterprises Inc. (CEI) entitled “Preserving Commercial Fishing Access: A Study of Working Waterfronts in 25 Maine Communities” found that annual taxes per acre in 2000 were \$58.76 and land valuation per acre was \$1,281.88 in 2000.

anthropologist at MIT Sea Grant College Program; and Dr. Bonnie McCay, anthropologist at Rutgers University are the principal investigators. A primary goal of the project is to develop a process by which community members themselves can participate in the identification of major issues of concern to their communities as well as the collection of appropriate social and economic information.

Community panels in six fishing communities have been established. Four of these are important hub ports for the region, Gloucester, New Bedford (Massachusetts), Point Judith (Rhode Island) and Portland (Maine). The other two represent the small and medium-sized ports typical of the area: Beals Island (Maine) and Scituate (Massachusetts). Because of increasing interest in analyses of the vulnerability of commercial fishing infrastructure in the region, this report focuses on Beals Island and Jonesport's infrastructure.

Methods

In accord with an ecosystem approach to fisheries management, we assume that strong relationships exist among factors as diverse as fish stocks, oceanographic habitat, fishing technology, individual harvesters, fishing families and communities, economic policy, public welfare, political participation, and fisheries regulation. Given this level of complexity, examining the social and economic impacts of fisheries regulation requires a range of methodological approaches including both quantitative and qualitative approaches. These include analysis of formal surveys, structured and unstructured interviews, focus groups, mapping, and participant observation, and archival data sources (Glaser and Strauss 1967; Harding 1989; Strauss and Corbin 1998; Stringer 1999; Patton 2001; Creswell 2003; Kumar and Chambers 2003).

As this project began, the focus was on preparing comments on the potential socio-economic impacts of upcoming groundfish regulations. The Panel also showed a strong interest in placing the current status of the community into context, specifically including an historical look at what existed prior to recent regulations. Later, as the Panels Project matured, the issue of infrastructure resonated in all of the panels and became a topic of regional interest.

1) Five panel meetings (i.e., focus groups) were held in Jonesport. These involved nine individuals in total. Their range of relevant experience included: fishing boat owners, crew, other members of fishing families, shoreside business owners, education administration, academic research, community development, ministry, town officers, leadership of fishing industry organizations, and fisheries management staff and advisors. Because Jonesport-Beals Island shares many concerns and issues with other small fishing communities in the area and local fisheries leaders encouraged a broadening of the Community Panel, three individuals from Stonington were incorporated into the panel.

2) Ten key informant interviews in Jonesport, Beals Island and Stonington were conducted with boat owners, shoreside business owners, fishing family members, and town officers, and former fisheries management agency staff.

- 3) Key informant interviews elsewhere in the state, conducted with boat owners, an academic researcher, and a state employee helped broaden the Panel Project's perspective.
- 4) A survey was mailed statewide to commercial marine harvest license holders.
- 5) The Panel Coordinator was a participant-observer at one Council meeting, two Maine DMR A13 informational meetings, two buyback informational meetings, two social impact meetings convened by Council staff, and three industry organization meetings.
- 6) The coordinator met with project Phi's and other project staff.
- 7) The coordinator reviewed published materials, including regulatory, academic, and gray literatures.
- 8) Additional data collection external to the primary goals of the current project provided essential background information. This includes over 70 interviews, 37 survey responses, and attendance at over two dozen public meetings concerning the management of New England fisheries. These data collection efforts were originally directed toward completion of the Maine Panel Coordinator's doctoral dissertation and other contract work, outlined prior to her involvement in the Panels project.

Selected key informants and focus group participants were individuals who:

- Are long standing and respected members of fishing communities.
- Have some awareness of fisheries management issues.
- Are involved in their communities in ways additional to the harvest of marine resources, such as local government or other positions with public responsibility.
- Have an interest in the long-term sustainability of their coastal communities.
- Expressed an interest in participating.

Jonesport and Beals Island Commercial Fishing Industry

Community

Community Norms

In Beals Island and Jonesport, panel members are proud of their community and the fishing industry upon which most community members rely either directly or indirectly. There is a strong sense that fishing is a unique and valuable livelihood. While they were interested in investigating issues that they might effectively address, panel members were

adamant that they were not interested in painting a doom and gloom depiction of their town or the industry.

The panel expressed an interest in gathering information that could be used at the local and state level to address issues that were tractable. For example, it was important to panel members that young people in the community be aware of the value of the industry and for the fishing industry to be a realistic career choice. One panel member pointed out that the Stonington Fisheries Alliance has been working to have marine education incorporated into the school curriculum and another noted that the Local Fisheries Knowledge Project sponsored by National Marine Fisheries Service has involved seniors at Jonesport-Beals High School.

