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DMF NEWS

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MarineFisheries

A Commonwealth of Massachusetts Agency

State-wide Fishway Survey Completed

New report inventories all existing runs and prioritizes streams for future work

Anadromous fish in Massachusetts (of which there are 17 species) underwent a striking decline in populations from the time of European colonization in the 1600s through the 1950s. The combined effects of impassable dams, gross pollution, water diversion and overfishing drastically reduced or eliminated our anadromous fish populations. However, late 20th century efforts to restore depleted stocks through improving stream passage and management of populations have led to a significant recovery in the Commonwealth. Today more than 100 coastal rivers and streams are sites of active herring runs.

In 1967, *MarineFisheries* conducted a survey of coastal streams to determine the existence of anadromous fish resources and potential for restoration and enhancement. Results of that survey, published in 1972, provided a work plan for *MarineFisheries*' Anadromous Fish Project over the last 30 years.

In the three decades since the completion of the survey, numerous changes have taken place. Some fishways have deteriorated or their designs have become obsolete. Dams have failed, eliminating spawning or nursery habitats. Impoundments have degraded due to eutrophication, and water withdrawals have raised fish passage issues.

Other changes have been positive. Many fishways have been constructed, replaced, or repaired, and designs have improved dramatically. Stocking programs have resulted in new populations and restoration of others. Water quality has improved in many systems, and virtually all recommendations made

The survey examines and documents 215 coastal streams, 380 obstructions (primarily dams), 493 ponds, and 175 fishways.

in the 1972 report have been successfully carried out.

Because of these changed conditions, continued effective management of coastal anadromous fish resources in Massachusetts required a new survey and report with updated recommendations. This new survey was conducted in 2001 and 2002 and was a massive effort to document all impediments to passage of anadromous fish in Massachusetts coastal streams and to collect information on all fish passage structures ("fishways"). This report with recommendations will be the basis of an action

Obstructions to Fish Passage in Massachusetts Coastal Streams

plan for future *MarineFisheries* anadromous fish work.

The survey examines and documents 215 coastal streams, 380 obstructions (primarily dams), 493 ponds, and 175 fishways. A vast amount of information is provided on attributes of these streams, ponds, obstructions, and fishways including stream length, pond acreage, dam height, and type, condition, and function of each fishway.

The number of fishways documented (175) is likely the most of any state; representing about $40 million of infra-structure. The most significant finding is that about half of all fishways function inefficiently and about half of those need repair. We are now developing a prioritized list of repair/ construction project to improve existing fishways and build new ones where necessary. A great deal of work remains to be accomplished over the next several years, and this survey will provide the needed guidance.

The report is entitled *A Survey of Fish Passage in Coastal Massachusetts* and is presented in four parts: Southeastern Massachusetts; Cape Cod and the Islands; South Shore; Boston and North Shore. The report is available on our website (www.mass.gov/marinefisheries) and will also be available on CD.

by Dr. Michael Armstrong

Cooperative research cod surveys yielding unprecedented detail in the Gulf of Maine

On November 21st *MarineFisheries* began the first of five legs of the pilot Industry-Based Survey (IBS) for Gulf of Maine (GOM) cod. Funded by NOAA Fisheries and in cooperation with Maine Department of Marine Resources and New Hampshire Fish and Game, this trawl survey is breaking new ground for cod assessments.

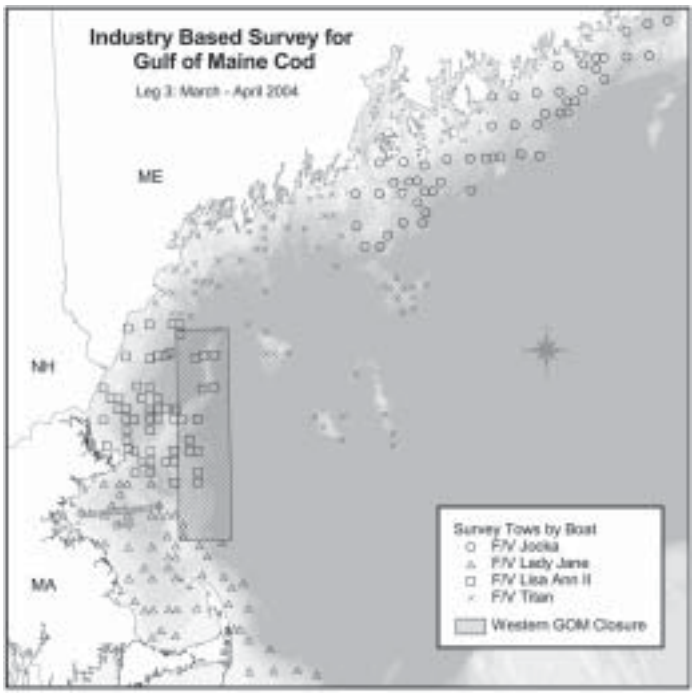
Utilizing expertise and knowledge of New England commercial fishermen, this important collaborative effort will help develop an optimal survey to identify the spatial and temporal distribution of GOM cod. Information collected includes cod population age structure, growth rates, spawning sizes & timing, and associations with other species and habitat.

With an eye to the effective use of such scientific data in management decisions, the survey has been designed to complement both federal and state trawl surveys. Information collected will provide fishermen, managers, and biologists with a better understanding of GOM cod, enhance stock assessments, test current management techniques, and assist in developing new management strategies.

The project is currently on schedule having completed the third leg on March 6th. Over 413 standardized tows have been completed from the Maine/Canadian border south to Chatham, Massachusetts out to 60 fathoms.

As expected, cod catches were high in November through January but dropped off during the heart of winter. The western Gulf of Maine closed area and Massachusetts Bay (see map) have yielded the biggest cod catches thus far in the survey. Observers have been excited by signs of a strong year class of haddock (age 1) prevalent throughout most of the survey region. State and federal trawl surveys also detected this strong age class.

MarineFisheries sampler collecting age and maturity data on cod of all sizes.



Tow locations of the Gulf of Maine cod survey abord four cooperating fishing vessels.

