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DMF NEWS

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Can the Inshore Fleet Survive Gulf of Maine Cod Closures?

Commercial fishermen who target groundfish, such as cod, haddock, and flounders, are under siege. Many of these fishermen, struggling to cope with increasingly restrictive regulations to rebuild overfished groundfish, particularly cod, wonder if they have a future in the fishing industry.

Whether offshore fishermen fishing on distant fishing grounds or inshore fishermen fishing close to port in state waters, it makes little difference -- can they withstand necessary short-term sacrifices for conservation and still remain standing when fisheries managers eventually decide that fishing restrictions can be eased? What's more, can or should the government step in to provide assistance to help these fishermen weather this storm that's more akin to a hurricane especially for many Massachusetts fishermen who are heavily impacted by closures of nearby cod fishing grounds? These are important questions begging for answers. And there are others.

For example, is the Gulf of Maine (GOM) cod so depressed that recent closures were justified? The consensus answer is "yes." Scientists have concluded that the stock is on the verge of collapse because the number of spawners is at the lowest level ever observed, and the last three year classes have been some of the smallest on record. Fishing must be stopped on the remnant spawning cod because there is insufficient young cod to replace them. Occasional large cod catches have led some fishermen to believe cod is rebounding, but scientists believe the cod range is contracting and the remaining fish are simply aggregating - giving some fishermen an illusion of abundance.

GOM Cod Closures Beginning on February 1 and through April 30 extensive areas in the Gulf of Maine

abutting Massachusetts fishing ports such as Gloucester, Boston, Scituate, Plymouth, and Provincetown, were closed to commercial fishing with gear capable of catching cod (e.g., trawls, gillnets, and longlines). These are areas where the highest catches of cod have been taken in the Gulf of Maine from February-April -- areas where the remnants of the Gulf of Maine cod stock spawn. These closures represent desperate actions by the New England Fishery Management Council to protect spawning cod in hopes the protection will produce many young cod this year as the 1999 year-class. It takes about three years for cod to mature and become harvestable by the commercial fishery. Therefore, these closures likely will be warranted in future years. In fact, beginning in May, the Council has scheduled more areas to be closed as well as a lower trip limit for cod from 400 lbs. to 200 lbs. in the Gulf of Maine.

More to Come? Even more ominous for these commercial fishermen may be further restrictions to prevent the Council's Gulf of Maine "target" cod quota from being exceeded. The 1998-99 target is 3.9 million lbs.. Cod targets for the last few years have been greatly exceeded - Last year's landings exceeded the target by over 200%. Consequently the Council took these draconian steps to close areas and lower landing limits. Unlike a fixed quota system where widespread closures of fisheries occur when a quota is reached, target quotas serve a "benchmarks" triggering additional restrictions for the following year to compensate for excess landings. The Council has preferred this indirect approach to reduce groundfish landings and may be forced to use it again if this summer and fall's landings exceed expectations.



Dwindling Options There's more bad news from scientists. Several other stocks of fish in the Gulf of Maine are now in poor condition and will need attention before next year. These include Gulf of Maine yellowtail flounder and American plaice as well as white hake, found further offshore. Consequently, any shift of fishermen's effort from cod to these other species will only exacerbate problems. Similarly, effort may shift from closed areas to open areas. The Council will have to anticipate these changes in fishermen's behavior. It already has learned a hard lesson through the shift of effort from Georges Bank to the Gulf of Maine when portions of George's Bank were closed a few years ago. It's the domino theory applied to fisheries.

Spiny Dogfish Option Foreclosed Additional bad news for some fishermen who were encouraged to find alternative species to groundfish, and they did, is the Spiny Dogfish Management Plan that will be implemented later this year. The last issue of the DMF NEWS described this Plan and how it will impact Massachusetts. The fishery was scheduled to be shut down next year for 10 years causing fisher-

Our greatest challenge will be to identify and then maintain options for commercial fishermen in the Gulf of Maine that can be supported by the Council and NMFS.

men and dealers to lose their markets and the income derived from this small shark. Both Councils have agreed to adopt the Plan but with a more ambitious 5-year schedule, instead of 10 years, to increase abundance of large female dogfish.

After the Plan is published by the Secretary of Commerce and the public comment period ends, regulations will be implemented later this year. Before this happens, Massachusetts' objections will be reiterated and emphasized by DMF and legislators who will continue to speak on behalf of their constituents by protesting an unnecessarily restrictive plan that is a death knell for the Commonwealth's dogfish fishery.

One major concern shared by DMF, legislators, and commercial fishermen is dogfish prey on cod and cod rebuilding strategies may be impacted by increasing dogfish abundance to levels producing a maximum sustainable yield. This would be the ultimate irony of the Sustainable Fisheries Act (SFA) that requires all overfished fish stocks to be rebuilt to MSY levels. DMF continues to argue for a precautionary approach for cod meaning that the potential impact of dogfish on cod should be recognized and factored into any decision about increasing dogfish abundance.

