

APPENDIX 1

New Bedford's Commercial Fishing Infrastructure Report 2004

Community Panels Project

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Introduction

Since 2000, New Bedford has been the highest grossing fishing port in the country. It is the East Coast's largest groundfish port and the center of the country's sea scallop industry. In 2002, fishermen landed \$169 million worth of seafood in New Bedford, a record for the city and one of the highest values ever recorded in the nation for a single port. A considerable portion (around 60%) of that value stems from the scallop fleet, which has seen a remarkable turn around in the last five years since it reached a 25-year low of \$30 million in 1998.

If New Bedford's shoreside infrastructure has stability today it is because of the scallop industry. New boats have been steadily steaming into the port to replace the aging fleet. New Bedford is not, however, a one fish port. In addition to scallops, it is the top groundfish port on the East Coast. In addition to the scallop and groundfish fleets, New Bedford is also home to a fleet of monkfish gillnetters, inshore and offshore lobstermen, clam dredges and fish-potters. While many shoreside business owners count their blessings in having the scallop fleet, they stress that their business plans have been modeled on the entire fishing fleet and the character of their community depends on all of these species.

New Bedford is a self-sufficient, "hub" port, in that a commercial boat does not have to travel to another port for any services. Everything is provided for at home. In fact, many boats from other ports come to New Bedford to use its services. One of the reasons New Bedford has remained atop the landings chart is that the port's auction (which operates daily with separate auctions for groundfish and scallop sales) and processing facilities attract boats from throughout the Northeast. Scallopers from Stonington, CT and groundfish boats from Massachusetts, Point Judith, RI, Long Island, NY and New Jersey sell their fish in New Bedford because of the prices obtained at the auction and the port's ability to accept large quantities.

Where other major ports may have a handful of fish processors, a couple of gear shops and a fuel service, New Bedford has an estimated 75 processors, several dozen gear shops and four fuel companies. In addition there are two shipyards, two ice plants, four settlement houses and ten engine shops. It is estimated that around 300 businesses in the New Bedford region are directly involved with the fishing industry. A 1999 report by the New Bedford Chamber of Commerce found that the seafood industry contributed nearly \$609 million in sales and 2,600 jobs to New Bedford.

There are relatively few "essential" facets of the infrastructure that the port is currently lacking (additional dock space and port security are at the top of the list). Unlike some of the other ports in the region, New Bedford businessmen are not afraid of losing the commercial fishing infrastructure, but some fear consolidation and corporate take-over of what has traditionally been family-owned and operated businesses. New Bedford seems confident that it will remain a fishing port, the question is, what will it look like?

At times, New Bedford has been referred to as the "sleeping giant" of the New England fishing community. This refers in part to a belief held by some outsiders that New Bedford

wasn't affected by government actions in the same way that smaller ports were, and could sleep through them. However, New Bedford has seen its share of businesses converted to coffee shops and boats scuttled for artificial reefs. In 2003, a community panel easily compiled a list of 30 fishing-related businesses that had closed their doors in the previous five years.

Another reason why New Bedford may be viewed as a sleeping giant is because so little is known about its fishing community. There are many barriers that separate the fishing community from the rest of the city. Business owners have talked about the physical barrier that developed when Route 18 was built up and the fishing community was effectively cut off from the rest of the city by a major highway. Others have mentioned the language barrier in the New Bedford dragging fleet, which is primarily Portuguese¹ with many fishermen still speaking their native tongue. In addition, there is a social distance between fishermen and other community members stemming from perceived drug use and associated ills, a reputation exacerbated by two series of articles in the local paper.² In fact, barriers exist in every fishing community since most of the work is done at sea, out of sight of the rest of the community.

Apart from a report in *New England's Fishing Communities*, there have been very few studies of New Bedford's fishing community or documentation of its infrastructure.³ Perhaps, Herman Melville's tale of *Moby Dick* is the most recent account of the life of a New Bedford sailor. According to grumbling in the fishing community itself, not even the city newspaper has a firm grasp on the city's leading industry.

In this study, one of the questions asked of business owners is whether or not fisheries management groups have approached them in the past to talk about how regulations might affect their operations. The response of one businessman summed up those of his colleagues: "I've been running this place for 30 years and this is the first time anyone has ever asked me about my business."

The city and the fishing community are starting to bring down these barriers by making the port more open to visitors. The fishing community is becoming more active in organizations. As a result, the sleeping giant is being roused.

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,

¹ New Bedford has the largest percentage of Portuguese population in the United States. Hall-Arber, et. al. 2001 found that the majority of the dragger fleet is Portuguese, while the Norwegian population in New Bedford/Fairhaven tends to work on or own scallop boats.

² Ryan, Winnie. Personal communication.

³ Hall-Arber, Madeleine, Christopher Dyer, John Poggie, James McNally and Renee Gagne. 2001. *New England's Fishing Communities*. MIT Sea Grant College Program. MITSG 01-15, sometimes referred to as the MARFIN report.

Executive Director, Massachusetts Fishermen's Partnership; Dr. Madeleine Hall-Arber, anthropologist at MIT Sea Grant College Program; and Dr. Bonnie McCay, anthropologist at Rutgers University are the principal investigators. Dr. David Terkla, economist at U Mass Boston, is a consultant to the project. 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), Portland (Maine) and Pt. Judith (Rhode Island). The other two represent the small and medium-sized ports typical of the area: Beals Island (Maine) and Scituate (Massachusetts).

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 (Amendment 13 to the Multispecies Fishery Management Plan). Later, as the Panels Project matured, the issue of infrastructure resonated in all of the panels and became a topic of regional interest. An effort was made to analyze on the whole range of infrastructure needs and services provided in each of the major ports involved in the project.

Data collection methods were adapted in New Bedford to better accommodate the size of its fishing industry. An initial step was to compile a list of businesses that directly serve the fishing industry. The baseline list was a merger of telephone directory listings, additional companies suggested by industry members and the list of businesses in the New Bedford Port Directory, published by the city's Harbor Development Commission. This resulting list contained over 250 businesses in the city of New Bedford and surrounding regions. While we knew that some of the businesses on the list might not be of interest to the study of commercial fishing infrastructure because they serve only the recreational fishing or pleasure boating communities, we also were aware that other businesses would be missing because their services are not overtly dependent on the industry (trucking companies, packaging companies, etc.). The community panel was then called upon to edit the list based on their knowledge of the businesses in the community.

Once the universe of commercial fishing related businesses was roughly laid out, the coordinator and researchers agreed that one business from each genre (gear supplier, fuel service, ice plant, packaging producer, shipyard, engine dealer, electrical services, etc.) should be selected for an interview to gain an overview of the port. Once this information was collected, a community panel meeting with the owners of these businesses was held to review the data collected and comment on topics, issues, or other aspects that were considered important to understanding the infrastructure of New Bedford.

Infrastructure Needs

New Bedford is a self-sufficient fishing port. Instead of steaming to other ports for services, many boats from other ports come to New Bedford to use its services. This is a boon for local businesses, especially those that depend on volume (e.g., ice, fuel). It is, however, not without complications, the two most noted being inadequate docking space and port security. With 250 registered boats vying for 60 dock slips, New Bedford may be the most crowded commercial fishing port in New England. Business owners have stressed the difficulty in providing services to boats that are rafted four and five deep. In addition, the port's security is nearly non-existent. The port is without its own security force, or even security system (adequate lighting and fencing) and must depend on local police forces to make periodic visits as part of their patrols. Business owners noted that theft and burglary are on the rise and that a port authority may be necessary to curb further incursions.

As annoying as the space and security issues are, they are not considered by the Community Panel members to be the most serious concerns for the industry. They are instead viewed as negotiable problems that could be resolved with additional funding and/or the restructuring of current systems and agencies. What panelists did raise as a fundamental concern is the ability of the fishing industry to survive in the long run. Contributing to their concerns are the perceived negative impacts of two intangible aspects of infrastructure needs, i.e., the absence of the business community's voice in local and regional management decisions and the negative portrayal of the seafood industry by environmental groups through the media.

The lack of communication between the shoreside infrastructure business owners and fisheries managers was identified as one of the reasons for sudden and unexpected rule changes. The inability to predict changes has led to a host of business problems including stockpiles of outdated inventory, holds on renovations and upgrades, difficulty securing a loan, and the inability to hold a workforce.

For active hub ports, the following were first identified by the Gloucester Community Panel as essential to attract and sustain commercial fishing. New Bedford has at least one, usually multiples of each of these. Though not explicitly identified by the Gloucester panel as an essential component, both Gloucester and New Bedford have benefited from a harbor planning process that incorporated commercial fishing industry needs.

A. Businesses, Structures, and Space

- Mooring/Dock space
- Facilities to maintain and repair vessels
- Gear and supply shops
- Open space to work on gear
- Fueling facilities
- Ice plant(s)
- Fish buyers/auction
- Fish processors
- Transportation for fish and fish products
- Coast Guard/port security

B. People

- Experienced fishermen (including captains)
- Young fishermen (including young captains)
- Gear technicians (for repair and design)
- Lumpers
- Settlement agents
- Maritime attorneys
- Skilled trades
 - Welders
 - Electricians
 - Diesel engine mechanics
 - Commercial divers/ underwater welders
 - Electronics specialists
 - Refrigeration specialists

C. Intangibles

- Insurance for vessels (hull, P/I)
- Markets for fish
- Financing for shoreside operations
- Fishing industry organizations
- Voice for the community in fisheries management
- Long-term vision/planning for the harbor
- Positive public relations for the fishing industry
- Clear lines of communication between the community/industry and government decision-makers

Discussion of Selected Elements of New Bedford's Shoreside Infrastructure

Businesses, Structures, and Space

Harbor Planning

In the cases of both Gloucester and New Bedford, state designated port areas (DPAs) and harbor planning have played critical roles in helping the cities maintain and support their commercial fishing infrastructure. Specifically, the DPAs must be maintained as “areas of concentrated maritime industrial activities or supporting uses.”⁴ Development in the DPA is reviewed through the Massachusetts Department of Environmental Protection (DEP) Chapter 91 (21) and Massachusetts Office of Coastal Zone Management (CZM) Federal Consistency Review (22) processes. DPAs are also considered high priority for state and federal funds, including those available under the Seaport Bond. The DPA of interest here includes portions of the New Bedford harbor on the west bank of Buzzards Bay and the town of Fairhaven on the east bank.

In 2004, New Bedford was designated as a demonstration pilot “portfields” project. Portfields is a federal interagency effort to redevelop brownfields (i.e., contaminated real property) in port and harbor areas.⁵ The agencies partner with the port to “provide targeted resources to assist the pilot ports in redeveloping brownfields and revitalizing waterfront areas, improving marine transportation, and protecting and restoring coastal habitats.”⁶ This designation helped streamline the processing of the navigational dredging project by Bridge Terminal (Fish Island). The designation is also expected to help New Bedford/Fairhaven achieve the other high priority projects identified in the New Bedford-Fairhaven Harbor Plan including “waterside brownfields remediation and reuse, pier and bulkhead enhancements; and the creation of public access points on the harbor.”⁷

The dredging by Bridge Terminal was critical for facilitating access to Maritime Terminal, one of the largest US Department of Agriculture-approved cold storage facilities on the East Coast, and to Northern Pelagic Group, LLC (NORPEL), a herring and mackerel processing plant that opened in 2002. Prior to the dredging, freighters could not be fully loaded with the frozen product.

