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Lobster Management Changes Due in 2002

Industry-crafted conservation plans to be aired at December hearings

The spinning wheels of lobster management are about to gain traction in 2002. By next spring, lobstermen along the northeast U.S. coast will see many rule changes designed to increase egg production of the various lobster stocks or portions of the population.

Scientists have been warning the industry for decades that lobsters are "over-fished." Too many lobsters are captured during the first year when they shed into legal size. In most



A "v-notched" female lobster showing the v-shaped cut in the inside right uropod. The Area 1 plan proposes to mandate fishermen to cut notches in all "eggers."

Lobster & Herring Plans Hearing schedule:

Monday December 10 at 7:00 PM at the Division of Law Enforcement Office Hewitt's Cove, 349 Lincoln Street, Building 45 Hingham, Massachusetts

Tuesday, December 11, 2001 at 7:00 PM at the Fuller School in Gloucester

Wednesday, December 12, 2001 at 7:00 PM at Mass. Maritime, Buzzards Bay

fishing areas, most females have not extruded their eggs before being removed from the population, and lobsters are not allowed to grow to an optimal size and weight (known as "growth" overfishing).

Lobster fisheries are managed collectively by the states and National Marine Fisheries Service through an interstate management plan written by the Atlantic States Marine Fisheries Commission. The plan has been refined over the years, and the latest amendment was begun five years ago. This amendment will tackle the Herculean task of increasing lobster egg production many-fold to prevent a stock collapse that scientists have been fearing for decades. For the various stocks, the current estimate of egg production is just 2-3% of what would be produced by a "virgin" un-fished population, and the goal is to raise that level to 10%. The plan has many other objectives (see page 2) to make the fishery more sustainable.

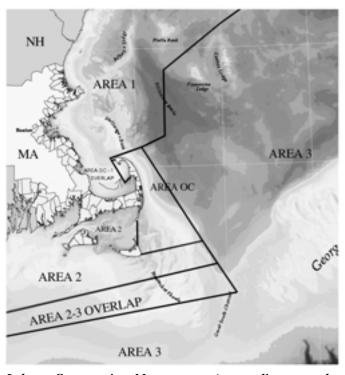
Since 1997, seven Lobster Conservation Management Teams comprised of fishermen and scientists (see map) have met to devise ways to improve lobster fishery management and meet the objectives of the plan. This "bottom-up" approach has empowered fishermen to devise rules that accommodate their local conditions and fishing practices. A variety of traditional fishery management tools were considered by each team that would increase egg production. These included increasing the 3 ^{1/4}" minimum size, establishing or lowering the 5" maximum size, increased lobster trap escape

vent size, reductions in number of traps allowed, and increased practice of "v-notching", where lobstermen cut a notch into the tail of egg bearing females to make them illegal to harvest even after the eggs are hatched.

The upcoming public hearings are fishermen's last chances to convince managers of the merits (or pitfalls) of these individual plans. Once approved this winter by ASMFC, states are bound to adopt the measures else their fisheries will be found out of compliance and can be shut down through the Coastal Cooperative Fisheries Act—the "teeth" in the ASMFC management process. The schedule and steps to be taken are listed in the table.

For Massachusetts fishery managers, the inconsistencies among plans will be challenging because our state will see landings from four different management zones. This is an unprecedented level of complexity for enforcement officers. For example, lobstermen on either side of Cape Cod will be regulated by two different minimum sizes (carapace length) if the plans are approved. Areas north of Cape Cod will retain the 3 ^{1/4}" size while those east, south, and west of the Cape will see increases of 1/32" for four consecutive years.

The controversial plan - and most politically difficult to craft - was for Area 1 which covers all inshore fisheries north



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

of Cape Cod. This is the largest area that includes the states of Massachusetts, New Hampshire, and Maine and produces most of the U.S. lobster catch.

The controversy centers on the industry reluctance to support the minimum size increase and reduction in traps that other LCMT's supported, and instead relies on increased "v-notching" of female lobsters as the primary means to increase egg production. "V-notching" is a long-standing Maine-based voluntary practice of protecting egg-bearing females by cutting a V-shaped notch out of the tail on the inside right uropod (see photo). This is a decades-old practice where lobsters that extrude eggs while in storage in Maine lobster

ASMFC Lobster Management Plan Objectives

- Protect, increase or maintain, as appropriate, the brood stock abundance at levels which would minimize risk of stock depletion and recruitment failure:
- 2. Develop flexible regional programs to control fishing effort and regulate fishing mortality rates;
- 3. Implement uniform collection, analysis, and dissemination of biological and economic information; improve understanding of the economics of harvest;
- 4. Maintain existing social and cultural features of the industry wherever possible;
- 5. Promote economic efficiency in harvesting and use of the resource;
- Minimize lobster injury and discard mortality associated with fishing;
- 7. Increase understanding of biology of American lobster, improve data, improve stock assessment models; improve cooperation between fishermen and scientists:
- 8. Evaluate contributions of current management measures in achieving objectives of the lobster FMP;
- 9. Ensure that changes in geographic exploitation patterns do not undermine success of ASMFC management program;
- 10. Optimize yield from the fishery while maintaining harvest at a sustainable level;
- Maintain stewardship relationship between fishermen and the resource.

pounds are sold back to the state, notched, and released by Maine state officials. Over the years Maine fishermen have viewed this as conservation, and many will notch egg-bearing females that are captured in their traps. The notch is usually visible even after the lobster molts once or twice, so it becomes protected from harvest for several years. In 1997, at the urging of Maine industry, the interstate plan enacted region-wide protection for v-notch lobsters.