Dragging in the Cross-hairs An important issue facing the New England Council is: once cod and other fish stocks are rebuilt, how can it prevent history from repeating. Should one type of fishing be favored over another? And, considering that the Council must now deal with protection of essential fish habitat (new requirement of the SFA), how will the Council deal with intensifying concern that dragging, the principal way of harvesting groundfish, is destructive to bottom habitat that is especially important to juvenile cod and other groundfish? This concern was recently profiled in the New Bedford Standard Times in an article, "Is dragging ruining the seabed? Fishermen, scientists differ on new studies" (2/21/99). The same article appeared in the *Cape Cod Times*.

Some researchers are clamoring that dragging be banned in many areas. This concept is supported by competing groups of commercial fishermen, such as longliners (fishing with hook and line) who argue for such a ban ostensibly to protect habitat. Of note, DMF has contributed to this debate. Arne Carr, DMF's Gear Technology Specialist with years of experience in underwater observation of fishing gear in action, published his views in Commercial Fisheries News (February 1999): "Trawl impacts vary depending on the bottom." A motivation for his article was a recent claim that dragging (and dredging) "clear-cut" the ocean bottom. Arne Carr made the following observations:

"...There is also sea bottom off coastal New England that has not been subject to mobile gear for 50 years or more. Mobile fishing in these areas is prohibited by law. Observations of some of these areas, granted by eye and camera and not by microscope, suggest that some of these areas, especially featureless mud bottom, differ little from nearby trawled sea bottom."

"There is sea bottom and mobile fishing gear that is not compatible for the maintenance of species diversity. There is benthic habitat that is sensitive to mobile gear, especially mobile gear that tows heavy on the sea bottom. But to associate terms such as 'strip mining' and 'clear cutting' with most of the Gulf of Maine and Southern New England region is not proper and taints those who are objectively attempting to define and quantify impact, both short and long term."

This debate will go on and intensify, and DMF will play an important role in the research. Nevertheless, making dragging (and scallop dredging) the bogeyman and the culprit for all that ails the groundfish industry is foolish and unfair. Moreover, trawl nets are needed to catch many species of flounders that otherwise could not be caught, unless taken with gillnets. To catch sea scallops, trawl nets or dredges are necessary.

Research with Fishermen DMF also will play an important role in developing a research plan involving the use of fishermen in collecting data to improve stock assessments, in improving fishing gear to reduce bycatch and discard, and in monitoring the effectiveness of management plans. This research plan, to be developed by DMF with the University of Massachusetts at Dartmouth's Center for Marine Science, Environment, and Technology (CMAST), is part of a larger effort to assist the commercial fishing industry in its time of need.

This effort is being spearheaded by the Massachusetts Fisheries Recovery Commission (MFRC) funded by the Seaport Advisory Council. The MFRC, created in 1997 through an Amendment to the Seaport Bond Bill through the initiative of Senators Bruce Tarr and Mark Montigny, is made up of state officials (including DMF), legislators, fish dealers, and commercial fishermen. The Commission's purpose is "to develop scientific and socioeconomic research to facilitate the recovery of the Commonwealth's commercial fishing industry." The MFRC's purpose is consistent with DMF's mission regarding marine fisheries research and management, i.e., research answering important management questions and involving fishermen who are affected by management decisions. The plan is scheduled to be completed this spring.

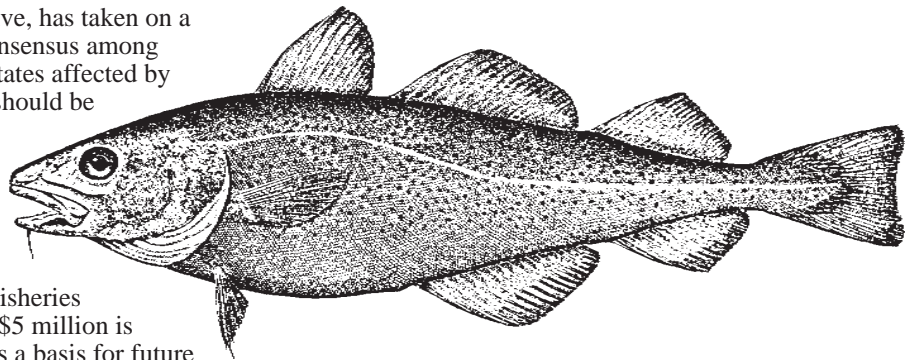
Unexpected MFRC Role The Recovery Commission has taken on another important and unexpected role. In November, U.S. Senators John Kerry and Judd Gregg (N.H.) worked with their Senate colleagues to acquire \$5 million

for emergency disaster relief for fishermen affected by the Gulf of Maine fisheries closures.

The Recovery Commission, with DMF and CMAST working on the research end of this initiative, has taken on a leadership role. It has helped develop a consensus among many commercial fishermen in different states affected by the cod closures as to how the \$5 million should be spent. The cornerstone of this plan is to exchange monetary compensation for fishermen's lost fishing opportunities with fishermen's agreement to participate in research programs addressing the scientific needs of the Management Council, states, and the National Marine Fisheries Service (NMFS). This effort linked to the \$5 million is considered to be a pilot program serving as a basis for future requests for additional federal and state monies.

Days-at-sea Compensation The Recovery Commission plan includes using disaster relief monies to "compensate" fishermen for their lost days-at-sea during the February-April closure. The New England Council relies on days-at-sea allocations as the major means to reduce fishing effort on groundfish. Commercial fishermen continue to be scaled back on their allocations; once fishermen use up their allotted days-at-sea, they no longer can land groundfish.