Hurricane Barrier

Since 1966, a 3.5-mile long, 26 feet above mean high tide, barrier, said to be the largest stone structure in the country, encloses the harbor except for a 150-foot opening. Two

⁴ <http://www.mass.gov/czm/envpermitdpa.htm>

⁵ New Bedford harbor sediment is contaminated with PCBs (polychlorinated biphenyl) and metals. It was listed by the US Environmental Protection Agency as a Superfund site in 1982 and cleanup has begun.

⁶ Portfields: New Bedford. U.S. Department of Commerce, NOAA, March 2004

⁷ The harbor plan may be downloaded from <http://www.ci.new-bedford.ma.us/portofnewbedford.htm> (Look under publications.)

large gates can be closed to seal the opening. The barrier protects both the fishing fleet in the inner harbor and a variety of industrial and commercial properties including the South Terminal, the site of many of the seafood processing plants, Green and Wood pier where a number of fishing vessels are tied-up, and the Whaling City Auction.

Dockage

Only active commercial fishing vessels that are seaworthy and possess adequate insurance are eligible to obtain docking permits. Fishing vessels that are temporarily using city-owned piers or bulkheads - including unloading catch at fish houses whose piers and/or bulkheads are maintained by the HDC - must obtain a daily permit.⁸

Inadequate dock space is a primary concern in New Bedford. The city's Harbor Development Commission (HDC) has jurisdiction over the city's waterfront property, including that along the peninsula, harbor and Acushnet River and property owned by the Commission. The HDC assigns moorings and enforces rules for use of the property it manages. However, though 250 commercial fishing vessels are registered for docking, the city only manages 60 dock slips along the 5 commercial piers used for commercial fishing berthing.⁹ The New Bedford/Fairhaven Harbor Plan includes plans to extend two existing piers (Leonard's Wharf and Homer's Wharf) to create more berthing. In addition, some of the seafood processors that lease land provide additional berthing to the fleet.

The shortage of dock space is, in part, a complication from a reduction in Days-at-Sea (DAS) as required by both the groundfish and scallop fishery management plans. Less time fishing means more time at the dock. Boats that once traded places when the other was out fishing are now both in port at the same time. "For the past five years I've noticed an increase in damage to the piers, boats sinking, and spills," said John Simpson, Executive Director of the Harbor Development Commission. "Boats raft three and four deep on some of the piers, making it difficult to maneuver as well as load stores and take fuel from trucks."

The berthing problem has also been exacerbated by specific instances of the loss of dock space. Several years ago the Steamboat Authority took control of the Hathaway Pier in Fairhaven sending 15 to 20 more fishing boats to seek berths in New Bedford. Also, "the HDC leases a portion of the State Pier from the Commonwealth to operate a ferry terminal"¹⁰ and berth cruise ships. While contentious due to the shortage of berthing space, the fuel dealers, welders, and other shoreside marine businesses benefit from the demand for their products generated by the ferry, cruise boats and their passengers. So, this diversification has helped maintain a higher level of services than would probably have been able to survive when fishing contracted.

⁸ <http://www.ci.new-bedford.ma.us/portofnewbedford.htm>

⁹ The five wharfs are: Homer's, Leonard's, Steamship, Coal Pocket and Fisherman's Wharves.

¹⁰ From interview with John Simpson, Executive Director of the NB Harbor Development Commission.

Nevertheless, “people are thinking of leaving this port because they don’t have enough space to tie up,” explained one business owner. “It makes our business harder and harder. It’s not safe. These boats aren’t made to walk across. It costs the owner more money because it takes more time to get on and off the boat. It’s all around difficult.”

Furthermore, some vessels berth at private docks for a fee, but are forced to sell their catch to the landowner-dealer, sometimes for a lower price than they would obtain at the display auction. “I lose 40 to 50 cents a pound over what they are getting at the auction. But what am I going to do? I can’t park ‘em on Purchase St. They have a hold on me. I can’t go [sell] where I want.”

The Harbor Development Commission charges a fee for dock space in an attempt to offset the cost of maintenance and expansion. In 2003, the fee was \$350 a year. In 2004, after six years without an increase, annual berthing fees rose to \$500 for vessels 50 feet or under and \$10/foot for larger vessels. Daily dockage fee is \$50. The additional money from berthing fees will fund engineering plans to extend the existing piers to create more berthing. The fishing fleet’s dock maintenance is subsidized by state funds and the fees paid at the local marina by recreational boaters. The annual operating budget for the Commission is \$900,000. Permits are issued for tradesmen to drive on to piers at \$250 per truck annually or \$25/day. Trucking permits generate \$50,000 of the budget and boat fees another \$90,000. The 196-slip marina at Pope’s Island that is also managed by the HDC generates \$400,000 (berthing is \$75/foot). These funds are used for marina staffing and expenses, but the surplus goes towards the offsetting the cost of the fishing piers.

The HDC is not responsible for any liability, theft, fire, or damage to persons or vessels using piers, bulkheads, or wharves under its control.¹¹

Several people on the panel had the feeling that if the commercial fishing fleet paid a little more in docking fees or excise taxes it could gain some leverage with the city to demand improvements in dock conditions. A risk assessment sponsored by the Seaport Advisory Council agreed that security improvements identified by the HDC and the city, including controlled access to piers, improved lighting, and video surveillance were needed.

The money generated in dockage fees could go toward maintenance. Major renovations, however, are generally funded by the state through the Seaport Advisory Council and cost several million dollars, well out of the range of anything that could be raised by the fleet in dockage fees.

Moorings

Under state law, the HDC issues mooring permits and regulates the placement of moorings for vessels, floats, rafts, and other bottom-anchored structures in city waters. Mooring fields that would increase moorings from 60 to 400 have been proposed for areas near Niemiec Marine, Cozy Cove, Pope's Island Marina, Gifford Street Boat Ramp, Frederick Street, Aquidneck Street, Butler Flats, West Rodney French Boulevard, Clark's Cove, and Padanaram Avenue.

¹¹ <http://www.ci.new-bedford.ma.us/portofnewbedford.htm>

Vessel owners

In contrast to the other major hub ports in the region, New Bedford has four individuals who are considered “fleet owners,” as they each own more than 10 fishing vessels. Nevertheless, a majority of vessel owners have one or two boats only. In the last few years, the scallop vessel owners have been more financially successful than have the dragger owners. Not surprisingly, some of the dragger vessel owners have sold their boats into the scallop fleet.

In 2002 New Bedford’s offshore fleet comprised 108 scallopers and 96 draggers (Georgianna & Shrader, 2005).

Vessel Repair and Maintenance

There are two major shipyards in Fairhaven that service the larger commercial fishing fleet: Fairhaven Shipyard and D.N. Kelley & Son. There are also several smaller boatyards where lobstermen can go to have their boats hauled out.

Fairhaven Shipyard and Marina

Approximately 65 percent of Fairhaven Shipyard’s business is fishing-related with boats hailing from Maine to Cape May, New Jersey. Most are scallopers and draggers ranging in size from 70 to 98 feet. Traditionally, vessels were hauled-out annually (or every 18 months). In 2002, both the scallop and groundfish industry sectors were coping with cutbacks in the days-at-sea so some owners were forced to delay hauling-out their vessels, a “disservice to the both the vessel and the fishermen.” Since then, the scallop sector has benefited from a striking recovery with new vessels and refurbished vessels joining the fleet. In the meantime, Fairhaven Shipyard diversified to tap into the recreational boating market in order to weather downturns in the fishing business. Of the 32 employees, the vast majority are skilled laborers including several who are former fishermen or members of fishing families. It is difficult work with hourly wages of \$15-18/hour, so it is sometimes a challenge to identify new-hires. On December 1, 2005, Fairhaven Shipyard was sold. The new owners are commercial fishing vessel owners and intend to keep the business going, servicing both the commercial and recreational industries.

D.N. Kelley & Sons

Kelley’s has transient slips, a 160-ton Travelift, and two railways to 850 tons, so is able to haul-out tugboats, steamships and ferries in addition to fishing vessels.

Gear and supply shops

There are dozens of gear and supply shops that service the fleet. In addition to fishing gear suppliers, New Bedford also has several businesses that provide food stores to the boats.

Two main concerns have surfaced through discussions with several of these business owners about the future: the inability to forecast changes and the consolidation of the fleet. Most business owners need six months to a year to adapt to regulatory changes to mesh size or gear design. They have been receiving much less, sometimes under a few weeks. One owner recalls having a container of netting in route from Portugal when the regulations changed to make it illegal in the Northeast. "It went to other places, but where I would have sold that in four months, it took me ten years. And instead of \$4, I got \$3."

Business owners feel that the National Marine Fisheries Service does not show them the respect they deserve and that has led to a feeling of resentment. "They teach you in a University to make a five year or ten year business plan, but how do you do that in this industry? You can't," said one owner. "You have to live one month to the next. You have to guesstimate. It's like a gambling game."

One recommendation is for NMFS to create a business liaison to work with the shoreside infrastructure. "NMFS doesn't understand fishing businesses, and doesn't make any attempt," explained one businessman. "There should be a liaison. There probably should be a federal extension of NMFS that handles the businesses. Something that can contact us and say, 'We're considering a change here, how long will it take for you to move X amount of material?' Because right now they just arbitrarily change things."

The second concern is consolidation of the fleet. The owner of one gear shop explained that the majority of his customers are single boat owners. Once an owner builds a fleet of boats they tend to do their work in house, thereby eliminating the middleman. "These big companies are taking over the boats," he said. "These companies have a tendency to go into all kinds of other businesses. Then they by-pass people like me. I think you will see a lot of things like that. Consolidation like that is happening right now. It is good for them, but I don't call it good for people like us. Our main business is fishing. We can't sell all of our nets to ball parks."

The third concern among gear shops is the restrictions in days-at-sea (DAS) placed on the boats. The less time a fisherman spends fishing, the less wear and tear there is on his equipment, which translates into less business for the gear shops. "If people only fish 52 days a year – that's one day a week – we're going to feel it," explained one owner. Another owner said "When the judge came down with that ruling a couple of years ago and cut 20% off the baseline [of DAS], we were off almost 20% exactly in business that year. Nobody wanted to do anything."

The following are the gear shops that have been interviewed to date:

IMP Fishing Gear Ltd.

Marine Division

IMP is a large supplier of gear to all types of commercial fishing. The company manufactures trawls for draggers, complete gillnets made and repaired, scallop gear and

ropes for lobster industry. While the fishing industry is always changing, IMP has become more diverse in the distribution of its products. They are North American distributors of netting ropes and hardware from Portugal and Scotland. IMP is also involved in research with SMAST regarding fishing and safety issues, and with several companies working on water quality issues. The company has a safety department that services life rafts, EPIRB'S and other safety equipment.

IMP Marine Group has 15 branches in Canada and 1 branch in New Bedford. The New Bedford branch has 8 employees while another works out of Seattle, WA. Several employees are experienced in both the military and commercial fishing and are fluent in Portuguese and Spanish. IMP is located in the busy South Terminal of New Bedford surrounded by processing plants and close to docks. The building is comprised of a retail store and large warehouse for storage of products. While everyone has struggled to deal with regulatory changes the diversity has kept them busy. The big picture problems consist of lack of time to sell inventory due to regulation change and cost/ availability of raw materials.

IMP Fishing Gear is also proud to sponsor several area youth sports groups that keep things in perspective.

Reidar's Manufacturing Inc.