The project has received excellent support from staff at Reidar's Manufacturing Inc., that built and maintained the nets throughout the survey. Reidar's has been able to respond on short notice, repairing damages and allowing vessels to get back out on the water as quickly as possible. Reidar's crane truck has been especially useful moving and transporting large nets and doors between vessels, storage facilities and Reidar's net loft.

Due to the commercial style and size of nets, catches have been large, proving to be a challenge for samplers. Protocol for working up a survey tow is to identify, sort, measure, weigh, and collect biological information from every species retained. This can be a very time consuming task but by working side-by-side, fishermen and scientists tackled large piles of fish and accurately quantified tows.

Great for lobstermen, but troublesome for the survey, a strong run of lobsters occurred late last fall, running well into December. Lobster gear severely hampered efforts for several of the survey vessels, particularly in the waters off Maine. Vessels have done an excellent job avoiding fixed gear, but unfortunately this can come at the cost of missed stations inaccessible to the survey.

During the first leg, vessels that surveyed off of mid-coast and downeast Maine only completed 38% of their assigned stations. By the end of the third leg, vessels had increased total assigned stations surveyed to 78%. This lack of data will result in gaps within the database.

It is imperative that vessels survey all stations. They need access to these areas.
MarineFisheries ***has requested that fixed gear fishermen monitor our website and keep stations gear-free.***

Although on schedule, the project has had challenges. In December two Nor'easters dumped 2-3 feet of snow and produced over two weeks of gale winds and rough seas. In order to complete the leg, vessels and staff were committed and poised at all times to take advantage of brief windows of good weather. In January, crews worked through 20-30 degrees below zero wind chills. Negative temperatures made sampling difficult as fish began to freeze as soon as they were brought on deck and sampler's fingers were numbed while attempting to remove age structures from the heads of codfish. One vessel reported ribbons of slush floating in the middle of Cape Cod Bay. This is a sight rarely seen and a testament to how cold it was.

The strata design, developed with assistance from the Northeast Fisheries Science Center, contains 150 systematic "grid stations" and 50 stations identified by industry as having seasonally high concentrations of cod. Because grid stations are points placed equidistantly throughout the survey range, many fell on bottom types that were not necessarily towable due to boulders or other obstructions. Therefore, new stations, or tows, had to be established. Although typical of most mobile gear surveys, this came at a cost.

Several nets sustained damage including torn bellies, wings, and a parted main wire and legs. On the backside of Cape Cod, one vessel became entangled, more commonly referred to as "hung down," with a wreck and was stuck for over two hours. Because the trawl was only attached by one wire, the captain had to be careful not to part the other wire which would have resulted in a total loss of gear. After two hours of tactful maneuvers, the captain was able to finally retrievethe gear.

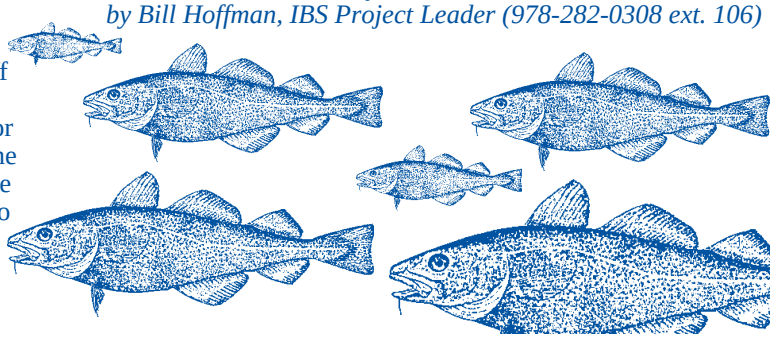
The fourth leg of the survey was completed on April 18. Although cod spawning occurs within the survey area and throughout the survey's time period, spring is known to be the primary spawning season. Dense aggregations of spawning fish will be susceptible to the survey gear and therefore it is anticipated that catches will increase compared to the first three legs.

MarineFisheries looks forward to continuing this coordinated effort between fisheries managers, scientists, and fishermen. Data collected during the first four survey legs is currently being processed. Once all five legs have been completed and all data have been processed and analyzed, results will be published for the benefit of all interested parties.

It is imperative that vessels survey all stations. They need access to these areas. *MarineFisheries* has requested that fixed gear fishermen monitor our website and keep stations gear-free.

For any fisherman who does not have access to the Internet, we can provide maps, a list of stations, and estimated dates of the survey.

by Bill Hoffman, IBS Project Leader (978-282-0308 ext. 106)



Conservation Engineering promotes selective fishing gear research

This past winter has been a busy period for *MarineFisheries'* Conservation Engineering Project (ConsEng). Several initiatives are underway to help place Massachusetts and the Northeast region at the forefront of global research on selective fishing gear.

Gear Selectivity Workshop

ConsEng and the University of Rhode Island hosted a Northeast regional workshop from March 22-24 on how to perform fishing gear selectivity experiments according to International Standards. The intensive workshop was held at University of Massachusetts' School for Marine Science & Technology (SMAST) in New Bedford. Led by Thomas Moth-Poulsen, Chief of ConsEng, and Rene Holst from ConStat in Denmark, who have conducted similar workshops in Europe, the workshop guided participants through a mix of presentations, discussions, and computer exercises. Mr. Holst has long been an active fisheries researcher engaged in various aspects of selectivity analysis with towed and static gear. The workshop's technical and statistical sections drew gear researchers from all major institutes throughout the Northeast.

Workshop led by MarineFisheries' Thomas Moth-Poulsen provided participants training in the principles of experimental design and gear selectivity. From left to right: Brian Kelly (DMF), Vin Manfredi (ME DMR), Mark Szymanski (DMF), and Laura Lee (ASMFC).