DMF's lobster scientists Bruce Estrella and Bob Glenn (members of the ASMFC Lobster Technical Committee) have expressed doubts that this measure will meet the egg production goals because the computer-model used to project egg production relied on every fishermen in Area 1 notching the tails of every egg-bearing female lobster encountered. Because there is no means for enforcement officers to inspect a fisherman's catch and ensure that he took the time to cut the notch into the tail of an "egger" before releasing the lobster, the level of compliance is questionable. Simply put, the Area 1 Team's plan makes a "voluntary" measure "mandatory." Further exacerbating the enforcement challenge is a proposal to create a "zero tolerance" for v-notched possession in Area 1. This means the current v-notch definition: a straight-sided triangular cut without setal hairs at least 1/4" in depth and tapering to a sharp point" is invalid in Area 1. Consequently a lobster with any v-shaped cut in the flipper of any size becomes illegal to keep!

Lobster Technical Committee members raised additional concerns that widespread cutting of lobster tails could increase the spread of certain diseases and cause additional mortality. Also, widespread notching is projected to result in a loss of landings of 30 to 40% from the Massachusetts portion of Area 1.



Finally, the Area 1 plan does not address a needed reduction in fishing. Although state regulations prevent fishermen from fishing more than 800 pots per vessel, the current average number of pots fished is about 400, so increases in overall effort are likely whenever fishermen expand their businesses.

Lobster industry members are urged to weigh in on these plans at one of the three December hearings. After those hearings it will be likely too late to alter the course of management for some time.

Copies of the public hearing document can be found via the ASMFC website at www.asmfc.org or by contacting Vanessa Jones, Administrative Assistant, at (202) 289-6400 or vjones@asmfc.org. For more information, please contact Heather Stirratt, Fishery Management Plan Coordinator, at (202) 289-6400 ext. 301 or hstirratt@asmfc.org.

Lobster is the second most valuable species landed in the Commonwealth totalling \$67.5 million.

DMF Photo by Dan McKiernan

Proposed Lobster Plan measures to be implemented in 2002 and beyond

	Area 1	Area 2	Area 3	occ
Minimum Size	3 1/4" - No Change	3 9/32" - 2001 3 5/16" - 2002 3 11/32" - 2003 3 3/8" - 2004	3 9/32" - 2001 3 5/16" - 2002 3 11/32" - 2003 3 3/8" - 2004 *3 13/32" - 2005 *3 7/16" - 2006 *3 15/32" - 2007 *3 1/2" - 2008	3 9/32" - 2001 3 5/16" - 2002 3 11/32" - 2003 3 3/8" - 2004 *3 13/32" - 2005 *3 7/16" - 2006 *3 15/32" - 2007 *3 1/2" - 2008
Maximum Size	5"	None	None	None
Trap Reductions	None	Historical Trap Reduction Plan Pending	• Historical participation based 25% reduction over five years from 1998 effort levels.	 Historical participation based 25% reduction from 1998 effort levels. Additional passive reduction via license transfer.
V-Notching	 Possession of v-notched female lobster prohibited Zero tolerance v-notch definition Mandatory v-notching of 100% of all egg-bearing female lobsters. 	 Possession of v-notched female lobster prohibited ASMFC v-notch definition (straight-sided V, 1/4" in depth, without setal hairs). 	 Possession of v-notched female lobsters prohibited ASMFC v-notch definition (straight-sided V, 1/4" in depth, without setal hairs). Mandatory v-notching within the Gulf of Maine portion of Area 3 north of the 42°30' latitude line. 	Possession of v-notched female lobster prohibited ASMFC v-notch definition (straight-sided V, 1/4" in depth, without setal hairs).
Lobster Trap Escape Vent size	• 2" x 5 3/4" (rect.), -2007* or 2 1/2" circular	• 2" x 5 3/4" (rect.), - 2003 or 2 1/2" circular	• 2" x 5 3/4" (rect.), - 2003 or 2 1/2" circular • Additional vent increases to match minimum gauge increases above 3 3/8" as selectivity information becomes available.	• 2" x 5 3/4" (rect.), - 2003 or 2 1/2" circular • Additional vent increases to match minimum gauge increases above 3 3/8" as selectivity information becomes available.

^{*} indicates a management measure that will be implemented if necessary to meet F10% after an updated stock assessment

Lobstermen and gillnetters face new proposals to

reduce whale entanglements

At November 27-28 public hearings, DMF will propose new regulations expected to minimize the chances of right whales and other large whales from becoming entangled in fishing lines. (See pg. 10) These proposals are based on a "settlement agreement" negotiated with the Conservation Law Foundation and Massachusetts Lobstermen's Association designed to end the six-year long litigation *Strahan v. Durand et al.* The Marine Fisheries Commission will take final action on the proposals at its December 13 business meeting, and final rules will be in effect in early January.

States and federal agencies have worked hard to reduce entanglements to prevent serious injuries and mortalities. Since 1996 about one whale per year has died or is suspected to have died from entanglement. Right whales range from the Canadian Maritimes south to Florida, and researchers usually are unable to pinpoint where whales first encounter the gear.

Since 1997, Massachusetts has been at the forefront of efforts to prevent entanglements. With the Cape Cod Bay Critical Habitat in state waters, DMF has had the obligation to prevent entanglements and the opportunity to work with some creative fishermen who fish in the Cape Cod Bay region.