Reidar's is a family operation, begun by Reidar Bendiksen, formerly a fisherman, and his wife, Kirsten. Located in Fairhaven, Reidar's is "committed to designing and building innovative new fishing gear used on trawlers and scallopers on the east coast of the US and Canada."¹² So far, the company has been able to survive downturns in the fishing industry by providing unique as well as skillfully designed and constructed gear. Reidar has invented several gear designs and customers return because of the success of their fishing nets and the friendly service at the shop. Tor Bendiksen (one of Bendiksen's two sons who are both active in the business) has taken the position as the shop's chief trawl gear designer and analyst. Skilled in trawlmaking he has attended a number of workshops and courses in places like the Newfoundland test tank, Scotland, Iceland and Hirtshals, Denmark where he studied trawl gear technology such as flat rockhopper gear, etc. The company also prides itself on excellent customer service.

Levin Marine Supply

Another family business, Levin's is in its fourth generation under Jerry Levin. The family has been in business since 1938 and at their present location in Fairhaven since 1964. Jerry's great-grandfather began by selling marine hardware. His father began making netting (literally, from raw materials) and nets in the 1960s. Both of his parents still work with him even though they are senior citizens. They don't like to hire other employees because it takes too long to teach them the trade and there are too many slow times when they would have nothing to do but push a broom.

¹² <http://www.reidarsmfg.com/>

Jerry has created several computer programs for net design. Levin's builds fishing nets for groundfish, shrimp, squid, fluke and other species along the East Coast. Unlike many other gear shops that have diversified, Levin's has remained focused on one single aspect of the trade – the nets. When a fisherman orders a net, Levin's designs it and builds it, from netting imported from Portugal, then sends it to another company to put it on a frame with ground cable and hardware.

There is significant lead-time to obtain netting (3 to 9 months) so unanticipated changes in net sizes create problems for the business and its customers.

New Bedford Ship Supply

Founded in 1932 by the current owner's uncle, Rasmus Tonnessen, New Bedford Ship Supply is a ship chandlery. It provides fishing boats with many of the supplies they need for a fishing trip including food, personal gear, some fishing gear (hooks), etc. The company also makes scallop bags and works rigging on the state pier (renting space for \$40,000/year). According to a National Park Service plaque honoring Tonnessen, "He probably single handedly helped more fishermen get started than any bank ever did by putting up the initial money. And he never pushed them for the money until they were on their feet."

Twenty years ago, Ship Supply employed 32 people. Fifteen years ago that number dropped to 24 people. Since 1994, as people died or retired they were not replaced. Now ten people work for Ship Supply: three people in the office, one in the butcher shop, one stitching scallop bags, two on the state pier doing rigging (wire, splicing, gear) and three people in the back loading stores and driving trucks.

Open space to work on gear

Outside of the piers themselves, New Bedford offers very little open space to work on gear. This issue, however, was not raised as a particular problem by any of the shoreside businesses. Scallopers often work on their dredges directly on the boat and trawlers use the dock space to stretch out their nets. Some fishermen noted that extra gear is stored at their homes.

Fueling facilities

Four fuel companies service the fleet: Sea Fuels, Bay Fuels, Warrior Fuel and Pier Fuel. The biggest change in the fishing industry-related fuel business is attributed to DAS regulations. Business has dropped considerably because the boats aren't out fishing as much as they once were. In addition, when scallopers are fishing in closed areas, they make a tow and then idle while they shuck. A closed area trip burns 2,200 gallons while an open area trip burns 8,000 gallons of fuel. Nevertheless, the overall volume of fuel purchased by the scallop fishery has not been drastically reduced since some owners have added additional vessels. Homeland Security regulations have required significant investments in planning (certified by an engineer) and erecting fencing, lighting, cameras.

The fuel companies have diversified by servicing recreational and other non-commercial fishing vessels in season (summer) such as the cruise vessels, ferry, barges and

sand-haulers. One business owner noted that there was sufficient demand for the existing businesses as long as no one “tried to get greedy.”

Sea Fuels

Sea Fuels, with 7 full-time employees, is located just to the north of Fishermen’s Wharf next to Crystal Ice. They have the only freestanding fuel supply-docking warehouse in the harbor. In addition, they have a warehouse where they sell all of the petroleum products a boat requires including lube oils, hydraulic oils, supplies, light bulbs, and rags. Every morning the company delivers fuel to the boats by barge and/or truck. The barges do have an advantage over the trucks since they can fuel the boats while the vessels are unloading fish and they don’t have to worry about snaking a hose over the docks and across other boats as they sometimes do with the trucks, especially when the boats are rafted out. Sea Fuels took over their present location from the Fish Co-op in 1995.

Bay Fuels

Bay Fuels, with 8 full-time employees, sells fuel, netting and electrical parts catering to scallopers, draggers and gillnetters. Like Sea Fuels, they primarily use a barge to provide fuel to the vessels. They do have a fuel truck and may eventually diversify to heating oil as well as vessel fuel.

Ice Companies

Crystal Ice

In the business for about 50 years, Crystal Ice is New Bedford’s primary source for ice. Several smaller ice plants in New Bedford and Fairhaven have gone out of business or service in the last ten years leaving Crystal with the lion’s share of the fleet. A second company, Easton Ice, north of the bridge, provides ice to their own fleet of scallop boats. Crystal Ice is a family business that was started in the 1940s by the current owners’ grandfather. Two large, red brick buildings house the plants operations just to the south of the Route 6 Bridge and the company employs 10 people full-time, adding a couple of people in season if needed.

Crystal Ice produces block, packaged and crushed ice. Vessels usually take between 10 and 20 tons of crushed ice per trip. A small percentage of the company’s business is providing packaged ice to retail stores. They have a bulkhead with three access points for the boats to load ice. They also have six trucks, some of which are equipped with grinders and blowers, that deliver directly to the fish houses and boats. They provide ice for about 90 to 95 percent of the dragger fleet and quite a few of the scallopers. In addition, they send trucks to Boston, Scituate and Provincetown because those ports don’t have ice plants.

Much like the fuel companies, ice plants are affected the most by cuts in DAS and the “blocks out.” Every day that the boat is tied to the dock is a day that it isn’t using fuel or ice. “A few years ago things were running right around the clock, now we really don’t have to,” said a plant manager. “It basically started when they had started the government buy-back when they were buying up some fishing boats here and there. And with all the regulations that have gone out over the last few years we just don’t need to produce like we used to.”

Fish buyers/auction

Whaling City Auction

A majority of the fresh seafood landed in the port comes through the Whaling City Seafood Display Auction owned by brothers, Richard and Ray Canastra. Fish unloaded at the auction is culled for size, weighed, boxed, iced and set out in the cooler for viewing in 100 to 1500 pound lots, tagged with date and vessel. Scallops are culled for count size and categorized by harvest area (e.g., Channel, Georges, Mid-Atlantic). Buyers from 32 seafood companies (i.e., 25 for finfish, 18 for scallops) examine the product and then bid on it. There are two auctions each morning, at 6 am for groundfish and 9 am for scallops. The auction charges buyers 12 cents a pound for handling groundfish and 15 cents a pound for scallops.

When the seafood is purchased, the winning seafood company trucks the product away and sellers are paid the same day. However, if the seller (boat owner) is unhappy with the price, he retains the right to “scratch” to force a new bid. From time to time a vessel needs an advance for fuel or groceries and the auction “just takes it out of their settlement.” There are several major species (lobster, whiting, squid) that are not part of the auction, however, these products can be unloaded and shipped through the auction for an unloading/pack out fee.

The auction was formed in 1994. For many years, a city-sponsored auction (though not a display auction) operated on the waterfront out of the Wharfinger Building but it was closed in the mid-‘80’s partially as a result of a strike by the Seafarer’s Union. The Lumper’s Union ran an impromptu, outdoor auction during the interim.

The Buyers and Sellers Exchange (BASE) is the electronic auctioning company that Whaling City Seafood Display Auction owns and operates.¹³ “Competition and quality determine the price.” The auction employs 32 people, 6 in the office, the rest on the floor. The majority is Portuguese.

¹³ From the Whaling City Seafood Display Auction website:
<http://www.whalingcityauction.com/howitworks.htm>

MacLean's Seafood

MacLean's buys swordfish, tuna and lobsters and sells to wholesale distributors across the globe.

Fish processors

“The fishermen had a good product, but no market. You can't snap your fingers and create a fish processor. Especially if someone buys the land for an office or condo.”

A 1999 tally by the New Bedford Chamber of Commerce reported 75 processors with a wide range of sizes, capacity and numbers of employees. Furthermore, many of the processors rely on imported frozen blocks of fish that are slacked out, portioned, breaded, packaged and refrozen.

Norpel

Norpel, one of the newest processors in New Bedford was founded in December 2002 specifically handle herring and mackerel. The fish are sorted by size, frozen in blocks, glazed and boxed for shipment overseas. They own two fishing boats, but process landings from a number of others. Six full-time employees work for Norpel, 25 work each shift when herring is being processed. Quality product is assured with careful attention to date, temperature of RSW tanks, hopper, pre-grading, etc. Theirs is the only plant with vertical plate freezers for herring on the East Coast, most plants handling pelagics use blast freezers. Norpel freezes food grade herring and mackerel for export to Europe and processes other herring for lobster bait.

The company works closely with Maritime Terminal that employs 10 full-time. The large cargo vessels create a demand for stevedore work, fuel, chandlery and electronics.

*Northern Wind Seafood, Inc*¹⁴.

With their 43,000 sq. ft. dockside facility, Northern Wind Seafood offloads, processes, packs and ships seafood to their customers' specifications. They are one of the world's largest suppliers of fresh and frozen scallops from all over the world. They also handle lobster and a variety of finfish. If customers require IQF frozen products, their freezing facility is equipped with state of the art technology. Their fleet of refrigerated vehicles, additional ground transport, short transit times and proximity to international airports helps ensure delivery of high quality products.

*Marlees Seafood, Inc.*¹⁵

Mar-Lees Seafood, LLC. is a privately held company engaged in the production and distribution of fresh and frozen seafood products. Mar-Lees is an integrated importer,

¹⁴ <http://www.northernwind.com/>

¹⁵ <http://www.marlees.com/>

processor, packager and distributor of scallops and shrimp to the foodservice, wholesale and retail trades. Mar-Lees products include fresh scallops, individually quick frozen (IQF) scallops and shrimp, block scallops, cooked shrimp, bottled shrimp and seafood related sauces. The company believes they are the largest producers of IQF scallops in the U.S. Mar-Lees source a wide variety of seafood products from numerous worldwide locations, utilizing nearly three dozen various suppliers from eighteen to twenty countries.

Frionor

Frionor's processing plant specializes in breading and battering seafood products. The plant produces a wide variety of frozen breaded and battered products tailored to key market segments of the U.S. foodservice industry. This facility also produces quality sea scallops from the New Bedford plant under the American Pride Seafoods brand name. The Frionor Brand is fully HACCP approved and compliant.

North Coast Seafoods

January 2005 saw the completed construction of a 60,000 square foot seafood processing facility for North Coast. The new structure contains IQF production areas, finished and raw cooler spaces, new production lines, freezer, dry storage, refrigerated dock space and employee areas.

Packaging

Packaging Products Corporation

Since 1961, Packaging Products Corporation has been manufacturing and distributing packaging for the perishable food industry. Eighty percent of their business is focused on seafood packaging, which they distribute on the East Coast from Portland, Maine to Key West, Florida. They also produce packaging for the floral and medical industries. In 1983 this family-owned and operated business relocated to the North Terminal of New Bedford and opened a warehouse and distribution center in Miami, Florida. (Formerly it had operations in Rockland, Scituate and Plymouth). The primary seafood products for which packaging is produced are the ground fish and pelagic species harvested in New England, the Chesapeake area and the warm water species caught in the southeast coast of the United States. PPC also has extensive packaging offerings for the shipment of live shellfish including lobsters, clams, oysters, crabs and shrimp. "We develop products for what is landed. When the government decides that we are going to push monkfish or haddock we design products specifically for these species, which will retain their value in the market place." "Creating new molds for insulated or rigid plastic containers takes both time and money. Timelines of six weeks to six months and up to a half a million dollars per product are common." The company employs twenty-seven full-time and six part-time workers.