Codend Selectivity Trials

ConsEng assisted in the design and sea-trials of a comprehensive project testing the selectivity of a 6.5-inch and a 7-inch codend. The project, funded by the Cooperative Research Partners Initiative, was conducted at-sea by Capt. Sam Novello. ConsEng designed a new cover bag to collect fish escaping from the codend. Built by Levin Marine Supply in Fairhaven, the cover was constructed in accordance with protocol for selectivity experiments and improved flow parameters based on a design developed in the Danish flume tank by Thomas Moth-Poulsen. Capt. Novello did an extraordinary job working with the cover that was often difficult to handle due to its large size. With the assistance of newly custom-built selectivity statistical software, ConsEng analyzed a comprehensive amount of data. Valuable information has been produced regarding selectivity for a number of species but in particular for dabs, yellowtail, and witch flounder.

Captain Scott Westcott (left) and Thomas Moth-Poulsen (right) aboard the F/V MARY HELENA.

Cod Bycatch Avoidance Sea-trials

ConsEng is currently conducting sea-trials of two separate trawls designed to avoid bycatch of cod as part of the second phase of its federally funded project designed to compare selectivity of the trawls against a standard yellowtail trawl. *MarineFisheries* is working in cooperation with Scott Westcott aboard the F/V MARY HELENA to conduct these sea-trials on Georges Bank. To avoid statistical errors normally generated by testing trawls individually during alternate tows, ConsEng is testing the two trawls in a side-by-side twin-trawl rig. Previous cooperative work between industry and *MarineFisheries* has shown these nets can exclude most cod from the catch. This new experiment will show whether these findings can be transferred to larger trawlers and night-time hauls. In preliminary trials to break in the twin trawl, the two wire technique on Scott's trawler has been successful and handling has been less cumbersome than anticipated.

The new twin trawl test technique means a big step forward in research for more selective trawls and can be used to improve other trawl-related research in the Northeast. Until recently, the statistical evidence that trawl innovations result in more selective fishing than commonly used trawls has been a weak side of the research in the Northeastern United States. Through such cutting-edge research, *MarineFisheries'* Conservation Engineering Program will provide insight into better opportunities for commercial fishermen from Massachusetts and throughout the Northeast who will need to avoid overfished species in the coming years pending new federal regulations under Amendment 13 in May of 2004.

For more information contact Thomas Moth-Poulsen at 508-563-1779 x 157.

2003 Massachusetts Saltwater Derby Winners

MarineFisheries held its annual Massachusetts Saltwater Fishing Derby awards ceremony on February 8th at the Eastern Fishing and Outdoor Exposition. The 2003 Derby saw 37 winners from a total of 230 derby entrants. Five new state records were set for albacore, dolphin, spanish mackerel, thresher shark, and wahoo.

The 2004 Massachusetts Saltwater Fishing Derby commenced March 1st and ends November 30th. It is open to all age groups and there is no entry fee. Fish entered must be caught in a fair and sporting manner on a hook and line and must be measured and weighed at an official weigh station on a certified scale. Weigh masters can be found at most local marinas and tackle shops. we would also like to remind participants that any entry must be caught in state waters and/or first landed in a Massachusetts port. In addition, a "Skillful Skipper" award is presented to the captain who has three derby-winning fish caught on their boat per year.

To enter, fill out an official affidavit and have it certified at a weigh station. Affidavits must be received within 30 days of catch and be postmarked no later than December 10th. Check *MarineFisheries*' web site for current information at: www.mass.gov/marinefisheries.

Yahoo! It's a state record wahoo!

Species	Minimum Entry Weight (lbs.)	State Record	Division	Name	Winning Weight
Albacore	30	**65 lbs. New Record**	Men	**Tom Good**	65 lbs.
Black Sea Bass	4	8 lbs.	Men	Jeff Capute	6 lbs. 4 oz.
Black Sea Bass			Women	Orietta DiGeronimo	4 lbs. 5 oz.
Black Sea Bass			Junior	Kevin Owen	4 lbs. 10 oz.
Bluefish	12	27 lbs 4 oz	Men	Mike Wilson	18 lbs.
Bluefish			Women	Elena Rice	17 lbs. 14 oz.
Bluefish			Junior	Taylor Sears	13 lbs. 5 oz.
Blue Shark	250	454 lbs.	Men	Paul Trani	341 lbs.
Bonito	5	13 lbs. 8 oz.	Men	Stanley Brown	10 lbs. 4 oz.
Cod	30	92 lbs	Men	Moe Howard	62 lbs. 12 oz
Cod			Junior	Robert Emond, Jr.	45 lbs.
Dolphin	30	**38 lbs 8 oz New Record**	Men	**Michael Kane**	38 lbs. 8 oz.
Dolphin			Women	Gretchen Mills	18 lbs. 15 oz.
Fluke	7	21 lbs 8 oz	Men	Charles Monteiro	13 lbs. 9 oz.
Fluke			Women	Jill C. Tuch & Pamela Bradford	10 lbs. 12 oz.
Fluke			Junior	Douglas Fraser	8 lbs. 13 oz.
Haddock	8	20 lbs.	Men	George Kavgic	16 lbs. 12 oz.
Pollock	20	48 lbs 2 oz	Men	Dennis Sullivan	34 lbs. 6 oz.
Scup	2	5 lbs 14 oz	Men	Robert Conway	3 lbs.
Scup			Junior	Nicholas Curry	2 lbs. 12 oz.
Spanish Mackerel	5	**6 lbs. 12 oz. New Record**	Men	**Timothy Carbone**	6 lbs. 12 oz.
Spanish Mackerel			Junior	Julie Birch	5 lbs. 1 oz.
Striped Bass	35	73 lbs.	Men	Gary Corsetti	54 lbs.
Striped Bass			Women	Kathy Theiling	46 lbs.
Striped Bass			Junior	Erich Bubb	51 lbs. 12 oz.
Tautog	8	22 lbs. 9 oz.	Men	Brian Calef	12 lbs.
Tautog			Women	Holly Fabbricotti	14 lbs. 2 oz.
Tautog			Junior	Jonathan Morse	9 lbs. 1 oz.
Thresher Shark	200	**506 lbs. New Record**	Men	**Jonathan Wietecha**	564 lbs.
Wahoo	30	**92 lbs. New Record**	Men	**Rich Laurendeau**	92 lbs.
Weakfish	8	18 lbs. 12 oz.	Junior	Joshua Folco	8 lbs. 10 oz.
Winter Flounder	3	8 lbs. 2 oz.	Men	Dennis DeCarney	5 lbs.
Winter Flounder			Junior	Zack Zero	3 lbs 1 oz.
Wolffish	20	55 lbs. 8 oz.	Men	Mie Comfort	36 lbs. 8 oz.
Wolffish			Junior	Jess Crozier	23 lbs.
Yellowfin Tuna	50	187 lbs.	Women	Marcia Kane	54 lbs.