After a thorough review of past entanglement records, many Cape Cod Bay lobstermen are convinced that the key to minimizing entanglements is to eliminate as much line from the water column as possible. This could be accomplished by replacing floating lines with sinking lines between pots in multiple pot strings. Lobstermen in Cape Cod Bay already are required to use sinking line during January - May 15, those months that whales are expected in Cape Cod Bay Critical Habitat.

Most lobstermen fish 10 to 25-pot strings, and the distance between pots is about 100 feet. DMF studies have shown that lines between pots rises off the ocean floor in an arc that ranges from 10-20 feet high - high enough to snag an open-mouth feeding whale.

Lobstermen have traditionally used floating line because it is cheaper and suffers less abrasion because it floats above the ocean floor. A change to "sinking line" has been resisted because the line would be more expensive and not last as long due to abrasion.

Lobstermen and rope manufacturers are testing so-called "neutrally buoyant" line that has a specific gravity close to that of seawater and appears to float just above the ocean floor and does not create the floating arc of line between pots.

The DMF proposal calls for all lobstermen fishing in the Critical Habitat to fish only sinking or neutrally buoyant line <u>year-round</u> beginning in 2003 and in all of Cape Cod Bay south of Brant Rock by 2004.

This line replacement comes at a cost. Bay lobstermen have estimated it would cost them \$6,000 to \$12,000. Some fishermen already have begun replacing their lines, but most fishermen are facing these costs over the next year or two. Lobstermen throughout the northeast are watching these developments because federal regulators at the National Marine Fisheries Service are expected to propose similar rules for seasonal right whale habitats outside of Cape Cod Bay such as the Great South Channel, Stellwagen Bank, Jeffreys Ledge (see map on page 2) and others.

One of the more contentious proposals DMF will be airing is a proposal championed by the Conservation Law

Foundation and other regional environmental advocates. A "Dynamic Management" program is proposed where gillnetters would be required to remove their gear within 48 hours after DMF receives a verified report of three or more right whales feeding in Cape Cod Bay during the summer/fall months. This near real-time management has never been attempted for a fixed gear fishery.

For gillnetters, DMF is proposing a unique color (yellow) be painted on all buoy and high-flyer combinations. This scheme would solve the problem of gear being unidentifiable at the surface. Under the current rules there is no reliable way to distinguish gillnets from lobster trap strings. This scheme could be extended to other fixed gear types (e.g. longlines, hagfish pots) in the future and would allow enforcement officers to determine gear types whenever one or more of these gears is prohibited in certain areas.

DMF also will be proposing changes to the "break-away" features that lobstermen and gillntters are required to deploy to allow whales that encounter gear to part the lines before becoming entangled. About 40 lobstermen participated in gear testing last winter. Fishermen have been working with plastic manufacturers to devise whale-safe and fishermen-safe devices that can be incorporated into fishing operations.

Finally, DMF is proposing to amend the season when the most restrictive rules are in place in Cape Cod Bay. The current January 1- May 15 season may be shortened and would end on April 30, consistent with the late April departure of right whales seen during the last four years. If whales remain in the Bay during May, DMF would be prepared to extend the restrictive fixed gear rules, if necessary.

DMF has been involved in ongoing discussions with state and federal legislators about the challenges of right whale protection and burdens on the commercial fishermen to re-rig their gear. Last August, Senator John Kerry filed a bill to protect right whales (S. 1380) that included studies on the cost of widespread use of these whale-safe technologies. Hearings on the bill were sheduled for mid-September but were postponed and have not been re-scheduled.

by Dan McKiernan

2001 Cape Cod Bay Right Whale Surveillance and Monitoring Report published on-line

The 2001 report, Surveillance, Monitoring, and Management of North Atlantic Right Whales, in Cape Cod Bay, Massachusetts: January to mid-May, 2001 by Dr. Moira Brown of the Center for Coastal Studies and Marilyn Marx of the New England Aquarium is available on DMF's web site.

The highly-successful program has completed its fourth consecutive season. This year's program was funded by DMF and the Massachusetts Environmental Trust (known for its right whale license plate). The results are in and they are fascinating (as usual). From late December through mid-May, 92 unique right whales were identified, including 7 calves born last winter off the southeast U.S. This includes 50 repeat visitors from 2000. Over the past four years, a total of 153 right whales have been identified in the Bay, representing about half the known population!

English beachcomber finds increasing amounts of MA fishing gear

Fishing debris is fairly common along the Massachusetts shoreline, and DMF routinely receives inquiring calls from the public about lost gear on local beaches. We were surprised to learn that Massachusetts licensed fishing gear debris also is washing up along portions of England's southwest shoreline. An e-mail from an Englishman reminded us of the power of the trans-Atlantic currents and the Gulf Stream.

DMF was contacted by an English beachcomber/fisher-man/playwright who has an extraordinary collection of east coast fishing souvenirs that wash up on the southwest shore of England. Nick Darke from Cornwall, England contacted DMF's Eileen Feeney via e-mail and the world-wide web and had many questions about the various tags, buoys, floats and other plastic fishing gears that he's found along his local shoreline over the years. Thanks to the digital photos transmitted via e-mails, Mr. Darke had his questions about the gear answered in a matter of hours. For Eileen who answers thousands of calls a year from local fishermen, this constituent call was most exciting and spoke volumes about the modern power and convenience of digital technologies.

Nick Darke enjoys walking along the shoreline as a "wrecker" or gatherer of the flotsam and jetsam that gets washed up on the beach behind his home on the north Cornish coast. Nick finds fishing gear, floats, tags, etc. from the entire eastern seaboard of the North American continent from Florida to Newfoundland!