This controversial "compensation" approach has merit because by determining from federal records where and when they fish, compensation can be directed towards those fishermen actually impacted by the 3-month closure that severely impacts inshore fishermen. In exchange for the



compensation, fishermen would agree to make themselves and their vessels available for research.

Next Steps At press time, the National Marine Fisheries Service, Governors, heads of state fisheries agencies, and fishermen were still trying to determine the best way to distribute the \$5 million in relief in a fair and equitable manner. DMF continues to urge that the lion's share be provided to Massachusetts fishermen since our state's industry is impacted the most by the closures. The share of additional federal funds provided in the future should be more evenly distributed between states as the GOM restrictions for cod and other species tighten and other state's fishermen and industry bear more of the burden.

The immediate challenge will be the development of a slate of research that will involve fishermen, will be scientifically sound, and will benefit scientists and fisheries managers.

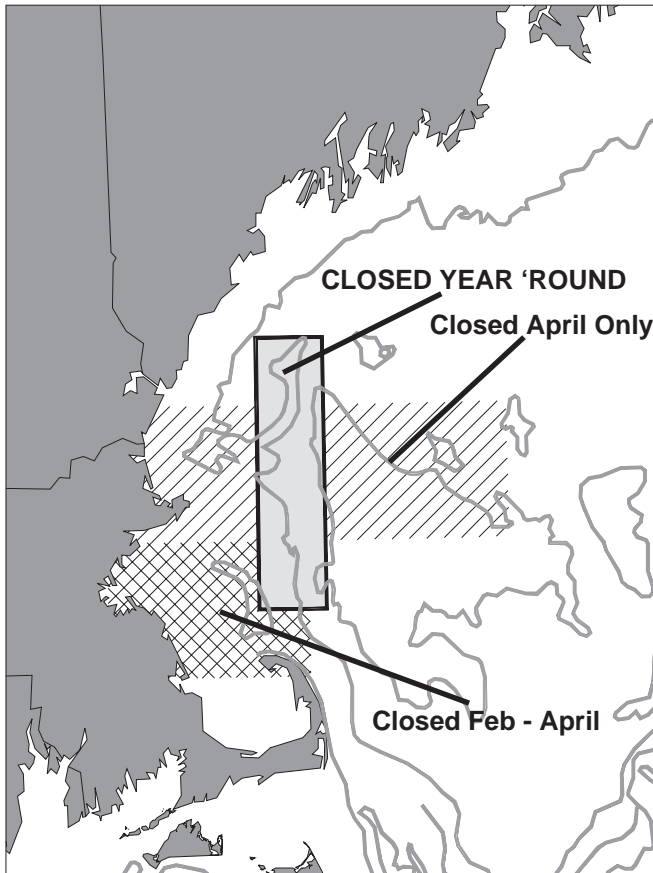
Our greatest challenge will be to identify and then maintain options for commercial fishermen in the Gulf of Maine that can be supported by the Council and NMFS. Without these options, effort may shift once again to other locations such as southern New England waters and back to Georges Bank thereby worsening our management problems there as well. The Council must anticipate these possible shifts especially since the new Sustainable Fisheries Act (SFA) requires overfished stocks to be rebuilt to high sustainable levels in 10 years. This requirement further reduces fishermen's options. As noted by Phil Coates, DMF's Director in a recent missive on the groundfish problems in New England, especially in the GOM:

"The SFA has forced the Councils to place the needs of the fish before fishermen. This transition has been difficult to accept at both the regulatory and harvesting ends of the fishery management spectrum."

Fishery managers are responding with the closures and plans for further restrictions this year. However, fishermen's needs are not being ignored. The \$5 million is an example. Still, this total is a far cry from what will actually be required.

Clearly we have reached a watershed time when hard decisions must be made about compensation for fishermen. Fisheries policy and philosophy regarding why, how, and to what extent managers should help those they regulate will be hotly debated. This debate will be spurred by the Recovery Commission's efforts to develop creative ways for the fleet to survive. Will it survive? We're optimistic that innovative thinking by industry and all levels of government will result in future sustainable fisheries.

by David Pierce, Ph.D.



New Gulf of Maine closures off Massachusetts to protect cod. See Rules Update for details

Bass Advisory Panel Recommends Changes

Last fall a panel of experts discussed at length all that was right and wrong about Massachusetts striped bass management. From intense discussions came calls for new regulations, new policies, and new scientific studies. The Striped Bass Advisory Panel, convened by Director Phil Coates, was asked to raise issues, study and debate them, and then present consensus positions where possible. DMF hoped this format would reduce the bitter, polarized testimony seen at recent public hearings.

Since 1995, there's been controversy every spring. Anglers reacted to a three-fold commercial quota increase in 1995, and in 1996 a reactionary petition followed to ban the sale of bass. In 1997, DMF lowered the recreational minimum size from 34" to 28", and 1998 proposals to "stretch out the commercial quota" with various bag limits and season adjustments were poorly received. The reaction to last year's proposals motivated many critics to sit down together and craft acceptable proposals for the future.