"HubLine" Construction Impacts

MarineFisheries leads efforts to assess and restore local marine resources

MarineFisheries will lead a 5-year program in cooperation with the Department of Environmental Protection (DEP) and Executive Office of Environmental Affairs (EOEA) to mitigate and restore marine resources and habitat due to assumed impacts of the Algonquin Gas Transmission Company's "HubLine" natural gas pipeline project. Algonquin has provided the Commonwealth with $5 million in mitigation funds as a direct result of permit violations; specifically the project exceeded the allowed Time-of-Year (TOY) "work window." *MarineFisheries* and NOAA Fisheries had recommended to the Army Corps of Engineers (ACoE) that the project be limited to certain time periods to minimize impacts on marine life, specifically certain species' spawning seasons.

"HubLine" Background

The HubLine is a 30-mile long pipeline from Salem/ Beverly to Weymouth designed to connect the Maritimes pipeline (in northeastern US and Atlantic Canada) and Algonquin pipeline (in New England), to transport natural gas to the northeastern United States. Trenches 3 to 10 feet deep and 20 to 50 feet wide were dug in which to lay the pipeline and involved horizontal directional drilling, conventional dredging, jetting, plowing, and blasting. Unavoidable impacts associated with these activities included extensive habitat disruption and direct loss of living marine resources. As a result, *MarineFisheries* in cooperation with NOAA Fisheries already administers $435,000 in mitigation funds previously received from Algonquin. Plans are underway to implement several projects during 2004 to enhance habitat, restore shellfish in Quincy and Weymouth, and identify pollution sources and conduct anadromous fish work in Salem Sound.

MarineFisheries' Hubline Mitigation & Restoration Program

Following receipt of the additional $5 million from Algonquin, *MarineFisheries* assigned senior fisheries biologist, Bruce Estrella, to supervise *MarineFisheries'* newly formed HubLine Mitigation and Restoration Program. One of the key early phases of the Program was to develop selection criteria for proposed mitigation and restoration projects. Public comments were solicited along with recommendations of an Inter-Agency Steering Committee including representatives of DEP, NOAA Fisheries, Massachusetts Office of Coastal Zone Management, Environmental Protection Agency, Conservation Law Foundation, and Massachusetts Marine Fisheries Advisory Commission.

The Steering Committee met twice during the winter to help *MarineFisheries* define a mitigation/restoration work plan. Following review of mitigation proposals, the Steering Committee chose to focus on four areas of work to be implemented over the next four years: shellfish mitigation and associated improvements to water quality, eelgrass restoration, habitat enhancement, and anadromous fisheries

Lobster walking under a raised section of pipeline near Lovell's Island. The pipe was later covered by cobble.

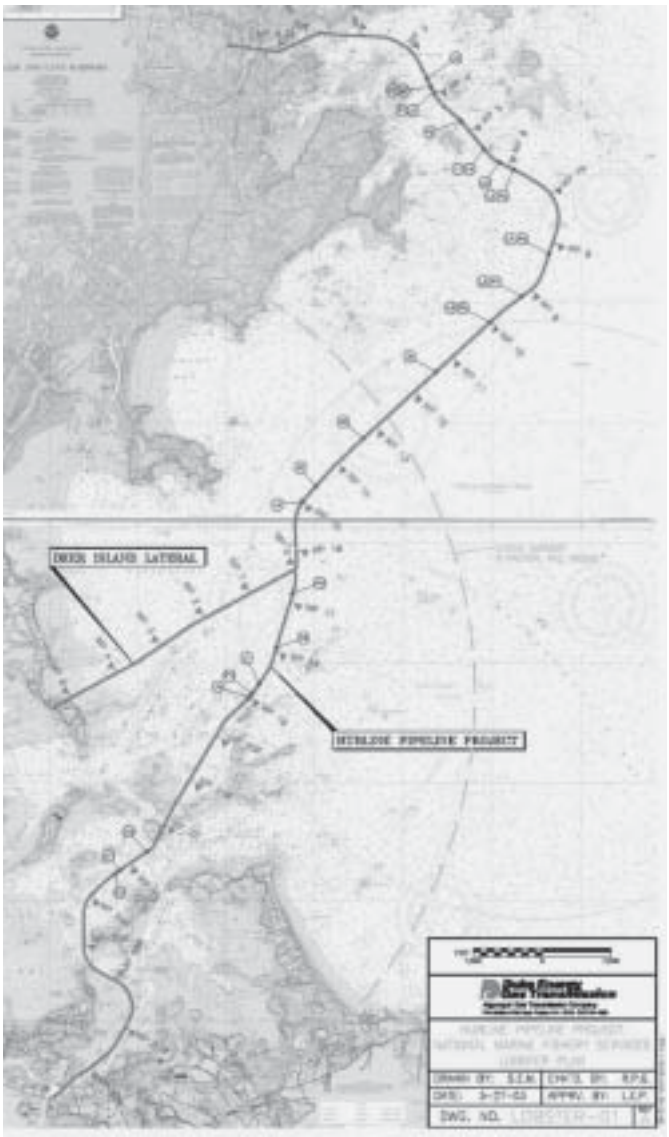


Chart of HubLine gas pipeline that extends from Salem Sound south to Weymouth.

restoration. Annual program review will involve assessing the success of the individual projects.