One of the interesting pieces he found was what we call trap tag identifiers. These plastic orange tags are used in wire lobster pots and are required to identify the owner of the trap. These tags are approximately 3" x 1" and have different writings on them depending on how the fishermen want to be identified. By law, identifier tags must have at least the permit holder's permit number inscribed on them, but some fishermen also have their boat name, last name, and phone number next to the permit number. All this information increases the chances of gear being returned to its owner. These tags are affixed to the trap by means of two, round metal rings, known as "hog rings." These tags sometimes get washed overboard or become detached from the traps when the metal rings degrade.

The tag apparently floats to the surface of the Atlantic and travels northeast with the Gulf Stream, south of Ireland and floats up on a beach on the coast of Cornwall, England. Three of the identifier tags he has found are from fishermen out of Westport, Massachusetts and one tag from Lynn, Massachusetts.

Nick has begun to find new items such as year-specific trap tags that are required of all northeast U.S pot fishermen to ensure compliance with the fishery-specific trap limits. These "plastic truck seal" type tags were first required in 1999. Based on his contacts with local fishermen he's estimated it takes about 14 months for the tag to travel from New England to Cornwall, England.

This story reminded us that colonial-era cod fishermen depended on the North Atlantic Gulf stream to transport them homeward to European markets. The state's sacred cod that hangs in the State House is testimony to our historic fishing economy's reliance on that powerful trans-Atlantic current.

The British Broadcasting Corporation (BBC) has picked up his story and has interviewed both DMF's Eileen Feeney and Mr. Darke in an international story about currents and tides

by Eileen Feeney & Dan McKiernan



Along the southwest shore of England, U.S and Canadian fishing debris is commonly found by beachcomber Nick Darke. The 11 rectangular tags on the table are the trap tag identifiers and bear fishermen's name, vessel names and in some cases phone numbers. Also pictured: Lego dragons, an octopus and an antique RCA vacuum tube. Below, pot buoys and floats from North American fixed gear fisheries adorn his shed. Photos courtesy of Nick Darke e-mailed to DMF.



More Restrictions Planned to Rebuild Cod in the Gulf of Maine

The pace for New England Fishery Management Council changes to Gulf of Maine (GOM) cod restrictions is quickening. After many months of meetings the Council has decided on options for further analyses and eventual public hearings early next year. These options involve cutting the harvest rate for GOM cod from about 50% (half of all legal-size cod in the stock removed each year by fishing) to 22%, and reduce waste of cod caught and discarded at sea.

The waste is primarily "regulatory" discards. Quite often commercial netters catch their low limit of 400 lbs., continue fishing for other groundfish (such as flounders) and release over-the-side any additional cod. Discards (most assumed dead) are huge: estimated to be around 6-8 million lbs. in 1999 and 3-7 million lbs. in 2000.

A low trip limit and target Total Allowable Catch (TAC) continue to be part of the Council formula to rebuild GOM cod stock. Total Allowable Catch for the "fishing year" May 1, 2000 through April 30, 2001 was 4.2 million pounds. Actual landings were about 7.7 million pounds, or 181% above the annual target. The same situation occurred during the previous fishing year, May 1999 through April 2000; 180% of a 1.7 million-lbs. target was taken. Last year, otter trawlers landed 54% of total GOM cod landings, gillnetters landed 41%, and hook fishermen landed just 2% (NMFS).

For the current fishing year that began on May 1, 2001, landings through June already were 40% (2.9 million lbs.) of the annual target. At this rate, landings this year will again far surpass the target. Halting this trend of vastly exceeding annual targets will require the Council to do much more to *effectively* control catch of GOM cod. This means adopting regulations that will dramatically reduce discards.

Compounding the challenge to control catch is the apparently increasing recreational fishery for GOM cod. According to the Council's Monitoring Committee (scientists and managers who advise the Counci on fisheries and stock status matters) recreational landings have risen, and the Committee recently concluded: "Continued expansion of the recreational fishery will prevent achieving the mortality objectives, even if commercial landings are controlled."

The Council is discussing a number of measures that include setting a portion of the target TAC aside specifically for recreational fisheries (charter and head boats and private fishing vessels) and other restrictions, such as seasonal area closures. Up until now, recreational fishermen on "for-hire" vessels have had no "bag limit" but may only keep cod and haddock larger than 21." Anglers fishing from private boats or from shore have a 10-fish bag limit (cod and haddock combined) in addition to the 21" minimum size.

Being able to fish in areas closed to commercial fishermen, recreational anglers have drawn more attention to their catch. This is especially true because this year for the first time recreational landings are included in the cod stock assessment and calculations of the cod target TAC. Furthermore, according to the Monitoring Committee recreational fishing for cod during winter months appears be on the rise in productive cod areas closed to commercial fishing.

The Council expects recreational fishermen to share the conservation burden. Recreational fishermen may find this position diffuclt to understand and justify. For example, commercial discards currently match or exceed total recreational cod landings

To help minimize discards, DMF has tested new net designs. Working with Captain Luis Ribas of Provincetown



Net designed to release cod. DMF's Arne Carr (right) and Paul Diodati explain trawl function and design to state fishery managers (from left to right) John Nelson of NH and David Borden of RI.

last spring, DMF's Conservation Engineering Program has produced some excellent results.

DMF's gear experts used a hardwired "pan and tilt" camera system mounted at the front of the net to observe fish and net behaviors underwater. This real-time viewing improves researchers' understanding of fish movement and response to the trawl and allows them to make sense of the numbers of fish in the "haul-back."