Because of their interest in extending the “institutional memory” of the fishing industry beyond the last decade, some of the data discussed by the panel focused on what the industry entailed prior to approximately 1990. In general, the panel also emphasized the way the fishing industry is intertwined with all aspects of community social and economic life. Impacts of certain regulations apart from direct fishing restrictions have had a negative effect on what was once the “annual round” of economic activities. The example of the Food and Drug Administration’s HACCP rules’ effect on the crab-picking cottage industry is discussed below.

Vision

The most powerful argument coming from Downeast is not that there should be no regulatory limits, but that the kinds of limits imposed should not eliminate entire geographical and vessel size fleet subgroups. As recently as the late 1980s, the vast majority of Maine harvesters opposed entry limits in any of its fisheries. As one diversified Maine harvester commented recently about the state’s lobster fishery, “There were always a few people who wanted [limited entry]. But until there was a receptive government, it didn’t go anywhere. It was like looking at a girlie magazine. These things can be incremental. Then one day you go in and everyone has a girlie magazine on their desk and you say ok.” As entry of new harvesters is limited or prohibited in an increasing number of fisheries, whether managed at the state or regional level, harvesters in other, previously open entry, fisheries come to favor entry limits as well. In part they desire entry limits to stem the tide of “refugees” from entry-limited fisheries. In part they come to accept entry limits by abandoning previously held ethical objections to privatization, spurred by the windfall profits they can expect to reap by selling entry limited licenses and permits. Virtually all Maine fishermen know someone who has made a handsome profit by selling a groundfish permit, whether privately or through a buyback program.

Now there are few fisheries that are not entry limited and some harvesters are calculating the anticipated value of their state licenses should they be made independently transferable. In this way, federal and regional fisheries policies, which made federal groundfish, lobster, scallop, and other permits transferable, are wielding a strong influence on state policy. Last year (and this year), Maine’s legislature considered (and will re-consider) a bill to make state lobster licenses saleable. Maine harvesters know

that in nearby Nova Scotia, lobster licenses sell for up to Cdn\$1.3 million and are largely consolidated within large companies, concluding a long history of an independent owner operator, locally based fishery.

“All we need to put everybody out of business is a few more ITQs and moratoriums.”

Members of the panel pointed out that decisions about the future need to be “made up-front.” Specifically, management choices have consequences, intended or not, that affect the long-range viability of various categories of vessels, gear, communities. Decisions about whether or not to maintain a diversified fleet or promote buyouts of all small boats, for example, should be explicitly considered. Then the management choices should reflect the probability of those choices supporting the desired vision in the long run. Several panel members emphasized that the vision should focus on the community’s long-term interest, rather than individual’s short-term goals.

There was concern expressed about the “insiders” versus “outsiders” involved in fisheries management, a perception that the insiders were closing off access to the fishery. For example, “In groundfishing, those few people who are on the inside now will make a killing after they have it all closed up.”

“All fishermen help each other here. You’ll find that is unique here. If one does something wrong, they’ll get it from all of us. But we take care of ourselves.”

Changes in community

According to two interviewees, the close-knit community that once revolved around families, the church and school has been affected by a variety of factors, not the least of which is that “everybody’s wants have gotten bigger.” Many women now work outside their home and many young people look elsewhere for work. Increases in property taxes and the cost of medical insurance contribute to that trend. In addition, the pace of life is faster.

Nevertheless, it is clear from the interviews and panel meetings that those from the fishing industry are very proud of their traditions and their businesses. They do not want to lose their community or identity as a fishing community.

“We are fighting to maintain our village.”

Increases in property taxes are blamed for some loss of waterfront access due to those on fixed income selling their waterfront property to “those from away” and for some movement of the young to other places.

Some interviewees remarked that the community is fragmented by class and by family, particularly between those who are obviously successful and those who just get by.

However, it was also said, “. . .you have to remember that the Alleys are married to the Kellys who are married to the Beals. . .”

The Flexible Fleet

“I’d lobster in fall. The lobsters used to come in a big rush. There weren’t much the rest of the year. Now there are more year round. In winter I scalloped. I’d dig worms in spring and in summer, gillnet [groundfish].”