Assessments of American Lobster and other Resources

MarineFisheries has set aside $1 million of the total funds to conduct resource assessments. These activities are multi-faceted and intended to determine impacts from construction, monitor recovery, and evaluate effects of mitigation and restoration efforts. Although Algonquin is required through the permitting process to conduct limited post-construction surveys, *MarineFisheries* is involved in a longer term effort. For example, some life history stages of more mobile epibenthic invertebrates and finfish species have the ability to move away from disturbances while other stages and benthic infauna could be buried and perish. There may be effects on spawning success, behavior, and physiology. Suspended sediment plumes can occlude habitat and impact eggs and larvae in the water column or on the bottom, thereby affecting hatching success and larval survival. Results vary with species, life stage, exposure time, and concentration of suspended silt, but they can reduce feeding rates and interfere with the ability of fish to find their prey. Physical effects such as clogging of gill tissue can lead to physiological responses similar to asphyxiation.

Exceeding the TOY work window end dates resulted in the need to evaluate the effect of surface laid pipe or open trench on the seasonal onshore migration of American lobster. In June of 2003 Algonquin used part of the funds dedicated to assessments to conduct a diver video and ROV survey of lobsters in the vicinity of the pipeline prior to pipe burial. The study did not find higher concentrations of lobsters on the east side (vs. west side) of the pipe which would have indicated the pipe was an impediment to inshore migration of lobsters.

In addition, complementary work to describe and quantify biota in the trenches of several exposed sections of pipe off Boston was conducted by *MarineFisheries* staff with a video survey of transects using SCUBA in August of 2003. These sections could not be buried to the recommended depth and, as an alternative, Algonquin planned to cover them with cobble. *MarineFisheries'* monitoring effort indicated that re-vegetation and re-colonization of crustaceans and finfish had occurred in a relatively short time since the pipe was laid.

Concerns about impacts to local lobster fisheries warranted enhanced sea sampling in the construction area. Consequently *MarineFisheries* hired two new Fisheries Technicians during the summer of 2003. Their efforts nearly doubled the usual number of commercial sea sampling trips in Massachusetts Bay. Also, suction sampling of early benthic phase lobsters was conducted in the Massachusetts Bay area to help evaluate larval lobster settlement compared to pre-construction years.

Experimental trap sampling represents an additional means of investigating impacts to American lobster. *MarineFisheries* designed a ventless lobster trap sampling program for implementation in the HubLine impact area and greater Massachusetts Bay. The use of ventless gear will improve our knowledge of all sizes of lobster in the area, as traps deployed by commercial fishermen normally release small lobsters thorough mandated escape vents. Trap placement will be stratified by bottom sediment type and bathymetry. This survey will help to evaluate lobster abundance and size structure on the impacted HubLine pathway relative to non-impacted areas throughout Massachusetts Bay while taking into consideration the effects of depth and bottom sediment type.

Acoustic & Optical Surveys

Post-construction baseline imaging of the HubLine pathway using sonar and video equipment aboard the R/V Gloria Michelle is ongoing. This effort will contribute to the site selection process for various mitigation proposals. Moreover, it will allow us to monitor succession and recolonization of the disturbed sediments. Diver surveys will also be conducted to complement this work. In addition, multi-year assessments will be made of the recovery of species diversity on the disturbed sediments relative to control sites.

Recolonization of impacted habitat and long term community composition depend on numerous factors: stability of dredged areas, dynamics of local oceanographics, tolerance of organisms to physical changes, and availability of recruiting organisms. The requirement for Algonquin to restore the trenched area to pre-construction quality will facilitate and enhance opportunities for recolonization.

The combination of mitigation & restoration projects with assessment efforts will help both *MarineFisheries* and the permitting agencies better understand the potential consequences of short and long term effects from future marine construction projects. Through these monitoring studies, *MarineFisheries* will learn much about the recovery of impacted fauna and flora on the disturbed sediments and effects of the mitigation program.

by Bruce Estrella, Program Manager

Sediment plume trailing barge in Salem Sound. The barge carried a backhoe used to return bottom relief to pre-construction levels.

On-line Reporting for Wholesale Fish Dealers

The state's historic wholesale seafood industry will soon have to go "high-tech" to keep up with the demands for accurate and complete reporting of landings. The new system will broaden the data collection to more species and make data collection more timely. It will aslo eliminate some redundancy where dealers must report some species purchases to both the state and federal statistics programs.

Under new federal mandates, most federally licensed wholesale dealers purchasing fish or shellfish from fishermen will be required to report all transactions daily. *MarineFisheries* also will require any state dealer that falls outside the federal mandate to comply with the program to ensure all fish landings are accounted for.

Web-based technologies will allow this program to be conducted on each company's personal computers. An internet-based program will allow wholesale dealers to submit reports electronically eliminating daily stacks of cumbersome paper. Currently, federally permitted dealers submit weigh-out slips or paper forms to NOAA Fisheries detailing their transactions with fishermen. As of May 1, paper submittal will no longer be accepted for these federally permitted dealers. Furthermore, weekly reports of quota managed species landings will no longer be required or accepted. Electronic submission to the new electronic dealer reporting system, known as SAFIS for Standard Atlantic Fisheries Information System, will be the only acceptable means for reporting transactions of all species purchased.

The stakes to improve the system are high. This program's mandate to improve reporting of fish landings comes from a federal court order as a result of lawsuits over Amendment #13 to the Multispecies Groundfish Plan. However there are long-standing deficiencies in the collections of landings data that will be improved through this system. Many of the state's dealers that are not federally permitted deal in shellfish and lobster and this system will vastly improve landing data for these species.

NOAA Fisheries' Northeast Regional Office (NERO), is implementing new federal regulations for electronic dealer reporting effective May 1, 2004. Details of these requirements can be found on NERO's website at http://www.nero.noaa.gov/ro/doc/nero.html or by telephoning them at 978-281-9300.

What does this mean for dealers who don't have a federal permit or who have a particular federal permit that does not require participation in the electronic reporting program? In Massachusetts, all seafood dealers, whether federally permitted or not, must have a state dealer's permit with *MarineFisheries*. It is *MarineFisheries*'s intention to follow suit with compatible rules that require all Massachusetts dealers, who are primary buyers of any seafood product, including those fishermen who act as their own dealer, selling product directly from their vessel, to report electronically. Many, if not all of the northeast states are following suite as well. Some states have already implemented systems, and others will be shortly, or intend to over the next year or two.