Both test nets had very large decreases in cod catch compared with a standard design net. The "Ribas" net, with an 8-inch square-mesh escape panel in its top, reduced cod catches by over 76%. DMF's test net, patterned after a design used in the Faroe Islands, reduced cod catch by over 93%. Cod tend to rise in the net as they fatigue; therefore, providing a way for escape through the top is sensible. Extensive coverage of this exciting research has been published in October and November 2001 *Commercial Fisheries News*.

Either net design, or something similar, will offer the Council an opportunity to justify modified trawls to reduce cod catch and discard while draggermen continue to fish for other groundfish, such as flounders. Even though more DMF work to "fine-tune" the nets is warranted and is being planned, the regulatory discard dilemma in the GOM demands use of a new design next year, especially to help protect an important, abundant 1998 year-class of cod that will be fully recruited and vulnerable to the fishery this winter. According to Fishery Biologist, Arne Carr, head of our Conservation Engineering Program, "The 'Ribas' design would be easiest for fishermen to use because they simply would have to cut the top of their net and put in larger mesh." Carr noted that "Flatfish fishermen could easily and inexpensively modify their net and start saving cod and juvenile flatfish today.'

Another way to reduce regulatory discards and cut mortality on cod and other groundfish, is a night closure. This is one option being seriously considered by the Council. A night closure will be a de facto reduction in days-at-sea (DAS) usage. A night closure will have a major impact on catches of gillnetters and draggers. Cod seem to be more easily caught at night, particularly near dusk and dawn.

Currently, DAS regulation is a primary means of controlling fishing mortality, and it's not working very well. In fact, the Monitoring Committee recently reported that DAS use increased by 10% from 1999 to 2000. And, only 36% of allocated DAS actually were used.

We're heading in the wrong direction. As a consequence, the Monitoring Committee offered some sobering and strong advice on this DAS approach for the next fishing year beginning May 2002: reduce <u>used</u> (not allocated) DAS <u>by 65%</u>, or reduce DAS by 20% overall and close more fishing grounds <u>year-round</u>, such as *most of Massachusetts Bay*. Any of these options would have dire consequences for Massachusetts inshore commercial fishermen already hard hit by current extensive and lengthy inshore GOM closures.

The Council hopes its new restrictions will be in place next spring. To meet this rapid schedule, the Council will spend the next 2-3 months getting reactions to its options and crafting a final set of measures for the next fishing year, beginning May 1, 2002. Any delays will magnify the problems of GOM cod management.

by David Pierce, Ph.D., Deputy Director



Despite signs of improvement in cod abundance in the Gulf of Maine, scientists insist the stock must be increased substantially before the stock is "recovered." DMF photo by Dan McKiernan aboard the R/V Gloria Michelle.

Nominations sought for NE Fishery Management Council

The Secretary of Commerce is seeking nominations for four New England Fishery Management Council at-large seats. These are held presently by Vito Calomo and Tom Hill of Massachusetts, and Bud Fernandes and John Williamson of Maine. Governor Swift has been asked to nominate up to twelve candidates for these four seats. Candidates "by reason of their occupation or other experience, scientific expertise or training must be knowledgeable and experienced in ways related to fishery resources of New England."

DMF will coordinate the nomination process on behalf of the Governor's office. We urge qualified individuals interested in being considered for nomination to the Council to contact us as soon as possible. The closing date for nominations is March 1, 2002. Nominees must complete a comprehensive application which includes a philosophy statement and financial disclosure statement.

Anyone interested in being nominated should contact DMF's Melanie Griffin at (617) 626-1528.

Massachusetts commercial fisheries landings worth \$288 million in 2000

Sea scallops and lobster account for more than half the state's landings value

In 2000, the combined ports of New Bedford and Fairhaven ranked #1 in the U.S. for landings value exceeding Kodiak and Dutch Harbor, Alaska. The recovery of the high-valued sea scallop fishery has brought a tremendous boost to fishing revenues in the region. New Bedford and Fairhaven combined saw landings worth \$146 million with scallops accounting for most of the value.

In Massachusetts statewide, lobster was a close second to sea scallops totalling about \$67. milion. For 2000, the top thirty species ranked in value is presented below. Data source: National Marine Fisheries Service

Species	Pounds	
	(in milli	ons)
1.Sea Scallop	16.2	\$85.3
2.American Lobster	14.6	\$67.5
3.Goosefish	20.9	\$24.1
4. Cod	19.8	\$20.7
5. Bluefin Tuna	2.1	\$16.0
Yellowtail Flounder	12.4	\$12.5
7. Haddock	6.9	\$8.9
8. Winter Flounder	9.0	\$8.9
9. Ocean Quahog	12.4	\$5.2
10. Witch Flounder	2.0	\$3.8
11. American Plaice	3.6	\$3.8
12. Deep-Sea Red Crab	5.3	\$3.6
13. Swordfish	1.4	\$3.4
14. Pollock	3.6	\$2.7
15. Skates	14.4	\$2.4
16. Striped Bass	0.8	\$2.3
17. Whiting	2.0	\$1.0
18. Crabs	3.9	\$2.1
19. Longfin Squid	2.7	\$1.6
20. Hagfish	5.6	\$1.5
21. Summer Flounder	0.8	\$1.4
22. Spiny Dogfish	5.8	\$1.3
23. White Hake	2.0	\$1.0
24. Black Sea Bass	0.6	\$1.0
25. Atlantic Herring	9.6	\$0.6
26. Surf Clam	0.7	\$0.6
27. Scup	0.4	\$0.4
28. Conchs	0.2	\$0.4
29. Bigeye Tuna	0.1	\$0.4
30. Atlantic Mackerel	0.5	\$0.2

Coming Next Issue:

Massachusetts recreational fishery ranks #1 in the Northeast worth nearly 1 billion dollars!