According to a random telephone survey commissioned by Maine DMR in 2002, of the vessel owners holding active groundfish permits in 2002, over two thirds also had income from other fisheries or marine activities. Of those, 51% had income from lobster, 27% from shrimp, 12% from scallops, 9% from urchins, 4% from tuna, 3% from herring, and 11% from other species. Among hired captains and crew, 38% had income from other fisheries or marine activities. Of those, 63% had income from lobster, 38% from shrimp, 25% from scallops, and 13% from tuna (Market Decisions 2002).³

The survey shows further that Maine license holders with groundfishing experience have participated in an average of over 5 New England fisheries (including lobster, crab, shrimp, urchin, groundfish, scallop, tuna, herring, whiting, mackerel, pogie, clam, worm, winkle and others). Maine license holders overall have participated in an average of 4 New England fisheries. Removing the roughly half of licensees who have participated in only one fishery (comprising either lobster or worms in this sample), the remaining licensees have participated in an average of over 6 New England fisheries. This suggests that there are two common marine harvest strategies in Maine – one specialized and one diversified. A separate mail survey of 2001 commercial lobster licensees showed that this population has participated in an average of three fisheries⁴, with 31% having groundfish experience⁵ (Brewer Forthcoming).

Targeted harvests of groundfish, shrimp, lobster, urchins, scallops, tuna and herring all require very different gear and spatial strategies. For this reason, Maine harvesters traditionally made their inter-species switches on a seasonal basis. For example, in years

³ N for vessel owners with active groundfish permits = 100. N for hired captains and crew = 21. This report claims a “sampling error” of +/- 8% for percentages describing boat owners with active permits. It offers no precision or accuracy estimates for data on hired captains and crew. Although it does not include more detailed information about confidence levels, a high level of accuracy may be assumed due to successful sampling of a majority of active groundfish permit holders.

⁴ N = 29. At a confidence level of 90%, the confidence interval is +/- .57. Standard error is .33. This analysis combines lobster with crab, and all groundfish species, as single fisheries. Separating lobster from crab, or separating distinct groundfish species, would result in higher diversity statistics.

⁵ N = 29. At a confidence level of 90%, the confidence interval is +/- 14%. Standard error is 9%.

when good shrimp catches and markets were anticipated, boats would gear up with shrimp trawls or traps to make the most of the limited winter shrimping season. In years when lobsters were plentiful, boats would remove trawls and set traps for summer, fall, and, more recently, winter. Some dragged or dove for scallops in the winter. In years when migrating tuna came close by, boats took on reels and spears. During the urchin boom, boats took on divers. They harvested herring when they could be caught inshore with stop seines or purse seines (or historically with beach seines and weirs). Until recent years when groundfish stocks declined and permits and DAS became severely restricted, many boats geared up with trawls or gillnets (or tub trawls in previous decades) for seasonal groundfishing. A number of other species rounded out the diversity of seasonal and multi-year cycles.

Such flexible switching strategies allowed small and medium sized boats in particular to adjust their individual business plans to changing ecological and socioeconomic circumstances with relative ease. Like diversified farming practices, the ecological and economic burdens and risks were distributed more widely than in single-fishery fleets. Should a single fishery experience stock declines, or normal inter-annual fluctuations, harvesters could accommodate the ecological change by shifting to other species, easing stress on both fish stocks and harvester's own communities.

The single-species approach common in US fisheries management fails to reward the adaptive strategies of existing flexible fleets. Regulatory restrictions have disrupted these normal cycles of species switching. For example, single species driven regulatory frameworks penalize diversified vessels by using single fishery landings histories to allocate fishing effort on a per vessel basis in the form of quotas or days at sea.

The vast majority of full time marine harvesters Downeast now rely on lobstering for the greatest portion of their income. Lobstering was always a major fishery in the state, but in the past it was always given regular breaks by natural cycles of stock increases in other fisheries, accompanied by open access regulatory policies that allowed for flexible switching strategies. Scientists and fishermen alike warn that the large number of harvesters now relying on this narrow single species resource base is not an ecologically and economically sustainable strategy for long-term community survival.

Target Species and Effort Applied

Lobsters

This is the highest-ranking fishery in Jonesport-Beals Island, both in numbers of boats, fishermen and value of the landings. "We've always had this lobster business to fall back on," one interviewee said. Washington County is third behind Knox County and Hancock County in landings. In 2001 Washington County landed 6,907,860 pounds of live lobsters between April and December with an estimated value of \$22,860,303.⁶

⁶ Maine's Department of Marine Resources Commercial Lobster Port Sampling Program. See http://megisims.state.me.us/dmr_lobster/InfoQuery.jsp

According to a September 4, 2005 story by Tom Bell in the Portland Press Herald, lobster catches in the last decade have been double or triple what typical catches were between 1950 and 1990. In 2005, Zone A was permitted 11 new entrants into the lobster fishery, based on a formula of 1 new zone entrant for every three licenses not renewed. One thousand, thirty-four license holders declared Zone A, according to Maine DMR.