Road Access

Route 18

Route 18 is a mixed blessing for the fishing industry in New Bedford. It allows trucks easier access to and from the waterfront, and connects to the Interstate system, facilitating movement of product to far distant points. As noted earlier, however, it has separated the fishing industry and working waterfront from the rest of the downtown area, apparently creating a distance that is much greater than the actual physical separation.

Route 6 Drawbridge

Those who service the fishing vessels find that the drawbridge between New Bedford and Fairhaven can be the source of major delays for truck-based services.

Transportation for fish and fish products

Freighters

New Bedford is considered a deep-water port with an average depth of 30 feet at mean low water. Maintenance dredging is a requisite. With funding from the Commonwealth, HDC recently completed dredging around Bridge Terminal that is expected to improve access for ships taking frozen herring and mackerel from the NORPEL processing plant (flash freezing operation) to international markets.¹⁶

Trucks

Trucks hauling frozen imported product to the processors serve various other sectors of the industry. "The key to shipping high volume/low value product is the backhaul, which they get in New Bedford. If they were even over in Mattapoisett the trucks wouldn't want to come."

Coast Guard/port security

Until recently, the Coast Guard had a presence directly in the port. Two 270-foot Coast Guard Cutters were stationed at New Bedford's State Pier until 2003, but were moved to Maine for national security reasons. The harbor, being open to fishing 24/7 did not provide enough protection for the cutters.

Port security is an issue that is in need of investment. The fleet has seen a rise in vandalism and burglary recently. Outside of the routine patrols of the local police force, the port has very little to deter crime. There is no specific security force, very little lighting and no efforts to control access (fencing, or gates). "[Police presence] is a good deterrence," said John Simpson of the HDC. "But better lighting and controlled access points would be

¹⁶ The Massachusetts Seaport Advisory Council advised the Commonwealth to provide \$5 million for New Bedford's dredging projects. For a brief discussion of the Seaport Advisory Council, see the South Shore Community Panel's Final Report.

better at protecting the industry's assets. There's been vandalism. There's been arson. There's been illegal dumping."

People

Experienced fishermen (including captains)

The aging of the fleet was mentioned by several Panel members. A recent publication noted that the average age on scallopers is 40, with 19 years experience and on draggers the average is 46 with 26 years experience (Georgianna and Shrader, 2005). Scallop vessels are limited to 7 crewmembers. Draggers are not directly limited by regulation, but some boat owners and/or captains take fewer crew than in the past, so that the proceeds from the catch are divided among fewer crewmembers. Limitations on DAS also contribute to the sense that every crewmember must be a full contributor since there is no time to waste. Naturally, this makes experienced crew all the more valuable.

Young fishermen (including young captains)

A growing problem throughout New England is the lack of young people (commonly called "young blood" by the fleet) interested in going fishing. A common story among fishermen is that they try to dissuade their children from the fishing life, telling them to go to college or find a job elsewhere. At the same time, most fishermen seem to recognize that there is a serious problem when the average age of crewmembers in the fleet is in the upper 40s.

Regulations are blamed as the primary culprit, either because they keep young people from becoming interested in fishing or because they restrict captains so that they can't afford to take an inexperienced deckhand. The scallop fleet complains of this because they are restricted on the number of days they can fish. A "shacker" or "greenhorn" can't shuck as fast and therefore slows down the operation of the boat. With days at sea at a premium, a captain can't afford to spend any more time at sea than he has to.

Among the dragger fleet, captains who are restricted on the amount of fish they can keep and DAS will cut back on their crew size. In the smaller fleet (lobster, fish pot and inshore gillnet), captains can't afford a deckhand at all often are fishing alone. These situations raise considerable safety concerns.

Fish cutters

During the strike in the mid-1980's the city lost some of its skilled labor including fish cutters. A number of the processors converted their operations to use automated cutters. Today, with the increases in minimum size (by regulation), some of the fish is too large for the automated systems so there is an increased demand for cutters.

A recent raid (2005) by the Coast Guard and Immigration officials of a fish processing plant in the city highlighted the issue of labor for processing. The highly competitive food business keeps wages relatively low in fish processing, so the plants

often hire immigrants through temporary employment agencies. Many of the workers are from Guatemala or El Salvador, and often are not documented. Nevertheless, some have worked for the same companies for many years, saving the company training costs.

Gear technicians (for repair and design)

See discussion under Gear and Supply companies above.

Lumpers

Lumpers are laborers who offload fish from the fishing vessels when they land their product. New Bedford has a lumpers' union, the New Bedford Fish Lumpers Union, Local 1749 I.L.A. The local also manages retirement pensions for union members through the New Bedford Fish Lumpers Pension & Welfare Funds.

Settlement agents

“There are five settlement houses in the port, including a vessel owner that does his own settlements and those of other vessels.”¹⁷ Among the best-known houses are Dawson's, Edie Marie, Luzo and Solveig. They play an important role in the industry, fulfilling most vessel's accounting needs as well as regulatory needs by keeping the boats up-to-date with their license paperwork.

Maritime attorneys

Welders

Electricians and power supply

Marine Electrical Services

Marine electricians have a more difficult task than their land counterparts because their work must be able to bear the pressure of a wet, corrosive environment. One electrician said that he hires young electricians and then trains them on the job. As a result there is an added investment in employees. Marine Electrical Services has four employees and works exclusively with the commercial fishing industry to provide electrical service, which includes supplying lighting, cable and electrical systems. The company's customers are from New Bedford/Fairhaven, but others may come from as far as Gloucester and/or Stonington, CT.

¹⁷ Georgianna, Daniel and Debra Shrader. Employment, Income and Working Conditions in New Bedford's Offshore Fisheries. Final Report for NMFS Saltonstall-Kennedy Program, June 22, 2005, p.11.

Diesel engine mechanics

There are several businesses that service diesel engines in the port.

R.A. Mitchell

R.A. Mitchell has been in business since 1954 designing, manufacturing, testing, installing and servicing a wide variety of diesel, gasoline and gaseous engine equipment.¹⁸ They sell and service 90% of the commercial fishing fleet's small engines and generators. The fishing industry used to be their primary customer base. Even five years ago it made up 60% of their business, but has fallen to about 20% with the buybacks and cutbacks in DAS. Nevertheless, the company considers the fishing industry the mainstay of New Bedford's economy. Consequently, "we try to keep parts on the shelf to keep the boats going." They have diversified into other products and industries such as providing contractor's equipment, generators, including custom built, engines on tree chippers, engine service, pumps for sewers, etc. "We do all of this or go under," said owner Bob Mitchell. "We have to branch out. We made a business on supporting the industry. If the fishermen cut back and then there are only so many fishermen buying your product then you have to look for another way to make money."

Brodeur C.P.

Brodeur C.P. is New Bedford's Caterpillar engine dealer, providing sales and service to customers from Maine to New York. This family owned and operated business has 7 full-time employees. They have been in business for 35 years and up until 10 years ago all of their business came from the fishing industry. Now the percentage of fishing-related business hovers at 60%. Besides the cutbacks in DAS that result in fewer engine repairs, dockside crowding can be problematic. "We can't carry 100 pounds of parts and equipment over three boats!" The company has picked up various government contracts including Coast Guard business and have found that they "are nice guys and they pay their bills on time."

Commercial divers/ underwater welders

Electronics specialists

Weeks Marine Electronics

The oldest continuously-owner-operated marine electronics business in New Bedford is Weeks Marine Electronics (founded in December, 1970). While there were 10 to 13 electronics businesses in the harbor in the 1970's and '80's, three remain: Chris Electronics, Tomtronic and Weeks Marine. Weeks specializes in autopilots, an important niche since crews have been downsized. However, the end of the shipbuilding boom,

¹⁸ <http://www.ramitchell.com/>

government regulations that limit fishermen's days at sea, as well as setting closed areas and species quotas, have affected the electronics business and led to the loss of related marine businesses nearby. In addition, in part due to fishermen's efforts to economize, it is more difficult to predict demand for service than it was in the past.

Refrigeration specialists

Intangibles

Insurance for vessels (hull, P/I)

Insurance costs have been increasing 15 to 50 percent (\$15,000+) despite vessels spending fewer days-at-sea. In addition, insurance companies have become less willing to cover older vessels and any risk factor is heavily weighed.

Related to insurance is the fees shoreside business owners pay into Workers Compensation. One owner explained that he couldn't afford high paid employees because of the workman's compensation. "Longshoremen are in a high-risk category. That's 25% of his salary for comp."

Markets for fish

Whaling City Display Auction (see details under "Fish buyers" above)

Financing for shoreside operations

Many businesses have had their renovations or expansions on hold for several years as they wait to see which direction the fishing industry will turn. One owner said, "[My] expansion does not depend on the fishing industry. I love the fishing industry, but if one person can shut down the industry I can't depend on it anymore. No one including a bank can lend out money with the uncertainty [in the fishing industry]."

The New Bedford Economic Development Council (NBEDC), Inc

NBEDC was established in 1998 to improve the city's economic development by helping to attract business and job opportunities to the city. The NBEDC also provides small business funds and offers financial support (in loans) for new businesses or those who want to expand.

Fishing Assistance Loan Fund¹⁹

This program is specific to the fishing industry and fishing related businesses. The primary purpose of these funds is to create or retain

¹⁹ Quoted from NB Economic Development Council's website <http://www.nbedc.org/finance.htm>

jobs within the fishing industry or to create new opportunities for those displaced by the fishing industry. Financing may be used for working capital, equipment, furnishings or other fixed assets and improvements. Loan packages are available in amounts of up to \$200,000.

Following are some examples of eligible businesses and the types of uses for these loans:

Vessels: Assistance for activities such as overhaul of mechanical components, gear repair, equipment required by changes in federal regulations, retrofit activities to accommodate technological change-over of equipment targeted to increased fishing of underutilized or alternative species.

Processors: Financing to assist in the conversion of equipment and hardware supporting new methods of seafood processing and retooling to process new product lines including underutilized or alternative species.

Suppliers: Shore side suppliers may receive assistance to allow the purchase of inventory items required under new fisheries guidelines. Loans may be made for short term cash flow deficiencies resulting from fishing activities directly referenced to inventory and accounts receivable.

General Fishing Related: Small businesses with potential for growth and job creation in geographic areas impacted by the dislocation of the fishing industry.

The Community Economic Development Center

The Community Economic Development Center is a non-profit organization vested in the economic development of the local community. The organization is unique in that it is involved with fisheries management. The center is currently engaged in a research project to better understand the employment status in the fishing industry. The center is a liaison for migrant workers and other newcomers to the community to have access to the benefits provided by the city. In the past the center at one time had a re-training program for displaced fishermen to move into aquaculture.

Fishing industry organizations

Trawlers Survival Fund

Participants include over 100 groundfish trawlers from Southern New England through Boston. The group was founded in 2000 to fund legal representation for draggers faced with changes in the multispecies fisheries management plans.²⁰

Fisheries Survival Fund

Participants include over 120 full-time Atlantic sea scallop fishing vessels from New England to North Carolina. The organization funds legal work and scientific studies. Through their work with Brian Rothschild and Kevin Stokesbury of the School of Marine Science and Technology (SMAST) of the University of Massachusetts, Dartmouth, the group was able to convince National Marine Fisheries Service to reopen some scallop areas on a controlled basis.