The recovery of striped bass over the past 15 years is well known, and now it is the backbone of the state's recreational fishery. Our recreational bass fishery is the largest on the east coast accounting for more than half of the 14 million bass caught in 1998. Despite the recovery, recreational anglers often express great apprehension about any new regulatory change they suspect may lead to overfishing. This sentiment is undoubtedly fueled by concerns about some unsuccessful fishery management examples, such as the Gulf of Maine cod collapse.

Recreational fishermen recognize that though regulated by daily bag limits, their impacts have increased substantially. Recreational fishing effort is increasing by about 9% per year and harvest may soon outpace growth of bass stocks. If such a situation should occur, Massachusetts may have to consider recreational fishing seasons in the future.

Commercial anglers have seen their quota remain static during 1995-98, but the season has become progressively shorter. The 1998 quota was filled after just 28 fishing days, down from 57 days in 1995. The shorter season has resulted from an increase in commercial anglers, increased abundance of stripers, and improved angling techniques making the fish more catchable. The static commercial quota has been set at 802,000 pounds by the Atlantic States Marine Fisheries Commission (ASMFC) Striped Bass Interstate Fishery Management Plan (FMP).

Massachusetts commercial and recreational striped bass fishermen share some similarities. Both are required to harvest stripers only by rod and reel or handlines. (Harvesting striped bass with nets or even having nets aboard while possessing striped bass is prohibited.) They often fish the same waters at the same time. The most striking similarity,

however, is that many commercial anglers also fish recreationally during the off-season. Even with these common denominators, traditional battles over resource access and allocation have been hotly waged.

Director Phil Coates has been in the center of tensions between the two sectors over striped bass management. He's been criticized at times by both groups and even by members of the Massachusetts Marine Fisheries Commission (MFC) over management of this fishery. Coates opposed an ASMFC decision for a two-year status-quo management period for 1998 and 1999 while development of a new plan amendment (# 6) was readied for 2000. He argued that delaying action

until 2000 would heighten the imbalance between recreational fishing growth and static commercial quotas, making future allocation decisions even more difficult.

Recently, striped bass management actions in Rhode Island raised the hackles of the recreational sector there when the state proposed to allocate more poundage to their commercial fishery by imposing a shorter recreational season. Although Rhode Island's action may not survive after review by ASMFC, it offers a glimpse of managers' future struggles

Coates envisioned future clashes over allocation when he formed the Advisory Panel to assist DMF and MFC unfold new management decisions. DMF has convened similar focus groups for lobster and mobile gear issues, but this is the first to tackle striped bass. The Panel was chosen from throughout the state and from various sectors. Coates chose the state's delegation to the ASMFC Striped Bass Advisory Panel, Bob Luce and Pip Winslow, to co-chair the first meeting. Former DMF Assistant Director Randy Fairbanks served as the Panel's facilitator with staff support from Paul Diodati, Recreational Fisheries Program Chief.

It was clear from the outset that the group came ready to conduct business. In just three meetings, they reached consensus on recommendations with accompanying rationales. The group's calls for regulatory change focused on the commercial fishery. Although there were discussions about recreational fishery minimum size changes and possible slot limits, the final consensus was to leave recreational rules unchanged in 1999. The panel's recommendations were reviewed by Director Coates and the MFC at the Commission's January meeting and will be presented at March 23-25 public hearings.

Based on its first performance, we expect the Panel to be convened next to guide Massachusetts' positions on Amendment #6 of the striped bass FMP. Projected stock growth from large year classes (1993 & 1996) should provide sufficient catches for the needs of both recreational and commercial anglers. Panel advice will position us to maximize benefits for the state's citizens and visitors.

by Paul Diodati and Dan McKiernan



*Commercial and recreational bass anglers share many similarities.
Photo by Mark Oulette*

Recommendations and Rationale:

(1) Commercial Bass Fishery:

(A) Majority View Recommendation: The Panel reached a strong consensus on proposed regulatory action in the 1999 commercial striped bass fishery: Replace the current three-weeks of fishing and one-week off with no fishing on Thursdays, Fridays and Saturdays; delay the start of the fishing season until the first Monday following July 4; and increase the minimum size currently regulated for the commercial fishery from 34 inches total length to 36 inches.

Rationale: Commercial fishery participants, markets, and consumers will benefit in several ways, all of which leading to long-term stability of the fishery. Specifically, market gluts will be reduced, improving ex-vessel prices, and extending the season. Higher prices paid to fishermen could increase incentive to improve quality control and provide a better product for the marketplace. Also, placing a higher value on the resource should encourage commercial fishermen to ensure better survival of released fish which may be marketed in future years. A longer season will keep the product in the marketplace longer creating incentive for seafood providers and restaurants to invest in better marketing, which could also lead to an increase in ex-vessel prices as demand goes up. Raising the minimum size should offer benefits relative to extending the season, but it should help increase spawning potential as mortality (on 34 to 36 inch fish) is postponed, thereby allowing fish that otherwise would have been harvested the opportunity to make further spawning contributions.

There will be indirect benefits to the recreational fishery as well. A 3-day weekly closure falling on weekends would also create more favorable recreational fishing conditions, especially for those anglers fishing from private boats and charterboat operators.