Quahogs

Twenty-eight boats go quahogging out of Jonesport-Beals Island. Most of the boats range in size from 35 to 45 feet, carry a crew of 2 (in addition to the captain) and fish about 6 miles out. It is considered a big industry. One interviewee noted that boats from Addison, Jonesboro, Cutler and Bucks Harbor sometimes land at a facility in Jonesport-Beals Island. Another interviewee noted that all quahogs are caught within a 10-mile radius of Beals Island. Red-tide can shut down the fishery occasionally. Generally, the biggest fishing months are May, June, July and August, but fishing continues until the quota has been caught and the fishery closes.

In contrast to many of the other fisheries, quahog orders are taken before the boats go out, so the buyers tell the fishermen how much to bring in. Landings are about 300 bags (100 bushel) per week (2004) but before closed areas were imposed, 200 to 250/day were not unusual.

Worms (sandworms and bloodworms)

This fishery has been consistently important to Beals and Jonesport. Fishermen are paid \$120/thousand sandworms; \$220 for bloodworms. Typically, a thousand or 1500 caught per day, no digging is allowed on Sundays. Some make \$38-40,000 per year without fishing in the winter. There are four buyers in town. One interviewee mentioned seeing Jonesport worms offered for sale in a vending machine in Portland. Another mentioned sending worms as far as New Bedford for bait shops.

Clams

There were 270 clam diggers in Jonesport in the 1978 to 1984 period, now there are 12 to 14 diggers of all ages. Typically a digger fills 1 to 2 bushels per tide but some get up to 6 bushels per tide. In 1984 only 40 licenses were issued with DMR's advice. There is no limit on the licenses now, 45 to 50 are sold, but many never dig. "People pay \$63 to support the committee, they may have kids who dig and they do it for enforcement purposes." The flats are being seeded; diggers see results in three years. Beals has 18 coves to dig and 2 islands; Jonesport has 26 coves.

Mussels

Musseling is now done year around. Initially, in the 1970's, the fishery was based on wild stock (ocean run). PEI was a major competitor. Depending on the supply, there are now varying numbers of boats, from 6 to 8 on average, but occasionally up to 16 (including some from Winter Harbor). Generally the boats carry a 3 or 4-man crew plus captain. The landings (and/or income) are significant. Some of the mussels are being grown on leased bottom. (One lessee pays \$50,000 for a 10-year lease. He is concerned, though, that this does not include a buffer to prevent other fishermen from accidentally

dragging over his lease.) Markets are limited, but the fishery is open entry. You do have to sell to a licensed dealer in Maine. Mussels, like quahogs are sold before the boats go out.

Urchins

In the early 1990s, there were 40 or more boats going, some as draggers, others carrying divers. Urchins were overfished, though, so many fishermen got out of the business. The price is higher now (\$4 per pound before Christmas 2003), but not predictable. There are about 10-15 local draggers and 15 from Cutler and Lubec. Between 6 and 10 divers come from Jonesport-Beals Island and another 20 from out of town. One boat will take two divers; each diver gives the boat 40% of their catch and keeps the other 60%. The diving season is 45 days (though some of those have weather unsuitable for diving.)

Scallops

Scalloping varies from year to year. In early 2004, interviewees said that since the prices on urchins were high, few people were scalloping.

Groundfish

Downeast Maine has a long history of groundfishing, once having a large, diverse, and regionally significant fleet (O'Leary 1996). In the 1960s, 70s, 80s, and early 1990s, Downeast and midcoast harbors were home to many small boats and dealers relying on groundfish for a substantial portion of their income (Wilson 1999). In any given year from 1978 through the early 1990s, 10 to 20 vessels in Jonesport and Beals Island participated in the groundfishery (Wilson 1999).⁷ In 1978 the total included over a third gillnetters, over a third lobster/groundfish combination vessels, and under a third trawlers. By the early 1980s, there were no lobster/groundfish combination vessels. Throughout the 1980s, the groundfish fleet generally comprised half gillnetters and half trawlers.

1988 records from one Jonesport buyer show vessel payouts for 2.1 million pounds of landed groundfish. Payouts from another single Jonesport buyer ranged up to \$1 million during the three-month season. Because many fishing families spend a considerable proportion of their income locally, this \$1 million generated additional income to many more community members. Today (2001), however, only one Jonesport vessel has an active groundfish permit and he lobsters. There is also one groundfish buyer. Three of the last 6 groundfish permits were lost in the last buyback.

