

FISHERIES ON THE AIR --

*A Joint Project Between Coastal Enterprises Inc. &
Maine Public Broadcasting Corporation*

Radio Story Transcripts:

1. **“Diversify or Die: Times of Change for Seafood Processors”**
2. **“Bringing Back the Atlantic Cod”**
3. **“Stonington: A Fishing Community in Transition”**
4. **“Hagfish: A rising star in Asian Markets”**
5. **“Fishing for Scientists”**

The following transcript copies are from the 5 radio stories aired on “*Maine Things Considered*”. The pieces highlight how fishing businesses are responding to groundfish regulations with innovation and ingenuity. Please take a copy and convey your comments to Elizabeth Sheehan 772-5356 or Email mes@ceimaine.org

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**Gulf of Maine
Council on the
Marine Environment**

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Project Report September 30, 1998

Background

Last Fall, CEI's Fisheries Project joined forces with Maine Public Radio to contribute needed information and coverage on responses to cutbacks in groundfishing. Traditionally, news coverage has focused on fisheries management debates. With this project, our intention was to re-direct public attention to the creative ways fishing businesses and communities are working to surmount the difficulties of this stock rebuilding period.

The Fisheries on the Air Programs succeeded in its goal of bringing the diversity and complexity of the groundfishing industry into the public spotlight. Periodic in-depth broadcasts about fishing industry sectors and trends -- presented in the context of mainstream news -- heightened people's interest and awareness of both the importance of the groundfishing industry to the regional economy, and of the rich cultural diversity in it.

The story ideas were plentiful. Our challenge was to select those cases which best revealed an industry response to the groundfish industry transition and could carry itself as a compelling news story. Shifting through the ideas was one of the rich parts of the collaboration. In addition we tried to be sensitive to geographic diversity as well as the diversity within the industry in terms of gear type and vessel size. We tried to include harvesters as well as processors, local products as well as exported, scientific information as well as practical fishing experience.

Each of us on the team, Elizabeth Sheehan, *CEI Fisheries Project Director*, Bob Moore, *a free lance journalist*, and Andrea DeLeon, *News Director of Maine Public Radio*, took responsibility for different tasks: Elizabeth and Bob developed a list of key themes, scanned the field for topics and presented the story ideas to Andrea.¹ Once Andrea approved the piece, Bob conducted the field research and interviews, logged the tapes, and drafted the script and introduction. From here Andrea would edit the final script, Bob would produce the piece and Maine Public Broadcasting would air it on Maine Things Considered.

The Five Stories:

1. "Diversify or Die: Times of Change for Seafood Processors" uncovered how seafood processors have weathered the decline in groundfish landings. The story profiled three different companies each representing a slightly unique diversification strategy. The piece demonstrated how processors that managed to successfully diversify have been expanding and investing in new plants, products and markets. Contrary to public perception of decline, employment in the industry has grown four fold since the time when local groundfish was the sole source of supply.

¹ We operated with a strict protection against conflict of interest by insuring that we did not cover businesses in which CEI had any financial interest.

2. **"Bringing Back the Atlantic Cod":** Once again this past winter, federal fisheries managers reassessed the Gulf of Maine Cod and determined further cut backs were needed. Many, outside the industry, were surprised when a good part of Maine's groundfish members supported area closures as a management policy that would help rebuild the weakened stock. The story included interviews with several fishermen from Southwest Harbor and Portland as well as New England Fisheries Management Council member Barbara Stevenson. In addition to articulating their support for such controversial measures, the fishermen revealed that the new regulations required that harvesters become better at fishing "smarter" to more carefully target their nets and time their landings to capture the best market prices.
3. **"Stonington - A Community in Transition"** This presents a thoughtful and highly personal account of how places that have committed themselves to fishing are responding to the impact of the groundfish regulations. In Stonington we found a fierce example of a community that is both adapting and challenging to the changes. The 14 boats that used to make up Stonington's groundfishing fleet has shrunk to three. The ancillary services that once fueled, fed, iced and trucked for these boats have had to re-tool completely. Today, most of Stonington's boats are trying to earn a year's income from a three month lobster season. That alone reveals something about this community's determination to hold on to a seafaring heritage.
4. **"Hagfish":** The piece demonstrates the breadth of the Gulf of Maine fishery and fishermen's ability to take advantage of new markets on a global scale. The infant Hagfish industry in New England demonstrates an opportunity for fishermen and shoreside plants to diversify. The challenge remains for all parties involved to manage this fishing sustainably. Interviews with fishermen, processors and exporters demonstrate another unique industry response to groundfish cutbacks.
5. **"Fishing for Science":** These days fishing for scientific data is both a source of revenue and a strategy for protecting the resource. This piece highlights the emerging trend of the fishing industry working collaboratively with scientists to gather information on key resources. The piece includes interviews from the scientific, management and industry sectors which shows progress in breaking down traditional barriers of communication between the three cultures.