(B) Minority View Recommendation: The Panel did not reach a consensus to support the following recommendation but did agree to forward it as a minority view recommendation: Continue the 1999 commercial striped bass fishing season with the three-weeks-on and one-week-off fishing schedule; delay the start of the fishing season until the first Monday following July 4; institute a 10-fish daily possession limit; and increase the minimum size limit from 34 inches total length to 36 inches.

Rationale: The proponents for this recommendation felt that these changes will accomplish much of the same goals stated for recommendation 1 A but that these changes would be more favorable for part-time commercial fishermen who require the entire weekend to conduct fishing. It was also felt that having the entire week to fish would provide fresher fish to the market place.

(2) License Fees The Panel reached a strong consensus asking DMF to increase the cost of commercial striped bass license fees from the current cost of \$10 to not lower than \$30 but not higher than \$50.

Rationale: The low cost of \$10 gives non-participants the false perception that the fishery is not highly regarded by its participants. Participants willing to make a higher personal investment in the fishery should also work harder to gain long-term stability for the fishery. Furthermore, a cost higher than \$50 may serve to limit access to certain segments of the fishery and thus constitute an inappropriate use of this license category.

(3) Angler Education The Panel reached a strong consensus for DMF to develop and implement an angler education program aimed at reducing hook and release mortality in striped bass (and other similar) fisheries. This could be accomplished by encouraging the use of certain types of terminal gear, certain fishing techniques and certain fish handling techniques.

Rationale: DMF has already completed hook-release mortality studies for winter flounder, black sea bass, and striped bass, and has ongoing studies of circle hooks vs. J-shank hooks for the school-bluefin and striped bass chunk/chum-bait fisheries. Continuing this work and compiling it in a meaningful way for public consumption will contribute to an education program aimed at reducing discard mortality in hook and release fisheries

(4) By-catch in net fisheries The Panel reached a strong consensus for DMF to evaluate and report on the current potential and extent of striped bass by-catch from Massachusetts' internal waters. Such a report would be useful to determine if further regulatory actions need to be developed to help reduce striped bass discard mortality. The evaluation should identify gear types, number of units fishing (boats, traps, nets, etc, by permit type), the magnitude of any reported catches and the magnitude of estimated potential catches based on survey or observer information.

Rationale: Concern about high levels of striped bass discard mortality has focused on certain net fisheries in federally controlled waters. Panel members are aware of strong anecdotal information provided from a variety of sources within both the commercial and recreational fishing industry that suggests large by-catch and discards of striped bass also occur in Cape Cod Bay and in other state-controlled waters. If this activity can be identified and quantified, proper regulatory action could be developed to help reduce the related mortality level, thereby increasing the amount of resource available for directed bass fishing.

(5) Status Quo for recreational fishery The Panel reached a strong consensus to continue with status quo regulations during the 1999 recreational striped bass fishery, i.e. to maintain the one fish daily possession limit and the minimum size limit at 28 inches total length.

Massachusetts Striped Bass Advisory Panel

Pip Winslow, ASMFC Advisor

Bob Luce, ASMFC Advisor

Dave Rimmer, *Executive Director, CCA*

Mark Fulton, *President, Plum Island Surfcaster*

Tom Downey, *President, Mass Striped Bass Association*

Lou MacKeil, *Cape Cod Salties*

Ed Jerome, *President, Martha's Vineyard Striped Bass & Bluefish Fishing Derby*

Mike Moss, *President, Mass Sportsmen's Council*

Paul Parker, *Executive Director, Cape Cod Commercial Hook Fisherman's Association*

George Sousa, Jr., *Commercial Anglers Association*

David Carnes, *Chatham Fish & Lobster Co.*

Steve Connolly, *Steve Connolly Fish Co.*

Wayne Bergeron, *Pres., Cape Cod Charterboat Association*

Ernie Sordillo, *Pres. North Shore Charterboat Assn.*

Cliff White, *Mass. Beach Buggy Association*

Al Williams, *Commercial striped bass fisherman*

Environmental Police Prepare for “Glass Eel” Poaching Season

Public is asked to be on the lookout for illegal netting in coastal streams

Enforcing eel conservation rules has become a top spring-time priority for the Mass. Environmental Police (MEP). Each spring, newborn American eels, known as “glass eels” or “elvers” enter coastal streams all along the eastern seaboard. In the narrows of rivers and creeks, these 3-4” eels are extremely vulnerable to capture, but Massachusetts law prohibits harvest of juvenile eels.

American eels are a major prey species for striped bass and support a small-scale commercial fishery where adult eels are harvested for recreational bait markets, as well as some for human consumption.

Scientists believe eels have declined during the past 20 years. Concerns in Massachusetts during the 1970’s about a potential juvenile eel fishery led to legislation prohibiting take or possession of eels less than 4”. Today, 10 of 15 Atlantic coastal states prohibit harvest of juvenile eels, but some states permit it. Three northeast states that allow it are Maine, Connecticut, and New Jersey, and the demand created by these markets contributes to poaching and complicates the enforcement task for the officers.