Stonington's history is roughly similar. In 1978 there were 16 groundfishing vessels, about a third draggers and two-thirds gillnetters. Throughout the 1980s there were around 25 groundfish vessels, with only 1-2 trawlers, and mostly gillnetters and combination vessels. By the early 1990s the totals had diminished somewhat to 17 vessels. By 1999, the active fleet was down to 3 part time boats (Wilson, 1999). In 2003 there may be as few as 3 active groundfish permits east of Port Clyde. A total of perhaps three active and inactive permits remain in Jonesport. Stonington has fewer than 10. Today, only one

⁷ The Beals Island-Jonesport Panel noted that there were up to eleven groundfishing vessels.

boat has a small number of groundfish days. In total, only 17 permits remain east of Rockland, despite the region's long history of participation and strong dependence on fishing.

Lost groundfish history, permits

Some boats were never documented in federal permitting records. Before the mid-1980s some harvesters were unaware that federal permits were required. Others chose not to obtain the documents since they did not want to purchase the requisite safety equipment or reporting requirements. Further, historical landings data from Downeast Maine are unreliable. Many boats landed at small, geographically dispersed wharves from where product was trucked out of state. Neither harvesters nor dealers/processors were careful to record landings. Many boats groundfished only in certain seasons, or certain years. In consequence, many lost access to the groundfish when regulations required a "history" of groundfishing in order to obtain a permit. Nevertheless, a mail survey to a random sample of state of Maine 2002 commercial marine harvest license holders (including lobster/crab, shrimp, urchin, general commercial fishing, shellfish, elver, and worm licensees with Maine mailing addresses) suggests that one third of Maine's licensees have groundfishing experience.⁸

Another factor may have complicated groundfish "history." It was suggested that the catch of groundfish depends on migration patterns less than on overall abundance.

"Sometimes the fish come around, sometimes not. And when the big boats can't catch enough offshore, they come closer in."

Concern about the loss of groundfish permits is not based on immediate economic impacts since lobstering is lucrative right now. What panelists and others are concerned about is the permanent loss of their history. They agreed that the community should have access to groundfishing in the future when the stocks rebound—particularly if lobster fishing declines. The emphasis is on flexibility. The tradition is to shift fisheries as the stocks and prices change over the seasons or years and the panelists feel strongly that flexibility and diversification is better for the community as well as the stocks themselves. "Fishing rights should not be concentrated in the more southerly ports or large vessels."

A further impact of groundfish regulations is that the closures cause vessels from mid-coast and southern Maine to fish the grounds off Jonesport. This forces the lobster fishermen to remove their traps.

⁸ N = 12. At a confidence level of 90% (commonly accepted in social science analyses), the confidence interval is +/- 26%. Standard error is 14%. Duplicate names due to multiple permit holdings were deleted from the total population before random sampling. Time constraints prevented additional sampling. Reliability is substantially increased, however, through corroboration by two additional sets of independent survey data.

Periwinkles (also known as wrinkles)

This is a drag fishery, six boats and 12 people are engaged in this fishery and the product is primarily exported to Holland. The fishery goes from Petit Manan East. In the mid-1980s to mid-1990s, the fishery was quite active with about 200 dragging and picking statewide. An interviewee reported that one business earned \$1 million annually in that time period. It was the biggest winter fishery then. Still, one interviewee maintained, *“the majority of the wrinkles are from this area.”*

Herring

“Maine has always had a herring fishery. The canning of it started in Eastport.”

In the 1920s to 1940s there was plenty of herring and several markets, including three factories. The two World Wars contributed to the development of a herring industry since herring was used to feed the troops. Weirs and stop seines and later purse seines caught herring for both the canneries and for bait. Jonesport had two or three weirs and two or three seiners who fished part of the year (part of their annual round). When the sardine factories were active, the cuttings were dumped in the harbor attracting a variety of fish including flounder and pollock. Environmental rules eventually had that practice halted.

No one from Beals Island-Jonesport is currently targeting herring. Though herring is open access for now, there is a control date that could be enforced with Amendment 1 (currently in development). The problem for the local, small-scale fishermen is that the herring have not been coming close to shore since before the control date. The weirs and stop seines that used to dot the coves were not productive during the control date period, so no one was fishing for herring. Furthermore, the small purse seiners with, for example, 20-fathom nets were unable to successfully catch herring that seemed to be more successfully caught at 40 fathom.

One interviewee commented that the foreign fleet on Georges Bank affected the inshore herring stocks because they were caught before they moved inshore. Without a history of landings during the control date period, no one will qualify for a herring permit; consequently, the local fishermen are likely to lose an opportunity to go herring fishing even if the fish return to the inshore sites.

“It’s the little guy, or the coastal communities . . . they’re the ones that are getting locked out and the ones that do the least damage to the resource.”