The richness of the sound tracks gave listeners a vivid sense of being on the scene with fishermen, or in the processing plant, or on the waterfront with wharf owners. The natural sounds, as much as the voices on the tape, evoked the struggle, determination and ingenuity of the groundfish industry to survive its most difficult period. On several occasions, people remarking on a piece said they were surprised to learn that the groundfish industry was still as vibrant or as important to coastal communities. A few people said that their perception from hearing or reading other media was changed as a result of hearing one piece. At a meeting at the Department of Marine Resources, one story was cited by development agencies as evidence of the importance of the states processing sector. We brought a tape deck to the Maine Fishermens Forum to solicit feedback from the industry on our first two stories. Maggie Raymond of the Groundfish Group responded, "These stories are balanced and interesting. The profile is very different from the standard "doom and gloom" press coverage of this industry." Maine's Department of Marine Resources Marketing Director Sue Inches noted that "the radio spots were well produced and presented a more positive voice than we have been hearing generally from the local media. What was unique about the spots is that they provided a well-rounded view of each topic, as opposed to an single-sided advocacy position. For this reason, the stories really stood out as something new and different. "The stories were broadcast on Maine Public Radio's news programs which reaches 124,000 listeners a week from six stations across the state.

Producing this series brought home important lessons. The stories are attempts to represent complex human responses to an unprecedented cutback in one of the regions oldest fisheries. Our challenge was to translate the trends into a compelling "readable" story. We learned the delicate balance required in offering in depth industry coverage that reaches beyond the waterfront to the broader concerns of the listening public. We included a number of voices in each piece and at times may have forsaken the powerful anchor of one person's story in order to protect ourselves from "over simplifying" a complex situation.

The pieces required considerably more time to produce than originally estimated. The process of scanning the field for potential story topics and researching the ones selected was exceedingly thorough since we wanted the five pieces to offer a broad view of the industry. The scoping and research process did become more streamlined as the project progressed. Actual production time was also underestimated, primarily because a lot of time was dedicated to logging tape transcripts with the intention of using the interviews again in other media outlets.

Other media outlets were difficult to crack. Freelance queries were submitted to numerous print publications and other radio programs. Andrea DeLeon at Maine Public Radio made offerings to the CBC, Marketplace, Boston's WBUR public radio affiliate, and Reuters radio news service. "Diversify or Die" went on the National Fisherman website. Gulf of Maine Council member Liz Kaye offered to share pieces with a contact at Living on Earth. We sent production outline and the producer's biographical materials to her, but didn't hear back. New Hampshire Public Radio aired "Hagfish" and "Diversify or Die." The pieces also aired on Maine Public radio's Middyay.

Our next steps will be to design a brochure and market the tapes as a series to radio stations in the hopes that the collection will offer them a more cohesive product. The tapes will also be placed in relevant public, technical college and university libraries and scientific institutions where the series can be heard in its entirety. The support of the Gulf of Maine Council and Davis Conservation Foundation was critical to the success of the project. Frankly, the programs would not have been possible without it. We produced five pieces that were thorough, accurate and informative. The funding gave us the luxury of traveling to sites where interviews could be conducted in their proper context. It is clear from feedback and interest in the pieces that the general public has as great an appetite for fishy radio pieces as they do for the fish itself. There is plenty of material left uncovered for more quality, in-depth coverage of marine issues in the future.