Public hearings in Massachusetts will be held May 3rd (Mass. Maritime at 7PM) and 4th (Gloucester High School at 7PM) to discuss this regulation change, and it is *MarineFisheries*'s intention to implement any new regulation over the next six to twelve months. *MarineFisheries* fully recognizes that not all dealers currently have the capability to report electronically. In addition, given the large number of primary buyers in Massachusetts, *MarineFisheries* realizes that this change will take time. Therefore, it intends to phase this program in over time while also maintaining the weekly call-in system to continue to collect landings for quota based fisheries. Federally permitted dealers in MA who are currently reporting their quota species landings to the state, will no longer be required to do so. However, state-only dealers will be required to do so until they are moved over to the new electronic dealer reporting system.

Information packages will be sent out shortly after acceptance of the new MA regulation. Large dealers will most likely be targeted first, with the hope that by the end of the calendar year, a large percentage of MA landings will be reported electronically. Keep in mind that eventually ALL products purchased will need to be reported, including finfish, lobster and shellfish, in addition to other species, such as herring or eels used for bait purposes. The goal is to collect and monitor the universe of landings in Massachusetts, something that is currently not achievable.

For further information or questions, contact the Division of Marine Fisheries MIS and Statistics Project in Gloucester at 978-282-0308 (Kim Lundy x117 or Tom Hoopes x112).

Web-based daily reporting by wholesale fish buyers will allow state and federal agencies to track landings real-time. The new system will focus on quota-managed species and many other species that have been inadequately monitored in the past.

DMF *Rules UPDATE*

Public Hearings • Regulations • Legislation

Notice of Public Hearings

Scheduled for April 28, 2004

Under the provisions of M.G.L. Ch 30A and pursuant to the authority found in M.G.L. Ch. 130 ss. 17A, 80, and 104, Division of Marine Fisheries (*MarineFisheries*) and the Marine Fisheries Advisory Commission (MFC) have scheduled a hearing on **a public petition to ban purse seining for bluefin tuna in Cape Cod Bay, as defined in 322 CMR 6.04(3)(d), year-round. A public hearing has been scheduled for Wednesday, April 28, 2004 (7PM) at the Holiday Inn – Dedham.** Contact *MarineFisheries* for draft regulations and further details. Written comments may be received by e-mail, (marine.fish@state.ma.us), fax (617.626.1509), or mail (*MarineFisheries*; 251 Causeway St., Suite 400; Boston, MA 02114) and will be accepted until 5PM on Friday, April 30, 2004

Scheduled for May 3 & 4, 2004

Under the provisions of M.G.L. Ch 30A and pursuant to the authority found in M.G.L. Ch. 130 ss. 17, 17A, 80, 100A and 104, Division of Marine Fisheries (*MarineFisheries*) and the Marine Fisheries Commission (MFC) have scheduled hearings on the following regulatory proposals. Contact *MarineFisheries* for draft regulations and further details.

1. ***MarineFisheries* proposals to amend reporting requirements for Massachusetts seafood dealers (322 CMR 7.07) to:**
   a. require daily electronic reporting of all fish purchased directly from fishermen by state-permitted dealers;
   b. eliminate dealer reporting via the Interactive Voice Response (IVR) system;
   c. implement a trip identifier requirement for dealers; and
   d. require dealers to report the disposition of fish purchased.
2. ***MarineFisheries* proposals to amend non-commercial lobster regulations (322 CMR 6.01 & 6.02), to create area-based lobster regulations for size limits, v-notch definitions, escape vent sizes and bag limits:**
   a. Establish two management zones in state waters (one north of Cape Cod, the Gulf of Maine Recreational Lobster Area; and the other southeast & west of Cape Cod, Southeastern Recreational Lobster Area) that generally coincide with the commercial area boundaries for LMAs 1, 2, and OCC;
   b. Amend current minimum/maximum lobster size regulations by establishing a 5" max. size in the Gulf of Maine Recreational Lobster Area (min. size would remain at 3 +") and a 3 3/8" min. size in the Southeastern Recreational Lobster Area;
   c. Amend current v-notch definitions by adopting a "zero-tolerance" definition in the Gulf of Maine Recreational Lobster Area (a "V" shaped notch at least + inch and not greater than a + inch in depth and tapering to a sharp point in the flipper next to and to the right of the center flipper as viewed from the rear of the female lobster when the underside of the lobster is down). The Southeastern Recreational Lobster Area would maintain the ASMFC v-notch definition that currently is in place for the recreational lobster fishery;
   d. Amend escape vent minimum sizes by increasing to 2" x 5 3/4" or two circular vents of 2 1/2" for pots fished in the Southeastern Recreational Lobster Area. The Gulf of Maine Recreational Lobster Area would retain the current non-commercial escape vent size of 1 15/16" x 5 3/4" or two circular vents of 2 7/16"; and
   e. Establish a recreational daily bag limit of 10 lobsters applicable to recreational lobstermen while fishing or while traveling to and from fishing grounds either
      i. in the Southeastern Recreational Lobster Area; or
      ii. in all state waters.
3. ***MarineFisheries* proposal to amend commercial striped bass regulations (322 CMR 6.07):**
   a. open the 2004 commercial fishery on Sunday, July 11, 2004;
   b. reduce the current 40-fish limit on Sunday through Wednesdays to a 10-fish on Sundays (and the first day of the commercial fishing season) and a 20 fish on Mondays, Tuesdays, & Wednesdays; and
   c. accept comments on whether striped bass must be eviscerated prior to first sale.
4. ***MarineFisheries* proposal to require special authorization for any project related to the construction, reconstruction, repair, or alteration of any anadromous fish passageway (322 CMR 7.03).**
5. ***MarineFisheries* proposal to enact a year-round 10-cod daily recreational bag limit (322 CMR 6.07).** This proposal would apply to all harvest within state waters as well as to all vessels fishing in any portion of the EEZ and landing in a Massachusetts port.
6. **Accept comments on recent *MarineFisheries* emergency action that restricted cod fishing in an area of Massachusetts Bay north of Boston from the shoreline eastward to the 70° 45' longitude, south of 42° 30' latitude, and north of 42° 24' latitude (322 CMR 8.15).** *MarineFisheries* seeks comments on whether to enact any of the following restrictions as a final rule for 2004 or to adopt other measures to protect cod aggregations and prevent regulatory discards:
   a. For gillnetters: gillnetting prohibited during Dec 1 – March 31.