There is conflicting opinion in Downeast Maine about whether or not midwater trawls catch too much herring and fish too intensively. Some note that pair trawlers fish 12 hours at the most while midwater trawlers can fish 24 hours per day. Nevertheless, others who depend on the midwater trawlers to assure sufficient bait for lobstering scoff at the idea that there could be fewer herring than the assessments indicate and/or that midwater trawling is inherently bad for the resource.

Shrimp

Prior to the 1980s, especially in the 1960s and 70s, shrimping was an important part of the fishery. In 1969 boats were catching 6 to 8,000 pounds per day, bought by Three Rivers of Jonesport for 8 cents per pound. The shrimp were cooked and shipped. One interviewee speculated that the currents or some similar oceanographic change brought the shrimp east in those years in contrast to other years when they tend to be found from New Harbor to Portland.

Other fisheries

There's no whelk fishery, sea cukes (sea cucumbers) were tried, but unsuccessful; slime eels were tried two or three times unsuccessfully. Interviewees agreed that "there's no money in seaweed. You'd need a whole truckload to make anything."

Aquaculture

The general sentiment does not favor aquaculture, in fact opposition is fierce. However, there are bottom leases for mussel culture. One interviewee noted that "owning" a piece of the bottom was not necessary, just "using" it. The hope is that aquaculture could help supplement "Mother Nature" for the long-term benefit of Beals and Jonesport without interfering with existing fishing or navigation.

Infrastructure requisites

The Gloucester Community Panel identified infrastructure essentials (see their panel report) for an active fishing port. The Panels Project has found, however, that some fishing communities do not have all of the requisite elements in their own community and must go to a larger fishing port (hub port) to obtain the required services. This may make the dependent ports more vulnerable, having less direct influence on the community upon which they rely but do not live. Moreover, federal regulations require fisheries managers to analyze socio-economic impacts on place-based fishing-dependent communities (National Standard 8 of the Sustainable Fisheries Act), but do not necessarily take into account the networks of dependency between the hub ports and their satellites.

The categories of infrastructure the Panels Project is considering in each of its six communities includes: businesses, structures and space; people; and intangibles.

Discussion of aspects of Beals Island and Jonesport's infrastructure

a. Businesses, Structures, and Space

Introduction

Although Downeast harbors may initially appear to be well preserved as working waterfronts, real estate markets and local economies have changed dramatically in recent

years. Town records show that a decade ago, about a half dozen Jonesport properties changed ownership in any given year. In 2002, 40 properties were sold. One piece sold 6 times within the year, each transaction incurring profits. A third to one-half of Jonesport properties are now owned by seasonal residents. Focus group data indicates that since the 1970s, the number of Jonesport businesses has declined from near 70 to near 20, with the number of boatyards declining from 12 to 6 and the number of lobster buyers declining from 11 to 6. Not surprisingly, the Panel identified shoreline access and use as a serious concern.

The vast majority of full time marine harvesters Downeast now rely on lobstering for the greatest portion of their income. Lobstering was always a major fishery in the state, but in the past it was always given regular breaks by natural cycles of stock increases in other fisheries, accompanied by open access regulatory policies that allowed for flexible switching strategies. Some fear that the large number of harvesters now relying on this narrow single species resource base is not an ecologically and economically sustainable strategy for long-term community survival.

Mooring space

Mooring is permitted. There is no municipal pier in Beals Island, just the breakwater. A few years ago, if a fisherman did not own waterfront property, he could moor anywhere, walk across someone else's property and leave his tender there on the shore. Now, more often the public is not permitted on privately owned property. There is a marina, though it does not have electricity, and a lot of private docks, but some of these are not sturdy enough to support a wrecker or mobile welder (when needed to work on a boat.)

The 2002 CEI study found 275 moorings, berthing, slips and tie-ups for both commercial and recreational use in Jonesport. They also reported that 73% of the boat access is used by commercial fishermen.

Eleven commercial private and public waterfront facilities identified in 2002 are dedicated to commercial fishing use, another three facilities are accessible. Ninety-three percent of the access is through private residence, pier or wharves owned or leased by fishermen.

Facilities to maintain and repair vessels

One shipyard (Sune's)

Three to five places where minor repairs can be made without hauling out

Gear and supply shops

There are four companies, one of which is on Beals Island that supply lobster fishing needs.

Fuel

At least one company that buys lobsters supplies fuel

Ice

One commercial supplier of ice makes 3 tons per day. Two other companies make ice only for their own lobster business.

In the past there were three commercial suppliers, two in Jonesport-Beals Island and one in Addison.