<Show: MAINE THINGS CONSIDERED> <Date: DECEMBER 30, 1997>
<Head: "Diversify or Die: Times of Change for Seafood Processors">
<Prod: Bob Moore>
<Tran: Two pages> <RT: 5:00>

CHARLOTTE RENNER, HOST: This Is Maine Things Considered, I'm Charlotte Renner. Just ten years ago, Seafood meant groundfish like cod, haddock, and flounder that fishermen brought into the docks. With these traditional fisheries seriously depleted and tightly regulated, fishermen are forced to diversify or get out of the industry. Fishermen are just one small segment of the seafood industry. A network of processors, dealers, and an army of distributors is also learning to cope with fewer groundfish and tightening regulation. As Bob Moore reports, seafood processors are diversifying and even adding new jobs despite the lack of key species.

NAT SOUND KNIFE:

A fish cutter needs a sharp knife to fillet a whole haddock every 30 seconds. For over 100 years, Portland has been a center for processing the cod, haddock, and flounder caught in the Gulf of Maine. In the early 80's there were as many as 75 fish cutters in Portland. Each cutter had one or two support people to keep the line moving. Ray Swinton set up Bristol Seafoods to cash in on the strong demand for Gulf of Maine haddock. Then the bottom fell out of the haddock fishery.

Swinton: We were bringing in close to 8 million pounds of haddock/year, mostly from Canada. We saw the Canadian government cutting their quotas in half and we said oh my God, we're going to be 4 million pounds of fish short next year, what are we going to do?
Moore: You must have been //

Swinton: Scared I guess is a good way to put it. We're thinking to ourselves, here we go, we're two years old, and we're going to be bankrupt in 2 years if we don't do something.

Moore: You must've worried how you were going to keep the same number of employees around.

Swinton: You could see the handwriting on the wall. What's going to happen - I've got to find another source and diversify, not sit here and wait for the fish to come back.

Since then, Bristol and others have been inventing ways to keep their processing lines running, even when their source of fish isn't the Gulf of Maine. Bristol was the first to bring in frozen-at-sea haddock from Norway. Cozy Harbor Seafood of Portland added shrimp and frozen lobster to its business.

NAT SOUND CONVEYOR BELT:

A conveyor belt carries cooked lobster to the freezer section. With liquid nitrogen, Cozy Harbor turns it into frozen product in 15 minutes. With shrimp and lobster in the mix, fish makes up only a third of Cozy Harbor's business. Owner John Norton.

Norton: I call it putting 3 legs under our stool, so that if one of those legs breaks off then we still have two legs to be sitting on. For us a diversity is extremely important, and has been for everybody else in the industry who's survived.

A seafood plant requires a dependable source of fish, and the steady flow of different species coming into the plants has been a boon to Portland's processors. And the state

economy too: while Cozy Harbor has half the number of fish cutters it had ten years ago, total employment is four times that level.

Norton: There's a lot of other money that is spun off into the economy. Its our water bill, our insurance, the fuel we use for trucks, the business that goes to United and Delta at the jetport, are all spin-offs from the processing sector and they contribute a lot of money and a lot of jobs.

Seafood is big business in the Gulf of Maine. United Processors of Portland figures its members keep about 300 people on the payroll, and generate over \$66 million a year in sales. But the most important player in the fish market is often overlooked: the fish eaters. Every time we buy a piece of fish at a restaurant or market, we propel the seafood industry forward. To feed the growing demand, the supply comes from farther and farther away, from sources all over the country and the world.

NAT SOUND: DOOR CLOSING

If you want proof of the global fish market, Portland's waterfront is a good place to start. There beneath the undulating rooflines of Custom House Wharf, is Harbor Fish Mkt. Co-owner Nick Alfiero watches over the flow of customers, and of water in the lobster tanks.

Alfiero: Back in the 60s, we probably didn't sell a total of 10 items. Now on any given day when you walk in this store you've probably got 50 different items.

If some processors use a 3 legged strategy with fish shrimp and lobster, the display case at Harbor Fish is like a chorus line, stretching for 50 feet, and featuring fish with exotic names like wahoo and opa.