Sea herring close encounter

During the ASMFC annual meeting in Rockland Maine, DMF's herring expert Dr. David Pierce had his state vehicle destroyed by an out-of control herring tractor trailer. It's these kinds of stories that legends are made so we've reprinted the local Rockport Maine news coverage of the events. This story is reprinted with permission from Al Slavin, News Reporter at www.rockland.k2bh.com.

Bay State official enjoyed the trip despite the calamity (October 19, 2001)

Dave Pierce estimates that the odds of him getting plowed by a truck full of herring at 10 million to one. Oddly enough, Pierce specializes in herring issues for the Massachusetts Division of Marine Resources. He joked Thursday that someone may have been trying to send him a message.

"Instead of putting a horse's head in my bed, it was a truck full of herring," Pierce said.

Pierce's vehicle was one of six vehicles damaged when a Beaver Enterprises truck driver lost control of his rig on Tuesday. Pierce was in town attending the 60th annual meeting of the Atlantic States Marine Fisheries Commission, held at the Samoset Resort in Rockport. At one point he joked that the near death experience had clouded his thinking. Pierce said he enjoyed his time in the Rockland area, despite having to drive home in a rental car.

New sea herring proposals

At the 60th Annual Meeting of the Atlantic States Marine Fisheries Commission, Draft Addendum II to Amendment 1 to the Interstate Fishery Management Plan (FMP) for Atlantic Sea Herring was approve for public review and comment. Massachusetts has scheduled public hearings to be held in conjunction with Addendum III to the lobster plan.

Draft Addendum II presents options for the seasonal allocations of total allowable catch (TAC) for Management Area 1A (inshore Gulf of Maine) of the FMP. This split is designed to alleviate the possibility of an early closure in Area 1A due to the fishery attaining the annual TAC before the end of the fishing year. Two potential causes for an early closure in 1A are: (1) the harvest capacity exceeds the Area 1 TAC and 2) the cost of harvesting herring from 1A is generally less than that for herring caught in areas farther offshore. The latter factor can create harvester conflict and a "derby-style" fishery. If a closure of Area 1A occurs before the end of the season (the end of November as determined by the demand for herring as lobster bait), as it did in 2000, some vessels will not be able to continue fishing in other management areas due to their size and safety concerns. Some users or communities may not be able to obtain herring to meet demand for bait. Also the Draft Addendum specifies the procedures to be followed for "Internal Waters Processing" where foreign vessels are allowed to enter a state's internal waters to purchase herring caught by U.S. vessels.

Copies of the public hearing document can be found via the ASMFC website at www.asmfc.org or by contacting Vanessa Jones, Administrative Assistant, at (202) 289-6400 or vjones@asmfc.org. For more information, please contact Dr. Joseph Desfosse, Fishery Management Plan Coordinator, at (202) 289-6400 or jdesfosse@asmfc.org.



DMF's herring specialist Dr. David Pierce and the Chevy Lumina van overturned and demolished by the runaway Mack truck transporting sea herring in Rockport Maine. David and his colleagues were discussing herring management issues over breakfast in a nearby restaurant when the accident occured. No one was hurt. Photo at left courtesy of David Pierce.

Photo courtesy of Alan Slavin, k2Bh.com

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Comings and goings...

Amy Whittingham a volunteer from Americorps-Cape Cod assisted DMF in the intensive "Scup Study" this past summer in Nantucket and Vineyard Sounds. Often called the "domestic Peace Corps", Americorps is a national service movement enlisting U.S. citizens in a year of service to their community. While at DMF, Amy accompnaied DMF Biologist Paul Caruso on recreational "for-hire" vessels from Hyannis, Harwich and Falmouth to take biological measurements from angler's catches. She assisted DMF in other biological studies of water quality, striped bass, and winter flounder. Paul Caruso prasied her efforts noting that "Amy was indespensible, her dedication to her work, the environment, and her willingness to learn are a tribute to her as well as the entire Americorps program."

Laura Savina, Bacteriologist with DMF's Shellfish Program has left after a 9-year career for a new job with the Department of Environmental Protection's Drinking Water Program. Laura came to DMF directly from graduate school in June 1992 as a Bacteriologist at our former Cat Cove Lab in Salem. Laura was one of our first employees to move to DMF's Annisquam River Marine Fisheries Station in Gloucester and was instrumental in establishing our Bacteriological and PSP Toxin testing laboratories here. In May of 1998, Laura began running both laboratories. During her tenure with DMF she was a participating member of the NELEOM Group (Northeast Laboratory Evaluation Officers and Managers). She also provided analytical assistance in the form of biotoxin testing and water quality testing to a variety of agencies and groups which included Woods Hole, DEM, Salem Sound 2000, and Project Link. We wish her well in her new position as an Environmental Analyst II at DEP.

Kristen Ferry has joined DMF as a Fisheries Supervisor in the Recreational and Anadromous Fisheries Program and will be working on projects concerning striped bass biology. Kristen recently completed her Master's degree in Wildlife and Fisheries Conservation at the University of Massachusetts, Amherst. For her thesis research, she examined the distribution and feeding habits of striped bass across Massachusetts estuaries. She has also given numerous technical and educational presentations about her research at national fisheries meetings and at local venues. Kristen has published papers on largemouth bass and zooplankton, and is currently preparing her striped bass research for publication.