Lobster Pounds

Lobster pounds play an important role in the economics of the lobster fishery. Beals Island and Jonesport, except during the summer, usually have top lobster boat prices.

The pounds are a very significant piece of Beals Island-Jonesport's infrastructure. There are about 13 to 15 in the two communities. These raise the boat price of lobster about 25 or 30 cents (average). Except for in the summer, this area has top prices (ex-vessel). The Coop buys about 1 million pounds annually. The rest the dealers in Jonesport-Beals Island buy about 2 million pounds. The dealers and coop are not major employers however their services are basic necessary to the landing and sales of the lobster catch. This is an important sector in keeping shoreline free from residential development.

Buyers/dealers

Lobsters and crabs are bought by the dealers (crabs are considered a bycatch of lobstering). One company primarily purchases lobsters from wharves for his pounds.

Processors

Crab picking

For many years, crab picking provided a cottage industry with convenient working conditions for homemakers and others. Dealer records reveal that in 1996, crabmeat payouts were made to over 200 individuals, representing flexible employment for one of every ten Jonesport and Beals Island residents and a total of \$300,000 in local income. Changes in processing standards instituted by HAACP drove this number down to almost zero in recent years. Many women were forced to seek new work outside the home, and often outside the immediate community. Outcomes include changes in patterns of domestic labor, household financial management, and child rearing. New grant programs exist to build HAACP compliant picking facilities, but the program has only created about 14 processing sheds (costing \$20,000 each) and 30 to 35 jobs, with less flexibility, independence, and profitability.⁹ Most crab is now picked in Canada.

Canneries

There were three sardine canneries here in the past. None remain.

⁹ Household livelihood strategies were similarly impacted in midcoast Maine when the same processing standards eliminated home shrimp picking.

Mussels

Processor purges the mussels, de-clumps them, hand picks stones and barnacles off.
 “People want it so they can just put it in the pot and not have to do anything.”

Transportation for fish and fish products

Trucks come to the dealers to pick up product and transport it to the various auctions, or even out of state (e.g., New Jersey). The rising cost of fuel as well as both road and fuel taxes may force some truckers out of business.

Coast Guard/port security

b. People

Experienced fishermen

Because of the clear dependency of the population on fishing, the limited availability of alternative occupations, the successful strategy of switching fisheries as needed, and the current viability of the lobster fishery, there is no shortage of experienced fishermen in the area.

Young fishermen

While the average age of the lobstermen in this area was reported as 50 years according to a survey conducted by the Downeast Lobstermen’s Association, Panel members and interviewees talked about young people who are still very interested in pursuing fisheries occupations. Some started out young, “rowing” a skiff in the dirt or lobstering by dragging pots through the dirt in their back yards. The school enrollment, however, is projected by the state to decline, due to lower birth rates.

Skilled trades

Boat Mechanics- two in Jonesport, one in Columbia Falls, and one in Milbridge.
 “You can’t get it done fast because they’re busy, but there are options.

Boat builders provide about 20 jobs in Jonesport-Beals Island.

Women’s work

Crab-picking was a common occupation for women in Jonesport and Beals Island before the HACCP regulations required separate rooms with stainless steel sinks, etc. In the past, crab-picking could be done at home while raising children—a flexible occupation. For that time, women could meet the expectation that one informant noted as “men made the income, women kept the house.” (That expectation may be more ideal than real, however, as women traditionally worked in the 3 sardine canneries.)

A few sternmen on lobster boats are women.

Other jobs commonly held by women include working for a bank, an insurance company, nursing, running a bed & breakfast, house-cleaner, blueberry-picking, teachers, school-board

c. Intangibles

Permits

With only one groundfish permit left in Jonesport-Beals Island and the proliferation of limited access to other fisheries, Panel members are concerned that if lobster catches or markets decline, local access to fisheries will be lost.

Insurance for vessels (hull, P/I)

One interviewee noted that in the past, fishermen took care of their well-maintained boats because there was no insurance if something happened. Now, the cost of insurance varies with the target species/gear (e.g., trawling is more expensive than lobstering).

Markets for fish

Both quahogs and mussels are sold before they are caught.

Fishing industry organizations

Maine Lobstermen's Association was said to have been founded in Jonesport-Beals Island in 1957 when prices for lobster dipped to 25 cents and the fishermen tied-up so prices went back up to 30 cents per pound. At that time a good lobsterman caught 100 pounds of lobster with a few 300-pound days.

Fishermen's training

In order to obtain a lobster license all are required to serve in an apprenticeship program. Occasionally this has proven annoying to experienced fishermen who let their license lapse while participating in other fisheries. They, like the young people who are just starting out, must serve as apprentices in order to regain their lobster license.