New Bedford Business Alliance

<http://www.portnewbedford.org/>

The Port of New Bedford Business Alliance endeavors to work for the economic revitalization of the working waterfront business community by actively promoting (realistic) business development directly associated with traditional marine trades and new advances in maritime industries within the Port of New Bedford / Fairhaven, MA

Massachusetts Lobstermen's Association

<http://www.lobstermen.com/>

Since beginning in 1963, the Massachusetts Lobstermen's Association Inc. has worked to help lobstermen meet whatever challenges they face. It has also worked to conserve the resource on which the lobstermen depend and today is the major voice of the Massachusetts lobster industry.

Northeast Seafood Coalition

<http://www.northeastseafoodcoalition.org/>

In January 2002, groundfish fishermen, shore-side business owners and fishing community members formed the Northeast Seafood Coalition (NSC or Coalition). Today, the Northeast Seafood Coalition's membership includes over 300 fishermen, 60 shore-side businesses, municipalities and individual supporters located from Maine to Long Island, New York. The organization is dedicated to the long-term health of fishery resources, fishing communities and the fishing industry.

²⁰ The Trawlers Survival Fund is inactive as of 2006.

Fish Lumper's Union

New Bedford Fish Lumpers Union, Local 1749 I.L.A. The local also manages retirement pensions for union members through the New Bedford Fish Lumpers Pension & Welfare Funds.

Seafarer's International Union

In 2003, the union represented 30 boats, primarily Portuguese. Boats paid 6% of their gross stock, of which 4% paid for health care, 2 % for a pension and a \$7500 death benefit. Before the last buyback, they represented 75 boats. Before the 1985-86 strike, unions were much more prominent. Rules governed the time at sea (9 days, 4 days tied-up) and 25% of the boats were on contract. In addition to the fishermen being a part of the Seafarer's Union, fish cutters were members of the Seafood Workers Union and drivers and dockworkers were Teamsters. Now many of the fish houses use South American workers (many Mayan) who have little representation, are often brought in by van and make lower wages than workers did 15 years ago.

The Seafarer's Union also operates two entities that provide specific benefits to members. The New Bedford Fishermen's Pension Trust provides for retirement and a death benefit to widows. The New Bedford Fishermen's Welfare Fund provides healthcare insurance to members, but this program is being phased out and will go out of business as of January 1, 2007.

Shore Support

Started in 1991 by fishermen and their wives, the organization informs fishermen of changes in regulations, refers them for retraining and human services and represents rank and file fishermen and their families in community activities. Shore Support also started a relief fund to help families in the event of disasters at sea or other hard times (Georgianna and Shrader, 2005:17).

Monkfish Defense Fund

Monkfish fishermen on the Atlantic

The National Fisheries Institute (NFI)

www.aboutseafood.com/about_NFI/who_we_are.cfm

Based in Virginia, NFI is the largest fish and seafood organization in the U.S., representing nearly a thousand companies, individuals, and organizations involved in harvesting, processing, importing, growing, selling, and distributing seafood.

Atlantic Offshore Lobstermen's Association

<http://www.offshorelobster.org/about/>

The Atlantic Offshore Lobstermen's Association began in the early 1970's as the Atlantic Offshore Fishermen's Association and was reorganized in 1992. Offshore lobstermen decided it would be prudent to initiate an organization specific to their industry

that would pro-actively address regulatory issues with an approach toward conservation, preservation and sustainability of the resource now and into the future. A.O.L.A. represents approximately 60% of the offshore lobster fleet and is a recognized leader and voice for the industry. Since it's inception, funding for A.O.L.A. has originated from dues paid by vessel owners belonging to the association.

New England Seafood Producers Association

<http://www.nespa-fish.com/>

New England Seafood Producers Association brings together all the companies and individuals involved in the processing, packaging, distribution, servicing, selling and preparation of seafood. From third generation processing plants to importers and distributors, from packaging manufacturers to cold storage companies, trucking lines and restaurateurs, our members are critical to the production of healthy and great tasting seafood. NESPA's headquarters are in Boston, Mass. and our members can be found up and down the New England coastline. We are dedicated to providing our consumers with the good news and the truth about New England seafood.

New Bedford Fishermen and Families Assistance Center

www.newbedfordcareercenter.org/fishermans.html

The mission of the center is to engage in partnerships with eligible individuals from the fishing industry for purposes of developing effective multifaceted job search and training strategies which would lead to new and satisfying long-term employment. The center was established in 1994 to serve individuals and their families in the fishing industry in an effort to reduce the long-term economic stress caused by declining fish stocks and restrictive management policies.

American Dogfish Association

American Scallop Association

Commercial Anglers Association

Offshore Mariner's Wives Association

While the Offshore Mariner's Association is no longer in existence, the Wives Association had retained its role in organizing the annual Blessing of the Fleet in New Bedford.

Voice for the community in fisheries management

Several of the organizations are said to be important specifically because of their role in representing the fishing industry in court cases when conservation groups bring actions against NMFS and/or in cases involving the industry opposing NMFS actions.

Long-term vision/planning for the harbor

The Port of New Bedford/Fairhaven has a Harbor Plan (August 2002) that is guided by four overriding principles:

1. Develop traditional harbor industries – preserve and develop the harbor’s traditional strengths in fishing, the seafood industry, and related port industries.
2. Capture new opportunities in tourism, cultural activities and recreational use – advance development of waterfront projects and sites to attract visitors to the communities and strengthen physical and economic links between these sites and the downtowns of New Bedford and Fairhaven; provide enhanced connections between existing sites and attractions.
3. Rebuild harbor Infrastructure – implement a major program of infrastructure enhancement on land and in the water that is essential to the success of both port-related development and tourism.
4. Enhance the harbor environment – improve public access and enjoyment of the waterfront.

There is a clash between the city and some parts of the industry over the future of the port – specifically, how tourism is woven into the waterfront (or whether it should be there at all). The Oceanarium remains a point of contention.

John Simpson, executive director of the HDC explains it this way. “There’s no silver bullet in this business. You have to attack the problems on several fronts at the same time. We’ve lost jobs in the seafood industry. We need to find additional jobs to help those that have become unemployed. We need to keep the tradesmen working so that when the processors, or the vessels or their suppliers need repairs done to their assembly lines, their trucks, or their vessels, people are here to do that work. We try to provide property at reasonable rates to keep people in business.”

Positive public relations for the fishing industry

The fishing industry is having a difficult time promoting a positive image. There is a saying that as you head north along the coast, the fisherman gains more and more respect. In New Bedford, the feeling is that he is mostly misunderstood. Part of the feeling of disconnect can be traced back to the development of Route 18, which effectively separated the city from the waterfront. While it is a necessity to the success of the industry for truck transportation and access to the highways, its side effect has been less public contact with the fleet.

There is not a strong relationship between the industry and the city's newspaper. In 2003, the New Bedford Standard Times ran a front-page series that painted a picture of a fish processing industry run by the mob where corruption and racketeering are part of the daily life (The articles were supported by the recent conviction of one dealer). The part of the series that has been noted is the separation between the city's newspaper and the fishing industry. The paper told the story as if was talking about a different country or a secret society, not the multimillion dollar industry that spans the waterfront only a hundred yards from the paper's office. The pictures were old, the quotes, second hand. As a result of these stories and other articles about overfishing, the fishing community has begun to abandon the paper. "I cancelled my subscription after they wouldn't print a letter I wrote," said one businessman.

Efforts are being made to bridge the gap and teach the public more about the industry. In May, the National Park Service opened the "Working Waterfront" exhibit in the Wharfinger Building on Fishermen's Wharf. The Wharfinger Building, which has been the Waterfront Visitor's Center for over a decade, was once the home of the port's fish auction. Every morning from 8 until 8:20 seafood buyers would bid on the fish brought in by the boats that day. In a frantic scene buyers shouted out prices as auctioneers scribbled down bids on a chalkboard, while the crews of the boats watched through the windows (Only buyers and captains were allowed in the tiny building). The boats then went to unload their catch at the fish house that purchased their fish. The auction closed in 1986 after the fishermen's strike. Another auction opened in the 1990s and eventually grew into the Whaling City Seafood Display Auction. The Wharfinger Building now holds a permanent exhibit documenting the daily routine of the old auction. The National Park Service also erected several "wayside signs" along Fishermen's Wharf that provide tourists with a historical perspective of the fishing fleet.

In addition to the "Working Waterfront" exhibit, a very successful festival of the same name was held on the waterfront in September 2004 and 2005. The weekends "open house" offered the public an opportunity to learn firsthand about the fishing community and the work that is done each day to bring seafood to their plates. Demonstrations and contests of occupational skills (e.g., net making, net mending, trap building, model boat building, scallop shucking, etc.); music and dance performances representing ethnic folkways (e.g., Norwegian, Cape Verdean and Portuguese); oral histories; panel discussions (e.g., a day in the life of a fisherman); food demonstrations; book author appearances; vessel tours; children's activities and other exhibits were some of the attractions. Some attendees talked about valuable it was to learn more about the fishing industry that they knew so little about before the festival.

Clear lines of communication between the community/industry and government decision-makers

There are not clear lines between the business community and NMFS, leading one owner to suggest creating a business liaison at NMFS. In the summer of 2002, as a result of the industry's rally and protest against Amendment 13 to the Multispecies Fisheries Management Plan, the Mayor of New Bedford, Frederick Kalisz, created a Seafood

Industry Task Force, acknowledging that he and other city officials did not know enough about the billion-dollar industry on the city's waterfront. With an open agenda and participation open to all at monthly meetings, according to City Solicitor, Matthew Thomas, the mayor planned to turn to the Task Force to obtain a consensus opinion representing the industry whenever decisions were to be made or views expressed. Nevertheless, several of the Panel members did not feel that the city government has an appreciation for the complexity of the industry or the importance of the revenues and jobs the seafood industry generates for the city. Some noted that the city should become more involved in supporting the industry in the management realm.

There has also been a disagreement between the city and part of the industry over the proposed Oceanarium, leading several business owners to create the New Bedford Business Alliance, a group dedicated to preserving New Bedford as a working port.

Appendix A List of Panel Members and Interviewees

Rodney Avila
Frank Avilla
Reidar Bendiksen
Richard Canastra
Harriet Didriksen
Roy Enokson
Roy Fornia
Henri Francois
Ted Heidenreich
Pat Kavanugh
Jim Kendall
Marty Manley
Virginia Martins
Luis Martins
David Marujo
Bob Mitchell
Fred Osborn
Cindy Pettway
John Reardon
Joe Rogers
Billie Scofield
John Simpson
Loring Weeks

Appendix B In Hindsight: Yellowtail Flounder 2004, New Bedford Community Panel Case Study

Madeleine Hall-Arber, Ph.D., MIT Sea Grant College Program
Based partially on interviews conducted by John O’Leary, F/V Captain Bligh

Introduction²¹

In mid-July 2004, New Bedford’s *The Standard-Times* reported that fishermen and processors were complaining that so many yellowtail flounder were being caught in such a short time that processors were unable to handle them and prices were plummeting. The article went on to argue that the derby fishery could be resolved as was a similar situation in Alaska’s halibut fishery, that is, by allocating individual transferable quotas.²²

Fishermen and processors had a different reaction to the situation. Yellowtail are part of the multispecies (groundfish) complex. Thus fishing for them is controlled by Amendment 13 to the Northeast Multispecies Fishery Management Plan. Amendment 13 divided fishermen’s days-at-sea into three categories (A, B & C). “A” days are the principal allocation of days-at-sea to permitted vessel owners. “B” days, far fewer, were to be used on species considered healthy (that is, mortality did not need to be reduced) and could be used in designated areas as part of a Special Access Program (SAP).