Holly (Yachmetz) McBride has returned to DMF after a three year stint at NMFS Science Center in Woods Hole. She is a graduate of Roger Williams University with a degree in Marine Biology. Her previous experience at DMF included work for Conservation Engineering program on the Experimental Raised Footrope Trawl Fishery in Provincetown. She started her career with NMFS Southwest Region as a California Drift Gillnet and Hawaii Long Line observer. She then went to NMFS Woods Hole where she worked for the Ecosystem Monitoring Branch for 5 years. While at NMFS Holly worked aboard federal research vessels collecting fisheries data and working with the new computerized data collection system. Holly is now assigned to DMF's Annisquam River Lab in Gloucester focusing on commercial fishery statistics and the redesign of the DMF web site.

Director Paul Diodati's new Administrative Assistant is **Melanie Griffin** who graduated from Cornell University in May of 2000. Melanie conducted research at the University of WA Friday Harbor Laboratories and served as an intern at the Mote Marine Laboratory in Sarasota, Fla.



Left to right: Amy Whittingham of Americorps holding jumbo scup, Paul Caruso of DMF.

DMF Introduces a new publication series

DMF has begun a new publication series aimed at making the Division's study results, data reports, and other scientific findings more accessible to the public, fisheries managers, and other scientists. The series has been named "DMF Technical Reports." The reports will encompass much of the work completed by DMF scientists and examples include the Lobster Statistics Report, Lobster Sea Sampling Summary, Striped Bass Monitoring Report, Salem Estuarine Study, Smelt Spawning Habitat Survey, summaries of Trawl Surveys, results of gear studies, and sea sampling studies of the whiting and scup fisheries.

The Technical Reports will be published as soon as possible after the work is completed and will be made available at no cost in hard copy or electronically from DMF's website. This new publication series is representative of DMF's commitment to improving communication with recreational and commercial fishing interests, academia, and other fisheries agencies. The series kicks off this month and a list of available technical reports will be published periodically in the DMF News. For more information, contact the Coordinating Editor, Dr. Michael P. Armstrong at 978-282-0308 ext 109.

A new marine fisheries internet web site design is in the works!

Marine Fisheries staff and a professional web designer are presently tackling the long overdue task of overhauling our Internet web site. As many of you know, our current site is limited in scope with much room for improvement. We envision the new site to be a *very* useful tool that is well organized, rich in information, current, pleasing to the eye and easy to navigate. This will not only benefit the general public but also Marine Fisheries staff with keeping abreast of our agencies accomplishments, fisheries regulations etc., which will provide people with information needs in a more timely fashion. It is anticipated that by spring 2002 our new site should be up and running. So stay tuned!

DMF Rules UPDATE

Public Hearings • Regulations • Legislation

Notice of Public Hearings

Scheduled for November 27 & 28, 2001

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

- 1. Accept public comment on an emergency regulation, 322 CMR 6.36, that enacted basic regulatory controls over a dredge fishery for quahogs (*Mercenaria*) in State-controlled waters of Nantucket Sound outside the boundaries of town jurisdiction. The regulation establishes permit requirements, and catch limits and gear restrictions for the developing fishery.
- **2. DMF proposals to amend regulations pertaining to right whale protection** (322 CMR 12.00) and fixed gear marking (322 CMR 4.13). DMF proposes the following:
- Amend the buoy line break-away specifications requiring a "weak buoy link", "tag line", or galvanic time release for use in Cape Cod Bay Critical Habitat during winter and early spring.
- Ban the use of floating groundlines year-round in Cape Cod Bay Critical Habitat beginning in 2003 and in all of Cape Cod Bay south of Brant Rock beginning in 2004.
- Implement a "Dynamic Management" scheme for gillnets that would require fishermen to remove or continuously tend their nets after notification from DMF about right whale aggregations in Cape Cod Bay during May through December.
 - Create a new gear marking color scheme specific for gillnet high flyers.
- Amend the lobster and gillnet breakaway specifications for year-round use that would complement similar federal requirements. Lobster buoy line break-away breaking strength is lowered from 1,100 lbs. to 600 lbs. and for gillnets, breakaway devices of 1,100 breaking strength would be required in the center of each headrope. Also gillnet anchoring rules are proposed.
- Extend the January May 15 gillnet closure to include a 5-square mile area west of Critical Habitat off the Plymouth shoreline.
- Shorten the season when the fixed gear fishing rules are most restrictive in Cape Cod Bay Critical Habitat. The current season of January 1- May 15 would be amended to January 1- April 30.
- 3.DMF proposal to establish a new special permit [322 CMR 7:01(4)] required by any vessel for-hire engaged in recreational fishing. Three categories are proposed: Head Boat carrying seven or more paying customers; Charter Boat carrying up to six paying customers; and Guide Boat carrying up to two paying customers. This permit will bring Massachusetts into compliance with the Bluefish Management Plan and any future plans that may require stricter monitoring of the for-hire vessel sector. This new permit requirement may factor into future regulatory and allocation considerations and facilitate enforcement of certain exemptions granted to for-hire vessels, e.g. authorizations to filet striped bass as well as liberalized bag limits (cod, haddock, scup). (This proposal is carried over from July 31 August 2, 2001 public hearings.)
- **4.DMF proposal to amend summer flounder possession limit** in the offshore winter fishery (322 CMR 6.22) from to 500 to 1,000 lbs.
- **5.DMF proposal to amend regulations (322 CMR 6.07, 6.22, 6.28 and 6.31) governing how the agency transmits information about quota-managed fishery closures to permit holders.** This proposal would eliminate direct mailings and instead require fishermen to monitor the progress of quotas and closures through a dial-in phone system and the DMF internet site.
- **6.Public petition from the Cape Cod Salties Sportfishing Club** to modify winter flounder recreational fishing rules (322 CMR 6.23(2) by eliminating the current March April closed season and adopting other conservation measures such as a reduced bag limit, larger minimum size or no-fishing days.