Museum

A herring museum may be established in Jonesport.

Public relations for the fishing industry

NOAA's Local Fisheries Knowledge project through the Jonesport-Beals High School is helpful.

Quality of life

Panel members expressed a strong interest in learning more about Stonington Fisheries Alliance's process of setting principles and examining values. It was thought to be important that the panel members consider the community's long-term interest (rather than individual's short term interests).

Panel participants are concerned that license moratoria, limited entry and reduced flexibility in the industry are diminishing opportunities for young people to move into the industry. Since there is little alternative employment in the area, parents fear that their children will be forced to move in order to find jobs. Panel members want to retain the right to fish for themselves and their descendents.

Others claimed that young people were moving away because of the cost of housing and increases in property taxes.

Appendix 1

Interviewees and panel members

Robin Alden	John Church
Arthur Alley	Gloria Feeney
Ted Ames	Eddie Hagan
Herman Backman, Jr.	Colleen Haskell
Ann Beal	Ted Hoskins
Becky Beal	Buster Huntley
Charlotte Beal	Vickie Huntley
John Beal	Amr Ismail
Ian Beal	Mike Kirby
Wayne Beal	Oscar Look
Albert Carver	Steve Peabody
Cal Carver	Dana Rice
Dwight Carver	Danny Rodge
Mark Carver	Ralph Smith
Rosalie Carver	Buddy Taylor
Stephen Carver	

Appendix 2

Businesses, Structures, and Space

Vessel Haul Out

Jonesport Shipyard (Jonesport)

Engine Repair

Dennis Welding (Beals Island)

Toppins Diesel & Marine Service (Columbia Falls)

Gear and supply shops

General (buoys, heads, vents, rope, hogrings, drags, survival suits, boots, gloves, paint, oil, clothing)

Jonesport Fishing Supply (Jonesport) (not currently supplying dragging gear)

East Bay Fishing Supply (Beals Island)

T.A. King & Son Marine (Jonesport)

Moosabec Marine (Jonesport)

Miscellaneous

Church's True Value Hardware

Traps

Friendship Trap Company (Columbia Falls)

Boats

Wayne Beal Boat Shop (Jonesport)

Beals Boat Shop (Milbridge)

Fuel

Hopkins Point Lobster

Ice

Ralph Smith

Two others supply only their own lobster business

Lobster Pounds

Albert Carver's

Elmer

Deep Cove

Flying Place

Hixie Head

Barney Cove (Beals Island)

Great Wass Seafood (Beals Island)

Ordman's

Shipp

Mill Pond

Perio Point

Long Point

Jonesport

Dealers/buyers

Lobsters and crabs

Beals-Jonesport Co-op

Look O.W. and B.S. Co. Inc.

O.W. Look & Son
Looks' Live Lobster
Smith's Lobster
Hopkins Point Lobster (Jonesport)
Perio Point Seafood (Beals) – closed in winter
AC Inc. (Beals)—buys from other dealers for their pound

Clams, quahogs

AC Inc. (Beals)
Atlantic Shellfish

Wrinkles

Snails R Us (Beals)
Atlantic Shellfish

Mussels

Moosabec Mussel
Atlantic Shellfish

Urchins

No local buyer—processors send trucks and pay cash for urchins

Worms

Coastal Bait

Scallops

Perio Point Seafood (Beals) – closed in winter
Atlantic Shellfish

Processors

Ralph Smith (mussels)

Marinas

Jonesport Marina

Restaurants

Tall Barney's

People

Mechanics

Dennis Smith
Dennis Welder
Harold T. (Columbia Falls)

(Milbridge)

Boat builders

Wayne Beal
Calvin
Ernie
Sune
Dougie Dodge

Intangibles

Fishing industry organizations

Maine Lobstermen's Association
Downeast Lobstermen's Association

Research

Founded by UMM Professor Brian Beal, Beals Island Regional Shellfish Hatchery is the world's only soft-shell clam hatchery and Maine's only public shellfish hatchery. (cultivation of soft-shell clams, lobsters and sea scallops for stock enhancement)

Downeast Institute for Applied Marine Research & Education on the site of the hatchery. This 9,500 square foot marine laboratory will function as a marine field station

Museum

Herring—Ronnie Peabody and wife are building one in Jonesport (?)

Aquaculture leases

Maine Coast Nordic—Net pen culture of salmon, haddock, halibut, cod (Sand Cove North, Great Wass Island; west of Spectacle Island)

John Wood—suspended culture of giant sea scallops or blue mussels (Moosabec Reach)

Isaac Beal—bottom culture of blue mussels (Hixey Head, Alleys Bay)

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