Continued next page

b. For longliners:
- prohibited from fishing more than 500 hooks;
- must use only circle hooks at least as large as 11/0; and
- may fish only between the hours of 6 a.m. and 6 p.m.

7. **Accept comments on emergency regulations to amend scup bag limits, size limits and seasons to accomplish a 40% reduction in recreational catch.**
8. **A public petition to lower the lobster trap limit in state waters from 800 to 600 (322 CMR 6.13).**

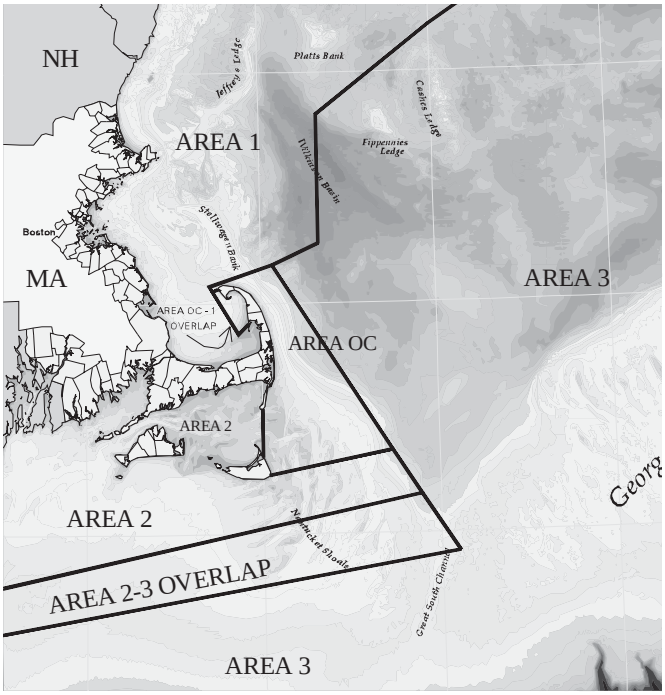
Two public hearings have been scheduled:
❖ Monday, May 3, 2004 (7PM) at Massachusetts Maritime Academy (101 Academy Drive, Buzzards Bay) &
❖ Tuesday, May 4, 2004 (7PM) at the Gloucester High School (32 Leslie Johnson Road).
Comments received by e-mail, fax or mail will be accepted until 5PM on Friday, May 7, 2003.

For further information please visit our website at **www.mass.gov/marinefisheries**.

Regulations Update

During the period September 2003 through February 2004, the following regulatory changes were enacted by MarineFisheries after public hearings and Marine Fisheries Advisory Commission (MFAC) approval. Emergency regulations that have subsequently expired or regulations preempted by subsequent filings are not included:

Commercial lobster minimum size in Areas 3 and Outer Cape Cod was increased by 1/8" to measure 3 3/8" (322 CMR 6.01). Area 2 previously increased to 3 3/8" due to declining stock conditions effective July 1, 2004. Area 1 remains at 3 1/4".



Lobster Conservation Management Areas adjacent to Massachusetts coast. Since 1999 fishermen have been choosing one or more fishing areas on their permit.

Schedule of MA Commercial Lobster Min. Sizes for 2004

	Current	July 1, 2004
Area 1	3 1/4" - No Change	3 1/4" - No Change
Area 2	3 3/8"	3 3/8" - No Change
Area 3/Offshore	3 11/32"	3 3/8"
OCC	3 11/32"	3 3/8"

Commercial wire lobster trap marking requirements were eased by allowing the sole use of trap tags to meet the long-standing trap identification requirements (322 CMR 3.07). Commercial wooden lobster traps must continue to be marked by both trap tags and trap id tag as defined in 322 CMR 3.07.

Final area-specific v-notch language was adopted in compliance with the interstate management plan for American lobster (322 CMR 6.02). While there is a statewide prohibition on the possession of v-notched female lobsters, the rules vary across sectors and regions. Area 1 commercial lobstermen must not possess a female lobster bearing *a v-shaped notch of any size* in the flipper next to and to the right of the center flipper as viewed from the rear of the female lobster. Areas 2, 3, and Outer Cape Cod fishermen, dealers, consumers and non-commercial lobstermen are prohibited from possessing a v-notched lobster with the following features: *a straight-sided triangular cut, without setal hairs, at least 1/4-inch in depth and tapering to a point.*

SCUBA divers harvesting lobster must measure all lobsters before surfacing (322 CMR 6.01).

Deadline to install trap tags in lobster traps was extended from May 1 to June 1 (322 CMR 6.31).

Final action was taken on emergency action to decrease the recreational haddock minimum size from 23" to 21" (322 CMR 6.03).

Striped bass dealer measures were amended to prohibit any person from receiving during a first sale any striped bass unless permitted as a wholesale or retail dealer pursuant to 322 CMR 7.01.

Scup bycatch limit of 300 lbs. enacted for fluke trawlers, during the open fluke season (June 9 through season closure) and on open fishing days Sunday – Thursday (322 CMR 6.28).

Limited entry permit rules were amended to authorize persons other than the permit holder to fish the permit holder's permit, vessel, and gear (322 CMR 7.03 & 7.06). Criteria were established to ensure that the temporary user of a permit allowed through a letter of authorization must use the gear and vessel reported (and owned) by the permit holder that was actively fished prior to the request.

Upper Cape Cod Bay Whiting Area for small-mesh trawling during September through November was extended south from the LORAN 44100 line to the 42°00.000' latitude line (322 CMR 8.14).