Competition for eel permits and desirable fishing locations is intense in Maine where the largest legal glass eel fishery exists along the east coast. In Massachusetts the only competition is among the poachers, motivated by the high value of glass eels, with prices as high as \$150 per lb.! Poachers have been known to net 5 pounds of eels during a tide with a dip net and even more with a fyke net. (See photo.) These are shipped to Asia where most are grown to larger sizes in aquaculture operations, but a small portion are consumed as a “delicacy.”

MEP urges the public to report any suspicious spring-time activity or illegal netting along coastal creeks and rivers. Glass eels and elvers migrate at night and are especially active during new moon tides in creeks along the coast. Poachers use dip nets in stream narrows such as

culverts or fish ladders. Be on the lookout for certain night-time activity: pickup trucks with large coolers, and aerator pumps are a giveaway. Some poachers have used fine-mesh fyke nets attached to banks and stream beds. Poachers will haul these nets under cover of darkness, but the elaborate netting might be visible to stream-walkers during daylight.

MEP will be strictly enforcing the regulations prohibiting harvest and possession of eels less than 4” as well as a new regulation prohibiting possession of fine mesh nets (less than 1/8”) in - or along - streams from February 15 - June 15.

Last year, intense surveillance along Cape Cod streams led to some high profile poaching convictions. Officers were tipped off by a private citizen who reported seeing a fyke net secured under a bridge on Route 28 in Falmouth. Two out-of-state brothers were found in possession of 30-40 lbs. of “glass eels” valued at about \$10,000. MEP siezed 3 dip nets, one fyke net, a rented truck, aeration pumps, head mounted “miners” lamps, rope coils and chain. The suspects were arrested, jailed, and were eventually fined \$8,000.

This season help conserve this precious and finite marine resource. Please report any illegal activity to the Mass. Environmental Police at 1-800-632-8075..

by Bob Ritchie, MEP and Dan McKiernan, DMF

EEL BIO: American eels are our only catadromous fish, meaning they are born in saltwater, migrate into fresh water habitats for most of their lives, and return to saltwater to spawn. Eels spawn in the Sargasso Sea east of the Bahamas and south of Bermuda during winter & early spring. Larvae drift and swim towards the continental shelf of the eastern U.S., and by the time they arrive along our shores have metamorphosed into nearly translucent “glass eels”, the most valuable stage for Asian markets. Once they commence feeding, they develop yellow and brown pigments, and become known as “elvers” and measure less than 4” in length. Studies have shown eels to be slow growers, requiring 8-24 years to mature in the Chesapeake region but may mature earlier in southern regions and later in northern regions. They migrate offshore to the Sargasso Sea to complete their life cycle.

A draft Fishery Management Plan has been completed by the Atlantic States Marine Fisheries Commission. For a copy of the plan call ASMFC in D.C. at 202-289-6400.

Right, “Glass eels” slithering from a dip net. Far right, MEP officer demonstrates the fyke net confiscated by MEP. A citizen spotted this net tied down under a bridge in Falmouth. Any small-mesh net set in coastal streams is unlawful under DMF’s regulations.



'98 Belding Award presented to Dr. Stormy Mayo

Outgoing Commissioner John Phillips presented the 1998 Belding Award to Dr. Charles "Stormy" Mayo of Provincetown's Center for Coastal Studies. Phillips cited Mayo's contributions to the state's right whale conservation plan and his research and rescue efforts that have helped conserve many rare and endangered marine mammals, including right whales, humpback whales, dolphins and sea turtles." Mayo is co-founder and senior scientist at CCS.

The Belding Award is presented annually to a citizen who, in the opinion of the Marine Fisheries Commission, has "done the most to promote the conservation and sustainable use of the state's marine resources." The award is funded in perpetuity by Dr. Belding's descendants. Dr. Roy Eldredge and Dr. Lizzie Eldredge, the son-in-law and granddaughter of Dr. David L. Belding, attended the award presentation. Dr. Belding's work in marine biology in the early 20th century became the cornerstone of today's DMF. *by Jeanne Shaw*

Be on the lookout for tagged winter flounder!

We ask all fishermen to be on the lookout for tagged winter flounder. Anyone returning tag recapture data will be eligible for our 1999 drawing of one **\$500.00** and five **\$100.00** prizes. An individual's name will go into our drawing each time he/she reports a tagged fish. This will be the last year we offer rewards for tag returns. However, we encourage fishermen to continue reporting any tagged fish caught after 1999. For 1998, **Bill Santos, a commercial draggerman**, was our big winner and received **\$1100.00**. Nine other fishermen won prizes of \$100 to \$500.

Since 1994, DMF biologists have tagged about 22,400 winter flounder in western Cape Cod Bay and part of Massachusetts Bay. Our flounder study will continue in 1999, but no new fish will be tagged. To date, we have had 883 tag returns. These recaptures have come from research, commercial, and recreational catches. The majority of these have come from our tagging area in the vicinity of Plymouth. However, we have had returns from such places as Boston Harbor, Stellwagen Bank, Buzzards Bay and Long Island, New York. Thanks to everyone who provided us with invaluable recapture information.