Alfiero: As there is less and less groundfish available in Gulf of Maine, some of these little known species have taken up some of the slack. So that I've got let's say 2 or 3 people who would not be employed if they weren't carving up opas and tunas.

Where some processors have changed their technique, like using innovations in freezing, Harbor Fish takes advantage of innovations in distribution: people try Alfiero's exotic fish because it arrives fresh. And, far across the country tonight, someone will enjoy a fresh piece of haddock from the Gulf of Maine.

NAT SOUND: COLDLOCKER DOOR

He opens the door to the cold locker, stacked to the ceiling with boxes of fish of every shape and size.

Alfiero: These'll leave on a flight this afternoon, they'll be in his door tomorrow by noontime his time. So if all goes well most of this product will be on tables in San Francisco.

Seafood processors haven't forgotten the fishermen they have relied on for years to bring in locally caught groundfish. They maintain old relationships, just waiting for the day fish become bountiful again in the Gulf of Maine.

For Maine Public Radio this is Bob Moore.

<Show: MAINE THINGS CONSIDERED> <Date: FEBRUARY 23, 1998>
<Head: "Bringing Back the Atlantic Cod">
<Prod: Bob Moore>
<Tran: Three pages>
<RT: 5:34>

ANDREA DE LEON, HOST: Tough new fishing rules are being imposed on the fishing industry to bring back dwindling codfish stocks in the Gulf of Maine. Fisheries managers want to cut the amount of cod taken in the Gulf of Maine by 63%. To do that, the new restrictions will close fishing grounds during the spring and summer when codfish are spawning, and restrict access year round to prime fishing grounds. The fishing industry will be hurt by this latest belt tightening, but as Bob Moore reports, some cod fishermen actually welcome it.

NAT SOUND - BOAT IDLING, ICE SHOVELING

The fishing vessel Theresa & Alison lies at a Portland pier as her crew loads ice and readies her for the next trip out. Like many crews who fish the Gulf of Maine, the men's job just got tougher. Starting next year, some of their prime fishing grounds will be off limits, part of a plan to bring back the floundering stocks of Atlantic cod in the Gulf of Maine.

NAT SOUND - BOAT LEAVING DOCK

Fishery managers use the term area closure to describe the latest scheme to bring the groundfish in New England back. You could liken it to a farmer taking the most fertile land out of production to give the soil a rest. It's tough medicine, but many have called for such a closure for some time. Dave Jordan is owner of two fishing boats, including the Theresa & Alison.

Dave Jordan: I think closed areas are the way to go, for the simple reason its worked on Georges and in other places its been done. If they leave them closed year round, if nobody accesses them at all, then the fish will eventually grow up, build up, spill out over, and won't be disturbed. I think that's one of the better ways to go in the management.

Each of the last three years has brought new, tougher regulations to the Gulf of Maine fishing fleet: traditional fishing grounds, such as Georges Bank, were closed. Most fishermen are now allowed half as many days at sea as they were in 1994, and the amount of fish they can land has also been cut.

Despite all this, the cod didn't recover as managers hoped. This time, by closing fishing grounds seasonally in the Gulf of Maine, regulators want to reduce cod landings by 63%. Barbara Stevenson is owner of two fishing boats and is on the New England Fisheries Management Council that is proposing the tighter restrictions.

Barbara Stevenson: I sort of view it like tough love, and you know this is an awful thing now and you're causing awful pain, but you know if you didn't do it the long term pain would be worse. So while I think it's going to be very difficult for a lot of boats this year and probably next year, in five years I hope we're all glad that we did it.

All sides say the closure is sure to help the cod. They point out that three year restrictions on another prime fishing ground -- Georges Bank -- have increased the cod population there. This new closure will primarily effect the smaller boats that work the inshore waters of the Gulf of Maine. And it means a key fishing area called Jeffrey's Ledge will be off limits. Barbara Stevenson says it simply can't be avoided.

Barbara Stevenson: Every regulation you do impacts each different fishery differently. It's a balancing act trying to figure out what's best for everybody. Bob Moore: Everybody at some point along the way has been hit by now. Barbara Stevenson: Yes, I think we've all been hurt by now. I think lean and mean is definitely the watchword.