The New England Fishery Management Council (the Council) approved a yellowtail SAP for Closed Area 2 with a maximum possible harvest of 4350 mt. This was to be caught in a maximum of 320 trips with vessels limited to two trips a month and 30,000 lbs of yellowtail per trip. Furthermore, the season had the potential to extend from June 1 to December 31. By September 3, however, 85% of the quota had been taken and the area was closed.²³

One Rhode Island fisherman who typically fishes for yellowtail in the late winter (during Lent) noted that boats he had never seen before, from as far away as North Carolina, were fishing for yellowtail in the SAP. Another noted that usually there are only a few boats fishing for yellowtail in that area of Georges Bank, but during the SAP, “there were more than I could count.”²⁴

²¹ Acknowledgements: I wish to thank Tom Nies, New England Fishery Management Council staff member; industry members, Richard Canastra, Rodney Avila, and Jim Kendall; David Martins, SMAST and Troy Hartley, Northeast Consortium, for their careful reviews and suggested corrections to the original draft of this report. All mistakes remain my own.

²² “Derby fishery” is the term used when too many fishermen target a single species at the same time.

²³ Based on the Northeast Seafood Coalition’s “Georges Bank Yellowtail Flounder 911,” a draft report prepared by Vito Giacalone and Jackie Odell. It should be noted that although the season could have remained open until December 31 if only about 45 trips per month had been taken, the SEIS for Amendment 13 projected a four-month season. This analysis was based on the 40 vessels equipped with VMS of the 117 who fished the area in 2002, taking two trips per month (Northeast Multispecies Fishery Management Plan, Final Supplemental Environmental Impact Statement, page I-281). The SEIS also said that if more vessels participated, the season could be “proportionally shorter.”

²⁴ Vessels from the south usually make an annual migration north at some time during the year, just as some northern boats (e.g., New Bedford vessels) make the trip to Virginia or other southern ports when there are

Landings

Preliminary reports on landings of yellowtail from May and July 2004 showed that New Bedford had landings of 6,902,000 pounds (3131mt) caught on Georges Bank and 39,000 pounds caught in the Cape Cod stock area. Gloucester had landings of 124,000 pounds (56mt) from Georges, 108,000 pounds from Cape Cod and 4000 pounds from the Gulf of Maine. Pt. Judith had landings of 185,000 pounds from Georges (84mt), 55,000 pounds from the Gulf of Maine, and 15,000 pounds from Southern New England. Portland, Maine had landings of 10,000 pounds (4.5mt) from Georges and 5,000 from the Gulf of Maine. Boston had landings of 93,000 pounds from Cape Cod and 2,000 pounds from the Gulf of Maine.²⁵

In documents prepared by the Groundfish Plan Development Team for the Council for Framework 42, the summary information on catches out of the SAP gave monthly totals in pounds as 2,816,400 (1,277.5 mt) in June; 2,810,365 (1,274.76 mt) in July; 2,255,008 (1,022.85 mt) in August and 194,205 (88.09 mt) in September for a total of 8,075,978 (3,663.2 mt) in 307 trips. The report explained that “because SAP trips are not specifically identified in either the VTR or dealer databases, total landings and revenue estimates are based on an analysis of the DAS, dealer, and VTR databases. A link was created between the VTR and DAS database in order to identify SAP trips – 307 (out of 316) SAP trips could be identified.” According to reports published on the NERO website, there were 316 SAP trips that caught 8.3 million pounds of yellowtail flounder (7.6 million pounds kept, 0.7 million pounds discarded).²⁶

Market consequences: low and declining prices

The SAP for yellowtail opened June 1st. In week one, 250,000 pounds of yellowtail were sold at the Whaling City Auction in New Bedford. The average price for large yellowtail was 58 cents (minimum of 40 cents) and the average for small yellowtail was 30 cents. In week two, 461,000 pounds were sold with large going for 40 cents to as low as 34 cents per pound. Smalls were 37 cents to as low as 27 cents. Week three, 400,000 pounds were sold, large yellowtail went for 34 cents to as low as 20 cents; small yellowtail was 26 cents to 10 cents. For the rest of June, 553,000 pounds of yellowtail was sold, of which 480,000 were large, 72,000 small. The large sold for 30 cents to as low as 20 cents; small sold for 26 cents to 18 cents. The average for the month of June was 33 cents to the vessels for large yellowtail, 31 cents for small on 1,256,000 pounds.

June-04	Pounds sold	Lg Yt-average	Lg YT-low	Sm YT-average	Sm YT-low
Week 1	250,000	58	40	30	

available fish and decent prices expected. What was different during the SAP was that it seemed to industry members that more vessels than usual were attracted and reportedly said that they came because they believed that they needed to create history in the yellowtail SAP. In fact, only four North Carolina boats, one from New Jersey and three from New York participated; however, altogether there were 105 participants in the CAII SAP.

²⁵ Document made available to Council and public, no indication of authors

²⁶ http://www.nefmc.org/nemulti/frame/fw42/appendix_II.pdf

Week 2		461,000	40	34	37	27
Week 3		400,000	34	20	26	10
Week 4+	Large-	480,000	30	20		
	Small-	72,000			26	18

According to the Whaling City Auction's history of yellowtail landings and prices since February 1997, the average price for large yellowtail flounder for the fishing year 5/1/04-4/30/05 was approximately half of the average price for the prior seven fishing years.²⁷

Year	Large	Value	Average	Small	Value	Average
2/1/97-4/30/98	1,842,855	\$3,421,720.91	\$1.86	1,297,336	\$2,175,136.98	\$1.68
5/1/98-4/40/99	2,430,722	\$3,599,851.49	\$1.48	2,494,365	\$3,197,441.34	\$1.28
5/1/99-4/30/00	3,424,164	\$4,198,959.58	\$1.23	2,057,108	\$2,098,411.25	\$1.02
5/1/00-4/30/01	3,951,330	\$4,449,552.45	\$1.13	2,150,347	\$1,851,857.68	\$0.86
5/1/01-4/30/02	4,136,253	\$4,403,987.33	\$1.06	1,673,913	\$1,313,362.35	\$0.78
5/1/02-4/30/03	3,018,964	\$3,864,682.02	\$1.28	1,651,419	\$1,879,425.33	\$1.14
5/1/03-4/30/04	2,963,417	\$3,636,245.70	\$1.23	1,280,130	\$1,454,730.53	\$1.14
5/1/04-4/30/05	4,566,074	\$2,992,150.93	\$0.65	1,512,012	\$1,112,502.48	\$0.73
5/1/05-1/31/06	1,959,599	\$2,511,141.74	\$1.28	1,316,544	\$1,391,466.14	\$1.06
		Average 2/97-4/04	\$1.32		Average 2/97-4/04	\$1.13
		Mean	\$1.23		Mean	\$1.14

Consequences for the auction and buyers, including processors, might be thought to be good, given the high volume and low prices of yellowtail. However, the effects were mixed and generally unsatisfactory for them as well as the harvesters. In 2004, vessels and buyers each paid 6 cents per pound to the display auction for the handling and selling of yellowtail.²⁸ However, the auction did not consider the large volume of yellowtail to be a boon for their business. When volume is so high, they have to pay overtime for their workers. Furthermore, since they provide the liaison between fishermen and processors, they benefit when both are happy. Processors cannot handle sudden volumes of fish, so the price goes down. Although the fillet quality of yellowtail in the early summer is always relatively low due to spawning and prices usually reflect this, the yellowtail SAP was thought to have exacerbated the situation.

According to some seafood brokers, when the prices are so low due to high volume and poor quality, the processors do not benefit. Like the Auction, they too have to pay

²⁷ For comparison, see a weekly report for the fishing year 2000-01 at the end of this report.

²⁸ In July 2005 the Whaling City Auction changed its policy so that the buyers are now responsible for the fees. However, "the vessels have always given 5% of their catch to the unloaders for shrinkage."

overtime for their workers and they have to freeze the product rather than selling it fresh.²⁹ On the other hand, some fishermen complained that the processors were benefiting by freezing the low-priced product with plans to sell it later when prices rose.

The best scenario for auction, fishermen, processors and perhaps consumers is a steady supply over time. A supply consistent in quality and quantity enables the brokers and processors to develop markets for fresh seafood that are often more profitable than the frozen seafood markets. Those demanding fresh seafood include higher end grocery stores and restaurants. "Many consumers perceive freshly caught seafood as having a higher level of quality than frozen seafood. To many people, unfrozen seafood has a better texture, flavor and appearance than frozen products" (Seafood Enterpriser, North Carolina Sea Grant, Summer 2005). If however there is a break in the supply, alternative or imported product may be used to fill the demand. Regaining market share once lost is difficult.

The low prices on yellowtail affected market prices for other flounders as well. Dabs and channel flounders are usually of higher quality in early summer than are yellowtail, but in 2004 their prices were almost the same as yellowtail. Large dabs, for example, were selling for 41 cents and small for 27 cents at the Whaling City Auction. Typically, in June, these flounders are sold for 75 cents to \$1.³⁰ Even yellowtail flounder, sold in much smaller quantities, usually has an average price that hovers around the 70 cents mark in June.

Another concern of the fishermen, when the SAP was closed in September, was that the closure would mean that no yellowtail would be available during the holidays and Lent when prices are usually high and fishermen "normally make a good living on yellowtail."³¹ As it turned out, however, fishing was allowed on Georges Bank yellowtail beginning January 13 with a 15,000 lb trip limit on yellowtail and continuing until April 1. Easter was early (March 27), so the fishermen were able to fish through Lent.³²

Since this SAP was the first one opened for "B" day use, the fishing industry feared that what they regarded as a negative outcome could hamper the development of future "B" day opportunities. It certainly left a negative impression among fishermen who had hoped that "B" days would allow them to survive the requisite cuts in "A" DAS. In fact, the groundfish vessels that did not use their "B" days in the yellowtail SAP had only a limited opportunity to use them at the end of 2004.³³ The only other SAPs opened for

²⁹ As one individual noted, "Junk in, junk out!"

³⁰ The range can be much greater, for example, in the week of June 13, 2003 the range was \$.16 to \$1.05. Notice the variation in prices on yellowtail throughout the year of 2000-01 in the table at the end of this report.

³¹ One Rhode Island fishermen noted that for the prior three years he had "made his year" in October, November and December fishing for yellowtail. He said that the SAP closure hurt his business. In fact, however, he may have been confusing the SAP closure with the October 1 closure of the Eastern US/CA area and/or the prohibition of possession of Georges Bank yellowtail on October 1 when the overall TAC was almost reached.

³² The lack of predictability associated with regulations (e.g., areas closed or opened; gear configurations or sizes changed) is a frequent complaint among industry including both harvesters and shoreside businesses.

³³ In late 2004, Category B (regular) DAS program did allow use of "B" days. Many vessels on Georges Bank used these days to target yellowtail and winter flounder (Nies, personal communication).

groundfishing included one that permitted use of a separator trawl to catch haddock and one that was restricted to the hook gear sector (Hook Gear Haddock SAP).³⁴

Distrust

“Derby” fishing and market gluts are often interpreted as the outcome of open access situations, but this case shows the importance of uncertainty about management implications of choices as well as distrust of the management agency and particular decisions it made. Interviews with a sample of participants and dealers elicited an almost universal response to the question of why vessels continued to land yellowtail once the prices dropped. Rhode Island and New Bedford fishermen said that they had to use their “B” days, given the opportunity, or they would lose them in the next round of regulations. A few buyers/dealers said that they had suggested that yellowtail not be targeted, but some sent a mixed message warning the fishermen that they could lose DAS if they did not go.