Lobster gear restrictions designed to minimize harm to endangered whales were amended (322 CMR 12.00). References to "neutrally buoyant" and "sinking" line were replaced with a new definition of "negatively buoyant" line and **7/16" line was eliminated from the Gear Technology List.** For more information on rigging gear to conform with the plan, visit the NOAA Fisheries website at: www.nero.noaa.gov/whaletrp.

Commercial coastal lobster permits were limited to fishing in only a single Lobster Management Area during the 2004 and beyond. An exception exists for those permit holders approved for LMA 3 (offshore) who may additionally have their permits endorsed for either LMAs 1, 2 or OCC. This regulation will be reviewed in 2008 following the next stock assessment.

The transfer of permits between LMAs was restricted to further control fishing mortality within LMA's and reinforce the American Lobster Management Plan foundation of "Area Management."

An historical effort-control plan was implemented in the Outer Cape Cod LMA commercial lobster fishery. A plan was required as part of Addendum III to the interstate plan. *MarineFisheries* implemented a plan that allocates unique trap allocations for each fisherman based on pounds landed and traps fished between the years 2000 - 2002. Eligible permit holders were required to have fished in the OCC in a single year between 1999 and 2001.

A non-trap endorsement was created for Offshore Lobster permits to enhance management, reporting, and enforcement of gear-specific trip limits; permits fished with trap gear will be the default category and not require a distinct endorsement.

The emergency moratorium on issuance of any new Offshore Lobster Permits for landing lobsters caught with traps was permanently adopted. Only fishermen who have a federal permit endorsed for "non-trap" are eligible to obtain a new state Offshore Lobster Permit endorsed for non-trap gear. Those vessel owners seeking a new permit for landing lobsters taken by traps would not be able to obtain it. This action discourages further expansion of trap fishing in federal waters adjacent to Massachusetts to complement effort control management efforts in inshore waters of the Commonwealth

A 40-day fishing season was implemented for the 2004 northern shrimp fishery, as approved by the Atlantic States Marine Fisheries Commission's Northern Shrimp Section. The season ran from January 19 through March 12, 2004 with no possession or landing of northern shrimp allowed on Saturdays or Sundays. Additionally, a prohibition was implemented on the use of any equipment to cull, grad, separate or shake shrimp, except those implements operated solely by hand.

The summer flounder (fluke) trip limit was increased to 2,500 pounds for the winter fishing period from January 1 – April 22. Monitoring and analysis of previous years' landings show that total landings during this period have fallen far short of the 30% target, thus the trip limit was increased to allow fishermen their full quota allocation as allowed under current state regulations. Consequently landings increased this past winter and on February 23, 2004 the trip limit was lowered to 100-lbs.

On December 16, 2003 *MarineFisheries* closed a portion of Massachusetts Bay off Nahant to gillnetting, and the area was re-opened on February 1. Documented commercial catches of cod taken from this area in December were well in excess of the trip limits (500-lbs.) and consequently there were numerous reports of discarding and high-grading. Future management of fishing for this area will be considered at future public hearings.

MarineFisheries is not renewing striped bass permits for 2004 for any permit holder who failed to submit catch reports by the extended deadline of January 31, 2004. Individuals who are not permitted to renew their striped bass permit for 2004 may apply for a new permit in 2005.

Timely collection of catch statistics greatly contributes to effective management of marine resources. Subsequently, *MarineFisheries* requires striped bass commercial fishermen to complete catch reports by a specified deadline. Unfortunately, analyses of these statistics are often delayed by late submissions or a complete failure to submit. *MarineFisheries*' authority regarding late submissions is clearly outlined in 322 CMR 6.07(4)(h), which states that failure to complete and submit an accurate form prior to the deadline may result in a non-renewal of the striped bass special permit.

Enforcement Actions

In conjunction with the Office of Environmental Law Enforcement (OELE) and Department of Fish & Game's (DFG) General Counsel, the following enforcement actions were taken to either suspend or revoke permits issued by *MarineFisheries* or to institute fines for violations to the *MarineFisheries* laws and regulations.

1. Fines

F/V "Carolyn Joyce" from New London was offloading mixed regulated species in Gloucester this past fall and was found in possession of eight oversize, eight scrubbed and eight egg bearing lobsters. Vessel only had a small boat license. No offshore or inshore lobster license. Captain David Keatley was found guilty of all three lobster charges, fined $7,000 and was banned from fishing or landing fish in MA for five years.

F/V "Vicious Circle" from Gloucester was apprehended fishing off of Nahant with 2,200 pounds of cod in possession by the patrol boat "Jessie." Vessel was escorted to Gloucester and a 1,700 pound codfish overage was seized. Captain Lou Williams was prosecuted for the violation and assessed a penalty of $500 and forfeited $1,700 for the proceeds of the codfish overage.

2. Permit Suspensions & Revocations. DFG Administrative Law Magistrate David Hoover held two adjudicatory proceedings in early 2003 concerning renewal of coastal commercial lobster permits held by Peter Picken, William Picken, Douglas Randall & Sharon Randall. Proceedings, brought by OELE's Lieutenant Peter Hanlon, sought suspension or revocation of these permits for setting lobster gear in the Cape Cod Bay Whiting area's fixed gear free zone. *MarineFisheries* Director Paul Diodati issued a preliminary decision not to renew any of these permits for 2003 pending outcome of the proceedings.

At the conclusion of each proceeding the Magistrate found that each of the four respondent's had in fact set their lobster gear in the restricted zone in violation of 322 CMR 8.14. Based on findings of fact and conclusions of law contained in the Magistrate's Final Decisions, the Director revoked coastal commercial lobster permits of Peter Picken, William Picken and Douglas Randall. Respondents Peter & William Picken, and Douglas Randall have filed two separate appeals in Suffolk Superior Court seeking judicial review of the Director's decision.

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Surfers • Surfers • Surfers

This Newsletter and Other Information is available at our Web Site!

http://www.mass.gov/marinefisheries

DMF NEWS

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MarineFisheries receives state and federal funds to conduct research, management and development of the Commonwealth's marine fishery resources. Information in this publication is available in alternative formats.

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