Smaller fishing boats can convert to catch shrimp, scallop, even dogfish. They may not want to, but Stevenson says most fishermen will have to diversify into different fisheries that aren't their first love, if they want to keep fishing. Bill Train is captain of the Theresa & Alison.

Bill Train: I usually fished on cod, that's all I'd fish for the whole trip. Now, I go offshore, I'm fishing for flounder, I'm fishing for pollack, and I'm fishing for haddock. I spend a couple days on each one. When I come in I have a multi-species catch, and it helps with the prices because we don't have that many fish of one species to flood the market.

Other fishermen are surviving the tightening rules by diversifying their income sources ashore, too. The 50 foot fishing vessel Joanne & Holly out of Bass Harbor goes for shrimp in the winter and groundfish in the summer. Owner and skipper Dave Horner:

Dave Horner: We truck our own fish and other peoples' fish back and forth. I also have a wholesale/retail fish market up on the island. I have a lot of things going on. Bob Moore: That's important, isn't it --to have a lot of things going on? Dave Horner: It seems to be important to get your fingers in as many things as you can. If you have less days to go fishing, you better keep more of what you catch in your own pocket, and keep control of expenses.

Jeffrey's Ledge will be closed for the entire year. Other areas will close on a rotating basis, starting off Massachusetts and moving northward into the waters off New Hampshire and Maine as spring progresses. But Bill Train says fish don't read calendars, and basing closures on dates instead of conditions in the Gulf can be risky.

Bill Train: The idea of the rolling closures is to let the fish spawn, and you never know when that's gonna happen. It can be within a three month period. Last year the rolling closure didn't work. There was a small area down in Ipswich Bay that wasn't closed, and the spawning cod were in there. And they were decimated -- everybody was fishing on them. It was crazy. So they have to work on that.

There's another problem the fisheries managers have to think about. If the closure is successful, cod will be plentiful in places like Jeffrey's Ledge. What is to prevent the richest areas from being targeted when they re-open, potentially destroying the benefits of the closure in a matter of weeks? Regulators admit they can't answer that -- yet. Fishermen that have made the tough adjustments and diversified will be ready. But that's not enough. Fishery managers will need to be ready too -- with a plan to protect cod stocks when they rebound in the Gulf of Maine.

For Maine Public Radio, this is Bob Moore.

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<Show: MAINE THINGS CONSIDERED> <Date: AUGUST 11, 1998>
<Head: "Stonington: a Fishing Port in Transition">
<Prod: Bob Moore>
<Tran: three pages>
<RT: 5:13>

CHARLOTTE RENNER, HOST: Now that Maine's fishermen can no longer depend on groundfish to fill their nets, former gilnetters are turning to lobstering. But what happens to the local economy if lobster runs short? That's the question worrying residents of Stonington, one of Maine's oldest fishing communities. Bob Moore reports.

NATURAL SOUND - GULL, LOBSTER BOAT

Another lobster boat leaves the dock at North Atlantic Seafoods loaded with barrels of bait. Lobstering has always been a mainstay fishery in Stonington, but it hasn't always been the only meal ticket for local fishermen. Until recently, groundfish provided a healthy income as well. Del Gross is the owner of North Atlantic Seafoods.

Del Gross: This dock right here used to handle a million and a half pounds of fish a year.

Bob Moore: how much fish do you handle now? Gross: zip, nothing. only thing we handle is lobster.

Gross says he never thought he would see the day when it was next to impossible to get a pound of fish in Stonington.

Gross: There's times when you can't do that right now.

In the late 80's and early 90's, fourteen gillnetters moored in Stonington's harbor. Fishing brought big money into the local economy. Each boat supported the families of the captain and three or four crew members. They spent their money in Stonington's grocery store and local gear supply shops. But there's only one gillnetter left. It's owned by Jen Bubar and her husband Rick. Jen is also director of the Maine Gilnetter's Association. She says the fish are coming back, but the declining stocks have already rippled through the local economy: it's harder to get fishing supplies locally, and the Bubars are finding it difficult getting their fish trucked now that theirs is the only boat fishing a full season.