The basis for this belief harkens back to the early stages of the development of the Multispecies Management Plan. A chair of the NEFMC once stated unequivocally that fishing history would never be used as a basis for allocations of the resource. At that time fishermen were being encouraged to fish for species that were more plentiful than groundfish. Later, when days-at-sea were designed, allocations were directly based on fishing history.³⁵ Consequently, the fishermen assumed that “B” day use could also serve as precedent for future allocations, regardless of any statement to the contrary by managers, or even the regulations themselves.³⁶

Because of this strong belief, interviewees noted, the only way that the derby could have been halted was if National Marine Fisheries Service (NMFS) had imposed a lower trip limit, restricted the number of vessels allowed into the SAP, and/or closed the SAP earlier. Under Amendment 13 to the Multispecies Fishery Management Plan, the Regional

³⁴ The lack of SAPs that could provide alternative fishing opportunities for groundfishermen to use “B” days resulted in a de facto greater cut in days-at-sea than fishermen had hoped. However, Amendment 13’s SEIS specifically notes that opportunities to use “B” DAS would be limited initially and would have to be developed in future actions. Nor did the economic analysis of Amendment 13 include any projected revenue from “B” DAS. The Haddock Separator Trawl SAP was reportedly underutilized, in contrast to the Yellowtail SAP, because of a lack of familiarity with the trawl, how or whether it worked, and whether or not the catch would be sufficient to cover expenses. Furthermore, this SAP was only open for about a month starting in late November.

³⁵ In 1994 Amendment 5 to the Multispecies Plan, followed by Amendment 7 in 1996, established a two-tier system for limited access that cut the number of DAS allocated to the fishermen. (Amendment 5 planned to reduce fishing effort by 50% over 5 years; Amendment 7 reduced the timeline to 2 years.) One option was the “fleet category” that allocated 139 DAS for the first year to the 514 vessels that had landed any groundfish (even a single pound) and 88 DAS for the following years. The second option was an individual allocation to those who could document their history. (One hundred, ninety boats received an average of 156 DAS for the first year, 120 DAS for the years after.) Those who had switched to other species in part to further conservation goals resented the perception that those who had most “damaged” the groundfish stocks were rewarded with more days. The numbers of DAS have been further reduced by additional measures.

³⁶ This fear that the “B” day use would dictate future opportunities is said to be one of the reasons the vessels from the Carolinas and elsewhere came north to work in the Yellowtail SAP, although there is usually some movement north (and south) by various boats each year. According to NMFS legal counsel, Councils are not bound by the actions (or agreements) of previous Councils, so this belief has some validity.

Administrator (RA) had the authority to slow the program down when 30% or 60% of the TAC had been caught, but the RA did not impose a trip limit until 70% had been caught.³⁷ In addition, the industry assumed that they would be allowed to continue fishing until 100% of the TAC was taken but the area was closed at 85% to accommodate expected bycatch in a newly created scallop rotation program in Closed Area II.³⁸

There was important diversity in response. For example, In contrast to New Bedford, fishermen from ports to the north said that they stopped fishing for yellowtail as soon as prices dropped rather than continuing until the fishery was closed. Anger towards both NFMS and the fishermen landing in New Bedford was repeatedly expressed, adding to a long history of blaming that divides industry interests along geographic lines. Interestingly, however, the following year, it was Jimmy Odlin, a Council member from Maine who argued for the necessity of a 30,000lb trip limit for each vessel, while Rodney Avila, a Council member from New Bedford urged a 20,000lb limit for yellowtail catches.³⁹

Management of groundfish requires that each permitted vessel not fish for a 20-day period in the fishing year in addition to other closures. This is referred to as their “annual block out of the fishery.” Traditionally, many of the Portuguese captains of New Bedford take their annual block out of the fishery in June, primarily because of the poor quality of yellowtail at this time of year. Most who do so believe they are making a choice that benefits the stocks. However, some of these captains fished in the SAP to create a history rather than taking time off.

Further complications

Adding to the situation was uncertainty and disagreement about the status of the yellowtail flounder stocks or, more specifically, about the appropriateness of management rules and actions. This affected fishermen’s decisions about how much TAC should be requested for the SAP and the size of trip limits.

GARM I said in 2001: “Current biomass is approaching B_{MSY} and current F is well below the control rule target (Figure C4).” According to the April 2001 Transboundary Resources Assessment Committee (TRAC) report on yellowtail,⁴⁰ “[o]verfishing is not occurring, and the stock is recovering from an overfished state, according to the Sustainable Fisheries Act (SFA) status determination criteria.” The same report did warn, “Inadequate sampling of U.S. landings, the lack of sufficient discard samples in the U.S. fishery, and the absence of

³⁷ Amendment 13 provides that, when specified portions of the TACs have been harvested, reduced trip limits would be imposed for all groundfish permitted vessels to slow the harvest of any stock that is approaching its TAC. When 70 percent of a specified stock is projected to be caught, and catch rates indicate that the TAC for that stock will be caught by the end of the fishing year, the following trip limits would go into place: Haddock: 1,500 lb (680 kg/day), 15,000 lb (6,804 kg)/trip; yellowtail flounder: 1,500 lb (680 kg)/day, 15,000 lb (6,804 kg)/trip. From: *Federal Register*/Vol. 69, No. 19/Thursday, January 29, 2004/Proposed Rules, p. 4370

³⁸ In Framework 16/39, the Council made clear that the yellowtail TAC for scallopers was to be a cap on catch, not an allocation to the scallop industry, but NMFS implemented it as an allocation.

³⁹ Rodney Avila, personal communication, referring to discussions at a Council meeting held in Portland, ME on June 22, 2005.

⁴⁰ Northeast Fisheries Science Center Reference Document 01-08 (July 2001)

age determinations from the Canadian fishery contribute to uncertainty in estimates of size and age composition of the catch and raise concerns about the reliability of VPA results.”⁴¹ Nevertheless, the report also stated: “Despite these problems, similarity of results from VPA and the production model are somewhat reassuring that conclusions about trends in stock size and fishing mortality are reliable: “

The TRAC status report 2004/03 assumed a total catch of 7,900 mt of Georges Bank yellowtail in 2004: 6000 mt for the US and 1900 mt for Canada. The report noted that the combined US and Canada catches in 2003 were “approximately 6800 mt.”⁴² This report reported that the stock biomass had increased and recruitment had improved since the mid-1990s. However, the report noted, fishing mortality for fully recruited adults (4+) had not fallen below the reference point of .25 since before 1973, despite management efforts. The report also reiterated the 2001 TRAC report warning, “Retrospective analysis is used to detect a pattern of inconsistencies with a tendency to over or underestimate fishing mortality, biomass, and recruitment relative to the terminal year estimate.”

A more complete report of the TRAC stated: “To meet the term of reference, the TRAC agreed to use the 2003 ADAPT results to perform projections, with the understanding that results are highly uncertain. For example, using the 2003 ADAPT result,⁴³ the projected 2004 catch at F_{ref} is 7900 t (Stone and Legault 2003). Considering the great uncertainty in the assessment, a status quo catch strategy (6100 t) may be reasonable.”⁴⁴

Amendment 13 of the U.S. Northeast Multispecies (groundfish) Fishery Management Plan assumed that the US share of the Georges Bank yellowtail TAC in 2004 would be 58 percent of a total TAC of 11,713 or about 6800 mt. Differences between the stock status numbers used in Amendment 13 and the numbers provided in the Transboundary Management Guidance Committee’s (TMGC) guidance document (based on the TRAC), were controversial, and Council member David Pierce, during a Council meeting on January 28, 2004, moved for a review of the differences. The Final Amendment 13 stated that the agreed upon US quota was 6000 mt. However, fishing industry members interviewed complained that the quota and trip limits for the Yellowtail SAP were voted on before the TMGC document was understood. Some suggested that if they had realized that the overall TAC would be 6000 mt, they would have requested a lower TAC and lower trip limits in the SAP.⁴⁵

TAC setting affected decisions about continuing in the SAP, as did the inability to predict—or the failure to anticipate-- other management actions. If all vessels had caught their maximum allowable catch in the Yellowtail SAP, 4354 mt would have been landed (320 trips x 30,000 lbs). Some of the fishermen continued to fish in the SAP after prices

⁴¹ VPA or Virtual Population Assessment is an age structured analytical assessment that uses fishery catch statistics and sampling for age and size composition.

⁴² http://www.mar.dfo-mpo.gc.ca/science/trac/TSRs/TSR_2004_03_E.pdf (June 2004)

⁴³ ADAPT (VPA)

⁴⁴ Overholtz, W.J. (TRAC Chairman). Proceedings of the Seventh Meeting of the Transboundary Resources Assessment Committee (TRAC), Woods Hole, Massachusetts, May 27-29, 2003

⁴⁵ Because the 6000 mt TAC was established well before the start of the SAP, this statement may be an indication of the regret that stems from loss of potential benefit realized in hindsight.

dropped believing that there would be sufficient quota so that they would be able to target yellowtail outside the SAP later in the year. If NMFS had not set aside 600 mt for the potential scallop bycatch, and if they had not overestimated discards in the SAP, more yellowtail may have been available to groundfishermen.⁴⁶

The rapid attainment of yellowtail TAC had effects on the haddock fishery due to by-catch concerns. By October 1, the lack of available TAC eliminated opportunities for fishermen to access haddock on a portion of Georges Bank near the Canadian border. Due to the potential yellowtail bycatch, the area was closed to groundfishing until January 13, 2005. When the area was reopened a smaller trip limit on yellowtail was imposed.

Agency Responses

Fishermen and others interviewed raised the question of why the regional office of the National Marine Fisheries Service did not take measures to restrict access to the yellowtail SAP, to prevent the derby nature of the fishery. The Federal Register states, "The Regional Administrator has broad authority to modify possession restrictions and trip limits under this SAP." Nonetheless, a spokesperson for NMFS explained that the R.A. could not slow the access⁴⁷ without explicit direction from the Council. According to this spokesperson, the Council had not identified "triggers" for when trip limits should be reduced when a certain portion of the TAC had been taken. Because NMFS "can only approve or disapprove plans and measures, not impose measures on their own," the spokesperson continued, they rely on direction from the Council. However, as noted earlier, the Council did specifically identify triggers in Amendment 13 (See page 6).

In addition, the spokesperson said, a web page monitors landings, so fishing industry members could have observed how quickly the TAC was being caught, implying that they could have slowed landings voluntarily. Unfortunately, the existence of the web site was not uniformly known among the fishermen, nor apparently were many aware that they should be keeping track of others' landings. It is also not an accepted norm among groundfishermen to try to tell their peers what to catch (or when not to catch certain species). Perhaps even more importantly, for those who were paying attention, what was not known was that access would be halted once 85% of the TAC was reached.⁴⁸

Final numbers

According to the September 2005 TRAC report: "US catches for 2004 were 6,757 mt, with landings of 6,208 mt and discards of 549 mt" ... "The Yellowtail SAP in Closed Area II accounted for a large portion of these landings and discards."⁴⁹ It should be noted that the TRAC is reporting the catch for the calendar year; the catch for the fishing year was 6,000 mt.

⁴⁶ <http://www.nero.noaa.gov/ro/fso/usc/yellowtail0405.pdf>

⁴⁷ Federal Register/Vol. 69, No. 81/Tuesday, April 27, 2004/Rules and Regulations p. 22913

⁴⁸ This also came as a surprise to the Council and Council staff (Nies, personal communication).