Two public hearings are scheduled:

- Tuesday November 27, 2001 at Plymouth North High School Auditorium at 7:00 PM
- * Wednesday November 28, 2001 at the Sawyer Free Public Library in Gloucester, 7:00 P.M. Public comment on the above issues can be **mailed** or **faxed** to DMF through December 12, 2001

One-stop and On-line Licensing Programs Up and Running

After being housed in 4 different locations over the past 2 years, DMF Licensing Program finally has a home. The Department held a ribbon cutting ceremony celebrating the opening of its new licensing/registration office; which brings all three of it's licensing agencies together. Now, at last, our constituents can register their boat, pick up their striped bass permit, and get their deer tags all at a single location. The new office is housed in the same building as the rest of the environmental agencies at 251 Causeway Street in Boston. The first floor modern office was designed with some innovative thinking to create a space that is both functional and aesthetically pleasing; a balance that was never achieved in our 30 years in the Saltonstall Building.

In addition to the new office, we have also completed our first year with an entirely new licensing program. The "state of the art" licensing software was developed as part of the Department's initiative to bring our constituents 1-stop shopping. The new software was designed with flexibility in mind, and, as such, uses the technology of the Internet to give our users more options. Last year, our commercial fishermen saw the consolidation of their permits for the first time. This meant that they received a single permit listing all the fisheries they are authorized to participate in, instead of carrying as many as a dozen different permits.

Although we considered our first year using the new permitting software a success, we did experience some problems. Glitches are inherent in the development of any new software, and we were not immune. Our renewal season began a full two months late in 2001, and we appreciate the patience of our permit holders. Our staff has tweaked, tested, and refined the new licensing system, and we expect a much smoother permitting year for everyone involved. Commercial renewal applications will be sent out around the end of November this year with non-commercial lobster packages following by mid-December. In addition to all the other changes our permitting program has gone through, noncommercial lobster permit holders will finally have the option to renew on-line. Information on renewing via the internet can be found at http://www.state.ma.us/dfwele/dmf/ dmflic.htm



(L - R) Dick Murray, DLE; Wayne McCallum, DFW; Dave Barber, DLE; Secretary Bob Durand, EOEA; Jim Fair, DMF; Commissioner David Peters, DFWELE.

Regulatory Update

During the period July through November 2001, DMF and the Marine Fisheries Commission took the following actions:

Sea bass trip limits amended: The Quarter IV (October-December) sea bass trip limit originally scheduled for 2,000 lbs. per day was amended to 2,000 lbs. per week. This action was mandated by an emergency action of the ASMFC Black Sea Bass Board that tried to prevent a premature closure of the fishery by slashing the trip limits to 300 lbs./day or 2,000 per week. To administer this weekly limit, DMF required all permit holders and authorized dealers to maintain a daily catch and sales log. Dealers are required to send the forms weekly to DMF and fishermen are required to submit the form after the season closes.

Public petition approved to enact a fixed gear-free zone in a portion of the seasonal Upper Cape Cod Bay Whiting Area (322 CMR 8.14). This rule ensures a portion of the area was free of fixed gear to allow trawlers to fish for whiting in the eastern portion of the Whiting Area that lies in state waters east of the LORAN 13880 line and west of the 13830 line during all of September and October.

New regulations for dealers purchasing quota-managed species (322 CMR 6.00). For all of the quota-managed species (e.g. scup, striped bass, bluefish, summer flounder, black sea bass, horseshoe crab) uniform rules regarding reporting and record-keeping requirements were enacted. Dealers are required to maintain written records of all purchases from commercial fishermen of all quota-managed species in the Massachusetts and maintain those records at a permanent place of business in Massachusetts for inspection by law enforcement officials. Dealers without a permanent place of business in Massachusetts are now prohibited from purchasing quota-managed species directly from commercial fishermen.

Quahog Dredge fishery managed through two emergency actions (322 CMR 6.36). Since last spring, a quahog dredge fishery has grown in the center of Nantucket Sound beyond town waters. The regulation established a 40 bushel daily limit and a 48 inch effective dredge width. The Commission approved a November 1, 2001 "control date" to allow DMF to limit participation if necessary in this fishery to vessels that held permits prior to that date.

Dogfish Update: On November 1, the dogfish fishery reopened after being closed since mid June for federal and state permit holders. DMF's 7,000 lbs. daily possession limit for state waters remains in place but the minimum size was eliminated back in June. Federal permit holders are limited to just 300 lbs. The quota is expected to be reached before the end of the year and will remain closed until May, 2002.

Contact DMF for more details. Gloucester office: (978) 282-0308; Boston office (617) 626-1520; Pocasset office (508) 563-1779; Martha's Vineyard office (508) 693-4372 or 508 693-0060.

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- Lobster gear floats downstream to England
- **©** Cod conservation challenges
- Runaway sea herring truck
- **Licensing system improved at Causeway St.**
- **Mov. 27-28 Public Hearings**

Surfers • Surfers • Surfers

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

http://www.state.ma.us/dfwele/dpt_toc.htm

DMF NEWS

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DMF 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.

Paul J. Diodati, Director, DMF David M. Peters, Commissioner, DFWELE Bob Durand, Secretary, EOEA Jane Swift, Governor

Comments and suggestions for the newsletter are welcome. Please contact the Editors at (617) 626-1520, or write to:

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