Using these data, we will map seasonal movements, define the geographical distribution of the local population, and estimate the population size. Our goal is to assess the ecological significance of power plant impact - namely the entrainment of larvae in Pilgrim Nuclear Power Station's cooling water withdrawal. *by John Boardman*



Photo by Brian Kelley



Dr. "Stormy" Mayo (left) of the Center for Coastal Studies and outgoing Commissioner John Phillips (right)

Best wishes to John Phillips

DMF thanks former Commissioner John Phillips for his efforts during his eight years as Commissioner. John was a strong supporter DMF's marine fish restoration mandate and took personal roles in management efforts. He was instrumental in enhancing DMF's conservation engineering program and was key to the development of the state's right whale conservation policies.

Commissioner Phillips worked hard to augment the number of Massachusetts' environmental police officers statewide and to significantly expand their presence in the coastal zone. He regularly attended Marine Fisheries Commission meetings and worked for interests of both the commercial and recreational fisheries. *by Jeanne Shaw*

DMF welcomes new Secretary and Commissioner

On December 10, 1998, Governor Paul Cellucci appointed Senator Bob Durand as Secretary of Environmental Affairs. Bob's fifteen year career in the state Legislature began as state Representative in 1984, and ended with his fifth term as state Senator from the Middlesex/Worcester seat. Bob also served as a delegate to the Atlantic States Marine Fisheries Commission. He is an enthusiastic outdoorsman.

David M. Peters was appointed as Commissioner of the Massachusetts Department of Fisheries, Wildlife & Environmental Law Enforcement by Governor Cellucci on January 19, 1999. An avid fisherman and bow hunter, Dave is an active outdoorsman who also enjoys hiking, camping, scuba diving, and piloting airplanes. He served as a legislator from the 6th Worcester District (Charlton, Dudley, Oxford, Southbridge, and Sturbridge) from 1990 through 1999. During that time, he served on the Natural Resources, Public Safety, Government Regulations, and Banks and Banking Committees. *by Jeanne Shaw and Bob Greco*

(Left) Commercial Fisherman Bill Santos (left) caught the most valuable flounder of his career. He was one of 10 lucky winners in the DMF Flounder Tag Return Lottery. John Boardman (right) presented the grand prize check.

DMF's Views on Swordfish Proposals

DMF has a long record of urging the National Marine Fisheries Service (NMFS) to stop swordfish overfishing. Therefore, we have taken a special interest in NMFS's Draft Highly Migratory Species (HMS) Fisheries Management Plan (FMP). This marks the first time NMFS has attempted to manage all highly migratory species under one umbrella FMP. The HMS management unit consists of populations of North Atlantic swordfish as well as western Atlantic bluefin tuna, Atlantic yellowfin tuna, Atlantic bigeye tuna, north Atlantic albacore tuna, west Atlantic skipjack tuna, and the 39 species of sharks inhabiting the western North Atlantic Ocean (large coastal, small coastal, and pelagic).

NMFS is proposing a limited entry program with species quotas as the main management tool. This approach mimics the International Commission for the Conservation of Atlantic Tunas' (ICCAT) method for managing effort in fisheries for tuna. The main objective of the limited entry program is to reduce or eliminate permits for fishermen not actively engaged in the fishery. For instance, under the current management regime, the swordfish fishery has approximately 1,000 federal permits. The preferred alternative in the HMS plan reduces the number of qualifying swordfish vessels to 298. However, since NMFS estimates there are now only 300 active permits in the swordfish fishery, this limited access scheme, as the eligibility requirements are defined, does very little to reduce overfishing.

We are encouraged, however, that NMFS answered DMF's call for an elimination of pelagic longline fishing in the Florida Straits with a closure during July, August, and September each year. The historic harpoon fishery centered in Massachusetts has been excluded because the average size of swordfish on the grounds has decreased due to increased pressure from the longline fleet. In past comments, DMF recommended accommodating future participation by harpooners by exempting all hand gear from the limited access program and eligibility criteria. We believe the decline in swordfish is largely due to intense effort by longliners in the Florida Straits where juveniles are caught before they can reproduce.

In April, 1997 DMF commented on draft Amendment 1 to the Swordfish FMP. We asserted the swordfish management plan should advocate and encourage improvements in selectivity, reductions in U.S. discards, and use of a gear type that in the long run will benefit all fishermen and significantly reduce fishing mortality on small, immature fish. This draft FMP does not encourage the development of selective fishing methods. In fact, contrary to DMF's request