Jen Bubar: The trucking company has had to diversify so they're not as flexible as they used to be. They're not catering to us. When he's the only gillnetter in town, who's gonna take his fish? I'm scared, and I've been scared a long time. And I don't like waking up every day feeling scared.

The Bubars are also having trouble finding a crew. Young men no longer trust fishing to bring them paycheck. Like many former gill-

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etters, they are turning to lobstering. That may be a short term solution to the town's employment outlook. But Jen Bubar worries about what happens a few years down the road if lobsters become scarce.

Bubar: If that falls apart we're all going to be in big trouble, because no fishery in a community like this is in a box by itself. It's really scary that we're all so tied in. I suppose it's the same if you live in a mill town, and the mill closes and all of a sudden you've got hundreds of people out of work with no other jobs to do.

For now, Stonington fishermen think lobstering is the best strategy. But every strategy has its risks, and falling back on lobstering doesn't make Stonington invulnerable. It does reveal a fierce dedication to the water. And unlike gillnetting, which kept boats out for days, a lobsterman can be home every night for dinner.

But not everyone can easily make the switch from gillnetting into lobstering. The Island Medical Center has been helping the community identify sources of stress, and has sponsored workshops to provide support and practical financial strategies. Kim Hutchinson worked on the center's Healthy Island Project, and says stress is high in Stonington's workplace and homes. Yet there is a stubborn reluctance to seek help.

Kim Hutchinson: People historically have been independent by nature, pull yourself up by bootstraps and keep going. What I've heard all my life growing up around here is this blind faith optimism in the future, like "Geez, it's been a tough winter, but it'll get better this spring," then summer, then fall. The built-in belief is you work hard and this is a good honest life. There is no fisherman out there that isn't doing it because they don't love it. People that have been doing it forever and ever, and now they may not be able to do it anymore. It's heartbreaking.

NATURAL SOUND -- FOGHORN, WAVES

Boom and bust times are nothing new here. A century ago, the granite industry employed hundreds of quarrymen. Now just a handful of workers carry on that tradition. The only thing booming in Stonington recently is real estate, as newcomers have bought places here for the scenery and quality of life. Summertime art galleries far outnumber year-round businesses on Main Street. For old timers here, there is a sense that Stonington's heritage of hard work and self sufficiency is slipping away. Jen Bubar says that's especially true because there is little to keep the younger generation in Stonington.

Bubar: There's not a lot of opportunity here for people. A whole way of life is being lost. When I went off to college I wanted to come back here. It's a shame that high school-age kids won't be able to come back here because there's nothing here for them.

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Today, most of Stonington's boats are trying to earn a year's income from a three month lobster season. That alone tells you something about this community's determination to hold onto a seafaring heritage. Whether it succeeds, or becomes just another summer colony, may depend on whether the fishing industry can hold on until the groundfish rebound, and how long the lobsters can support the fishermen of Stonington's former gillnetter fleet. For Maine Public Radio, this is Bob Moore.

-- END: 5:13 --

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<Show: MAINE THINGS CONSIDERED> <Date: AUGUST 11, 1998>
<Head: "Hagfish, Gulf Of Maine's Rising Star In Asian Markets">
<Prod: Bob Moore>
<Tran: three pages>
<RT: 5:12>

KEITH SHORTALL, HOST: When you think of fishing in the Gulf of Maine, you probably aren't thinking of trawlers bringing eels for shipment to markets in Korea. But there's more than cod, haddock, and flounder out there. And with the traditionally popular species in short supply, fishermen are on the look out for new and marketable species. Bob Moore reports on the slimy species that's getting the most attention this season.

NAT SOUND SPLASHING EELS

Another batch of Atlantic hagfish goes sliding down the chute at Resource Trading Company in Portland. Eleven workers surround the table sorting fish by size, and packing it into boxes. Handling hagfish is not for the squeamish or weak of stomach. These are decidedly repulsive creatures, mostly because they are covered in a slime like rubber cement that sticks to everything. Foreman Buddy Hudson oversees the packing:

BH: "Looks like a slippery slimy snake with no eyes and no teeth. They're gross."

The hagfish has long been considered a nuisance species to Gulf of Maine fishermen. Sightless, it navigates using a keen sense of smell to find its prey - fish in distress. The slime eel is essentially a parasite, with gross."