⁴⁹ Transboundary Resource Assessment Committee Status Report 2005/03 (Revised) (September 2005)

Industry suggestions for the future

This case was yet another potential learning experience for groundfish management, particularly in the more complex settings that one might expect for ecosystem-based management. Fishermen might be expected in the future to more closely monitor what is happening in an SAP fishery, both to modify their own behavior and to ask for help from responsible agencies. Interviews also generated a number of other ideas, that could be used by the Council, NMFS, and fishermen's groups for improved management in the future. Following are these ideas, not ranked:

- Do not open the SAP. "It would take longer to catch them but the price would be higher and the quota would last longer."
- Do not open the SAP up all at once, e.g., stagger the openings.
- "Make sure that fishermen have other choices for the use of their "B" days so that not everyone is doing the same thing at the same time."
- Lower the amount of fish vessels could land at any one time so that the quota would last longer.
- Allow small vessels to fish in the SAP in the summer when weather is usually good and give the larger vessels access in the winter (since they can cope with poorer weather)
- Allocate vessels a certain number of days that they could use in the SAP and assign each a time so that not all boats would go out at once.
- Alternatively, fishermen could enroll in a yellowtail program and be allocated a portion of the TAC. However, such a plan could too easily lead to ITQs, according to some fishermen, with negative consequences for conservation and socio-economic concerns.
- Rotate the closed areas.
- Everyone should have a vessel monitoring system (VMS) now. The stakes are high and limits strict, so there should be a way to ensure that cheating is not occurring.

Conclusion

If the Whaling City Auction's experience may be generalized, in 2004 the average price for yellowtail flounder was much less than it had been in prior years. The potential negative consequences of such an economic loss are striking, especially when many groundfish vessels are struggling to remain in the industry while the stocks rebuild. Fishing industry participants suggested that there was also a domino effect on the fishing communities and industry infrastructure of the lost benefit.⁵⁰ Nevertheless, the perception of loss may have been greater than it was in fact. The Groundfish Plan Development Team (PDT) estimated the total revenues for the 307 trips that they could identify as trips in the SAP were \$7.2 million. Yellowtail flounder accounted for \$3.45 million, haddock \$929,000, lobster \$645,000, scallops \$501,000, and winter flounder \$495,000.⁵¹

⁵⁰ See The Community Panels Project reports for additional information about the potential impacts of regulatory change on communities.

⁵¹ http://www.nefmc.org/nemulti/frame/fw42/appendix_II.pdf

Though not articulated by industry members interviewed for this report, the losses due to the low prices on yellowtail may have been partially compensated for by the million pounds of haddock and several hundred thousand pounds of winter flounder that the vessels landed in addition to the yellowtail. The SAP allowed almost 1500 more DAS to be used than would have otherwise been available to the groundfish industry. Given the uncertainty inherent in fisheries management, this latter circumstance may be considered a benefit of the SAP since it insures that catch history has been documented for those 1,485 DAS, a potential benefit to the participants. Furthermore, because the vessels were not charged a DAS for transit time to the SAP, 1,995 days were actually used in the summer of 2004.⁵²

One could say that it was “a series of unfortunate events” that led to the perception among fishing industry participants of a failure to generate the benefits that some believe could/should have developed from the yellowtail SAP in 2004: More than discrete events, certain pervasive social conditions contributed, including institutional obstacles, communication failure; distrust; and lack of industry unity.

Institutional obstacles:

- NMFS did not slow fishing (by lower trip limits, fewer trips, etc.) by using the targets the Council had set.
- NMFS has as one of its objectives the management of living marine resources for optimum use. However, the Magnuson-Stevens Act places restrictions on the agency’s ability to make decisions based on economic allocations.

Communication failures:

- The total US TAC was lower than originally anticipated by fishing industry participants. A newer, more pessimistic assessment was used by the TMGC than the one used in Amendment 13.⁵³ NMFS notified every permit holder of the TAC in a letter dated April 26, 2004, but evidently the significance of the change was lost on many of the fishermen.
- “B” days were a new concept and relatively few fishermen (or managers) understood how they could or would function.
- Industry misreading of supporting documentation. Some believed the TAC for yellowtail was 7,900 mt, not realizing that 1,900 mt were allocated to Canada.

⁵² http://www.nefmc.org/nemulti/frame/fw42/appendix_II.pdf

⁵³ It is not clear why the change in the stock assessment was not clarified in a Council briefing prior to the completion of Amendment 13 (Nies, personal communication).

Distrust of and uncertainty about management practice

Fishermen believed that unused “B” days would be lost in the future. The complexity of regulations (with variants depending on gear, vessel size, location of fishing grounds, etc.) and their frequent change makes it extremely difficult for fishermen to keep track of requirements. Furthermore, these same constraints apply to NMFS employees who therefore find it difficult to respond to fishermen’s questions consistently and correctly. Misinterpretations are paid for by the fishing industry and distrust is generalized.

Lack of industry unity

- Some fishermen and their representatives were well aware of the potential for the TAC to be reached earlier than expected but this information was apparently not shared freely.
- The independent decision-making of fishing vessel owners and captains, without reference to what might improve benefits for all, is documented in fishing industry research.

This report emphasizes the impression of many fishing industry members that the Yellowtail SAP unnecessarily sparked a derby fishery resulting in landings that were too high, in too short a time period, resulting in lower prices and a waste of quota. Because limited access to groundfish relies in part on a proven catch history, the New Bedford-based industry was adamant that they had to protect their future by creating a history of using the new SAP. A review of the revenues and landings of fish other than yellowtail suggest that the SAP did have some positive benefits. Had access been better controlled and trip limits lower, either by industry agreement or by NMFS using their designated power, the benefits may have been much greater and acknowledged by industry.

Epilogue

The Yellowtail SAP was established on the basis of assessments that indicated that yellowtail stocks were healthy. The situation changed dramatically after 2004, with somewhat contested conclusions that yellowtail flounder stocks are overfished. Measures to further restrict the yellowtail fishery, along with specific stocks of cod, winter flounder and hake, have been proposed. The 2005 Groundfish Assessment Review Meeting (GARM) of August 2005 identified Georges Bank yellowtail, Southern New England yellowtail and Cape Cod yellowtail as overfished with overfishing occurring. The GARM determined that Georges Bank yellowtail had been overfished for some time, contrasting sharply with the earlier TRAC reports.⁵⁴

⁵⁴ The assessments of yellowtail have a history of uncertainty. A paper presented at the American Fisheries Society Annual Meeting in 2005 noted “the assessments of all three stocks [Cape Cod, Southern New

According to GARM II, fishing mortality in 2004 exceeded Amendment 13 targets for eight stocks. Those stocks are Georges Bank (GB) cod, Gulf of Maine (GOM) cod, GB yellowtail flounder, Cape Cod/Gulf of Maine (CC/GOM) yellowtail flounder, Southern New England/Massachusetts (SNE/MA) yellowtail flounder GB winter flounder, SNE/MA winter flounder, and white hake. However, because GARM II's estimates were assessed for a calendar year and Amendment 13 was implemented in May 1, 2004, the GARM estimates did not reflect the impacts of Amendment 13. Revising the GARM estimates, the Plan Development Team of the Council found that "mortality for GB cod and GB yellowtail flounder (base case model, see section 5.1.2.1) is at or below the Amendment 13 target in CY 2005."⁵⁵

The TMGC's guidance document for 2005 concluded that "the most appropriate combined Canada/USA TAC on yellowtail for 2005 fishing year is 6,000 mt." Combining historical catch with information on resource distribution based on trawl surveys, entitles USA to 71% and Canada to 29%, resulting in a national quota of 4,260 mt for the USA and 1,740 mt for Canada.⁵⁶

On February 2, 2006 the Council approved Framework Adjustment 42 to the Northeast Multispecies Fishery Management Plan to address overfishing of the three stocks of yellowtail flounder, Gulf of Maine cod and "to a lesser extent," two stocks of winter flounder and white hake. The measure reduces allocated days by eight percent and counts days at sea at a rate of two to one in the inshore areas of the Gulf of Maine and an area off Southern New England. Some trip limits were also adjusted. Inshore fishermen from Gloucester, Scituate, Provincetown and New Hampshire ports are expected to be substantially affected.⁵⁷

England and Georges Bank] tend to overestimate stock size and underestimate mortality leading to considerable uncertainty in catch forecasts."

⁵⁵ Draft Multispecies Framework 42 And Monkfish Framework 3-- Measures and Summary of Impacts (February 1, 2006) http://www.nefmc.org/nemulti/fw42measures_feb06.pdf

⁵⁶ Transboundary Management Guidance Committee Guidance Document 2004/01 (September 2004)

⁵⁷ "New Groundfish Rules to Target Stock of Concern," Press release by New England Fishery Management Council, February 3, 2006.

Whaling City Auction, Yellowtail Flounder

2000-01	Large-lbs	price	Small-lbs	price
May	52,310	\$1.39	32,590	\$0.93
	78,810	\$0.80	72,065	\$0.35
	101,645	\$1.04	49,459	\$0.85
	71,635	\$0.89	43,196	\$0.80
June	84,918	\$1.02	50,673	\$0.79
	70,655	\$1.07	40,690	\$0.85
	45,845	\$1.09	36,875	\$0.68
	44,845	\$1.19	35,823	\$0.51
	33,340	\$1.09	20,183	\$0.88
July	25,135	\$1.56	28,240	\$1.23
	27,775	\$1.30	29,649	\$0.85
	19,375	\$0.81	13,094	\$0.61
	31,645	\$0.86	46,755	\$0.56
August	7,570	\$0.78	11,609	\$0.42
	12,745	\$1.11	9,288	\$0.78
	14,655	\$1.58	18,489	\$1.08
	28,065	\$0.82	24,005	\$0.53
	21,802	\$0.61	30,335	\$0.40
September	20,645	\$1.43	16,426	\$1.23
	42,795	\$1.04	50,075	\$0.75
	19,715	\$0.94	22,912	\$0.63
	27,950	\$0.94	15,810	\$0.72
October	7,245	\$1.00	7,385	\$0.90
	19,940	\$0.81	18,530	\$0.67
	21,470	\$1.06	15,915	\$0.71
	19,705	\$1.26	15,910	\$0.99
November	26,925	\$1.22	25,545	\$0.87
	67,475	\$1.14	60,677	\$0.93
	183,670	\$0.56	114,050	\$0.48
	51,740	\$0.98	49,630	\$0.89
	205,800	\$0.76	54,530	\$0.72
December	209,985	\$0.83	153,082	\$0.52
	165,450	\$0.93	78,500	\$0.50
	197,640	\$1.49	136,312	\$1.17
	52,830	\$1.82	48,895	\$1.30
January	61,890	\$1.66	64,568	\$1.25
	223,265	\$0.76	17,330	\$0.44
	193,730	\$0.92	42,835	\$0.85
	98,770	\$1.18	20,805	\$1.10
	131,560	\$0.95	28,055	\$0.87

February	38,250	\$1.81	15,495	\$1.68
	81,690	\$1.89	30,975	\$1.61
	126,265	\$1.41	31,500	\$1.39
March	128,585	\$1.56	42,100	\$1.38
	96,290	\$1.21	43,150	\$1.02
	72,910	\$1.66	20,890	\$1.49
	134,470	\$1.46	48,235	\$1.27
	71,740	\$1.25	22,350	\$1.06
April	102,410	\$1.23	31,540	\$1.01
	83,390	\$1.50	27,262	\$1.42
	102,590	\$1.33	29,245	\$1.29
	55,890	\$1.31	22,065	\$1.23

The median (mean) price for large yellowtail was \$1.10 and \$.87 for smalls. Highest for large was \$1.89 in February; \$1.68 for smalls also in February. Lowest for large was \$.56 in November; \$.35 for smalls in May.