And their disgusting habit of consuming other fish from the inside out has earned them the hatred of generations of fishermen. For years, New England the nasty habit of consuming fish from the inside out. New England gillnetters had gillnetters have had to discard about 18% of their catch because of damage caused by hagfish invading their nets. It has fond admirers in Korea though, where the skin is prized as a strong yet supple leather.

RMM: "Look at all the slime..." BH: "Oh that stuff I know, it's like superglue. They should find a market for that."

Finding a market for hagfish itself is a victory, since it converts a problem into a profit for fishermen. When a sharp observer from the University of New Hampshire saw Koreans buying Pacific hagfish, he thought, why not see if the Atlantic species will work?

Now Atlantic hagfish is the most highly prized by the lucrative Korean eelskin industry. It is used to make eelskin wallets and purses, and eelskin boots are in vogue with Texans with a taste for the exotic.

With all the news about financial crises in Asia, it might seem a risky time to start a fishery exporting to Korea. But hagfish ex

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ports are up, according to K H Cho, the leading exporter of hagfish.

Cho: "When we started in 94 we shipped 28 containers which is about 1.3 m lbs. In 96 which is peak of export, we shipped 70 containers which is almost 3.5 m lbs. But this year we'll try to target somewhere about 4.5 m lbs."

One reason demand is growing is that Koreans also buy slime eel meat, which they eat with a spicy sauce accompanied by strong drink.

The hagfish is just the latest under utilized species in the Gulf of Maine to become an overnight star on the Asian market. Others, like sea urchins and elvers, have quickly gone bust because of over fishing. Researchers say that because the hagfishery is just being developed there is the opportunity to manage it right and not make mistakes. There is time to study how fast the eels reproduce rather than wipe them out in five or ten years. There are no regulations on the fishery now, so it is up to the fishermen to harvest hagfish sustainably. If they don't, the fishery will disappear, as it did in Massachusetts last year. Cho began his export business in Gloucester five years ago. He moved his operation to Maine this year, because the largest and most desirable eels were already fished out of Massachusetts waters.

Cho: "Our five years in Gloucester we shipped 20 m lbs. And accordingly the larger fish were fished out. We have to wait several years for smaller eels to get to large eel. Nobody knows what is the growth cycle of this fish. Some say 10 years to get big, some say 17 years. Nobody knows, but generally everybody understands this is a very slow-growing fish."

And there are few people lining up to study the life cycle of the now-lucrative slime eel. Fishermen say that the size of the hagfish resource is nothing less than mind boggling. But how long they can sustain a fishery already taking out 7 million pounds a year is anyone's guess. If hagfish prices stay around 29 cents a pound, it is sure to be a high-volume fishery.

Groundfishermen see the hagfishery as an opportunity to keep working during the days when they can't target groundfish. Like Carl Schoenbacker, owner and captain of the 90 foot Osprey.

Schoenbacker: "Because of all the new regs that are in effect, limited days at sea, and depletion of the stocks, I've converted my boat into a freezer boat. and I target hagfish. And we're trying to develop this fishery."

"RMM: "How many crew do you have on board?" CS: "Currently fishing with 5 men: myself and 4 other people."

Add in the other boats going after hagfish, and all the people involved in freezing and trucking the catch, and hagfish-related em

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ployment is increasing at a time when other Gulf of Maine fisheries continue to struggle. Carl Schoenbacker says New England fishermen need the work.

CS: "Most people in this country want to eat their nice codfish fillets. But the more species that can be sold profitably and not harm existing stocks, the better it's gonna be all around, in my opinion." RMM: "So were eating down the food chain aren't we?" CS, laughing: "Yea, I would say this is about the bottom of the food chain."

If hagfish exports continue to rise in spite of financial problems in Asia, fishermen and resource managers will need to take steps to protect the slime eel from becoming too popular with fishermen. If they don't, another species could follow the path of sea urchins, and the cod, haddock, and other groundfish once plentiful in the Gulf of Maine. For Maine Public Radio this is Bob Moore.

<Show: MAINE THINGS CONSIDERED> <Date: SEPTEMBER 29, 1998>
<Head: "Fishing for Science">
<Prod: Bob Moore>
<Tran: Three pages>
<RT: 5:20>

INTRO: Here's a question: what do fishermen, scientists and managers have in common? Until recently, the safe answer was Nothing at all. Now fishermen and scientists are working together. Bob Moore reports that the result is extra income for fishermen, new data for researchers, and a new understanding between two groups who have often disagreed.

NAT SOUND FISHING GEAR, VOICES

Dan Schick, a fisheries biologist and researcher with the Maine Department of Marine Resources, surveys the fishing nets and gear in the storage shed. The pile of equipment represents hundreds of hours working with fishermen to design highly selective fishing gear. He picks up a grate shaped like a flat slotted spoon

Schick: "We are dealing much more with laws that require targeting be as sharp as possible, so the whole purpose of dealing with fishermen is to design gear that will release the species you don't want to catch unharmed, and retain only the size of the species you want to keep."

It is a marriage of convenience. researchers say it would be nice if they could jump aboard a research vessel and do their experiments, but boats are expensive to run. The Maine Department of Marine Resources lost its only research vessel in a recent funding cut. It's turned to boat owners like Maggie Raymond, who with her husband owns the 83 foot trawler Olympia and other vessels. She says scientific research is another way to keep the boat working.

Raymond: "We got involved contracting the vessel to do research as an economic necessity. Fishing regs make it difficult to see a return on cap investment and keep your employees working for a full year. So we felt we had to find some other opportunities." RMM: "Why do you want to use the Olympia to do this?"

Raymond: "Its a more cost effective way to do the research. a fishing vessel is uniquely suited to gather that kind of information, it costs the government less to contract with us rather than buying and maintaining their own

vessel. Plus, in these difficult times it does put a few more dollars into the industry."

A lot of healing has to take place for joint partnerships to succeed. There are wide gaps in trust between fishermen, managers and scientists. The three are like foreign cultures, each with a very different perceptions of the waters they share. Understanding the ocean poses huge challenges. In a dark, fluid ecosystem, finding and counting things is difficult. That makes managing fisheries a challenge, because the scientists can only give their best guess as to the status of the stocks. Fishermen have often disagreed with the scientists assessments, and the regulations built upon those assessments. Cooperation changes that.

Raymond: "You have a communication building process that evolves out of the coalition between scientists and fishing industry. There's a certain level of either miscommunication or distrust between industry and scientists about the status of the resource. So I think anytime those two groups can work together you're coming up with a positive situation."

Accurate measurement of fish stocks is key because managers use that information to regulate industry. The Gulf of Maine has the most complete database on fish movements in the world going back some 35 years. Its the envy of managers worldwide. Yet the official government trawls only offer a snapshot of the ocean twice a year at locations selected randomly by computers. Fishermen who are on the water daily see a more complete picture. Their efforts are highly directed: while scientists scan the whole ocean, fishermen scan for certain species of fish. Managers face the problem of bridging the two. John Williamson is a fisherman and member of the New England Fisheries Management Council, the governing body comprised of industry and scientists that develop fisheries management plans.

Williamson: In the past the reason fishery management has failed is that too often times its competing ideas and the competition has to be solved politically; whoever has the strongest presentation, whether its scientific basis or not, wins. The results of that have been all too evident. When we see collaborative efforts its very attractive because those efforts carry credibility in two spheres. It takes the politics out of fisheries management and gives us a much more solid foundation to work on.

NAT SOUND: DMR LAB

Dan Schick of the Maine Department of Marine Resources sits at his computer scanning the results of his summer trawl survey. His graph depicts the ideal combination of mesh size and bar spacing that targets the right size and species of fish.

Schick: "That's nirvana right here. If we can catch these and nothing else, that's good. Fishermen are coming to the understanding that the only way they're gonna win is to keep the fish on the bottom, and the way to do that is to only take the amount of fish they can efficiently take and still allow the pops to grow. And they're willing to work together to get there. That's simply good business, to keep charge of your own future."

While cooperative research might not make fishermen rich, the benefits of bridging the communication gap between them and scientists might eventually outweigh the economic returns of hiring fishing boats as research vessels. For MPR this is RMM.

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