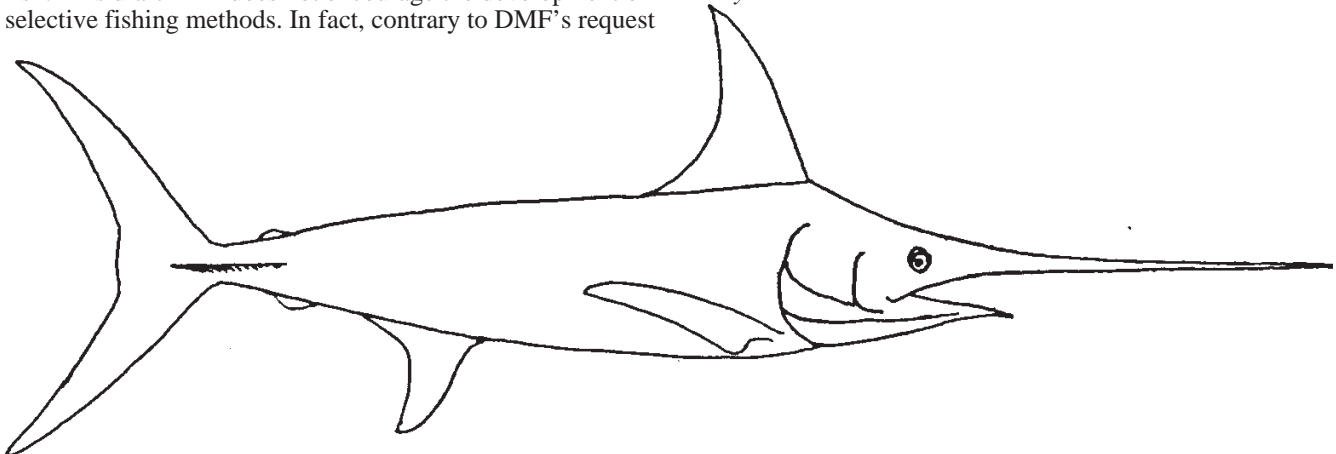
that the harpoon category be exempted from all eligibility and limited entry requirements, hand gear participants will be required to show evidence of past involvement. In addition, the hand gear category will be limited to 2% of the total directed quota in any year. We believe hand gear, as opposed to longlining, is a selective and a "cleaner" form of fishing that targets adult fish after they have had the chance to spawn.

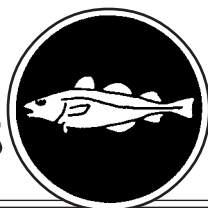
Additionally, in our past comments we supported the call for a 5-year rebuilding program. It is important to note that this call was made in early 1997 – two years ago. In Amendment 1, written in January 1997, NMFS asserted that "if the North Atlantic stock continues to decline at the same rate it has since 1978 and particularly since 1986, the commercial fishery will not be viable in approximately ten years." If this were true, then implementing a 10-year rebuilding program in late 1999 as proposed by NMFS would not immediately serve the resource's long term recovery. Of note, as detailed by NMFS' own analysis, a 6-year rebuilding program will result in a higher net and gross present value during the rebuilding period and a much shorter rebuilding period.

Of the 14 stated objectives of the HMS FMP, two objectives refer directly to rebuilding: *(1) to prevent or end overfishing of Atlantic tunas, swordfish and sharks and adopt the precautionary approach to fishery management, and (2) to rebuild overfished fisheries in as short a time as possible and control all components of fishing mortality, both directed and incidental, so as to ensure the long-term sustainability of the stocks and promote stock recovery of the management unit to the level at which the Maximum Sustainable Yield (MSY) can be supported on a continuing basis.* It is clear to us from the NMFS preferred alternatives that NMFS has little chance of meeting its own clearly stated objectives. Given the content and preferred alternatives of this plan, ending or preventing overfishing of swordfish will not happen because neither the active effort nor the catch quota has been reduced significantly. The plan will not rebuild the swordfish in as short a time as possible.

NMFS has much work to do before the Plan meets its own objectives. Specifically, the major problem areas in the proposed Plan are a continuation of significant longline effort, minimal protection of swordfish spawning areas in the Florida Straits, lack of encouragement of a highly selective hand gear fishery, and an extended rebuilding program that jeopardizes the swordfish resource.

by Leslie-Anne McGee





NOTICE OF PUBLIC HEARINGS Scheduled for March 23, 24, & 25, 1999 Please note early hearing starting times

Under the provisions of G.L. C. 30A and pursuant to the authority found in G.L. c 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 and petitions. Contact the Division of Marine Fisheries for specific proposals and details.

The following items are proposed regulation changes for the upcoming fishing seasons and are presented for public comment. After public hearings, the Commission and DMF will consider all oral and written comments through Friday, March 26, and votes on these proposals will be taken at the April 1 or May 3 business meetings of the Commission. **If specific changes are not approved, current regulations will remain in effect.** Contact DMF for draft regulations and other details of these proposals.

(1) DMF proposes changes to commercial striped bass fishery regulations (322 CMR 6.07) based on the input from the DMF-sponsored Striped Bass Advisory Group. (See DMF News article for details.)

Season changes:

Option A: (Preferred Option) Amend the closed fishing periods by replacing the three-week-open/one-week-closed schedule with specific no-fishing days for commercial fishermen during each week during the commercial season. The proposed no-fishing days are Thursday, Friday, and Saturday. At the request of the Commission, comments will be accepted about whether other no-fishing days should be considered.

Option B: Maintain the three-week-open/one-week-closed schedule. Enact 10 fish daily bag limit per licensed angler.

Season Opening: Begin the season on Monday July 5, 1999 and terminate when the ASMFC approved (Amendment #5, March 1995) Massachusetts quota of 802,000 lbs. is reached less any overage resulting from last year. This quota represents a n increase over last year's level of 750,000.

Minimum Size Change: Increase the commercial minimum size from 34" to 36".

Licensing changes: Amend the individual permitting requirements for multiple anglers fishing aboard vessels. Allow commercial fishermen to purchase a commercial boat permit and a single striped bass "regulated fishery permit" to cover the activities of all unlicensed commercial anglers aboard a fishing vessel. Currently all anglers fishing on commercially licensed vessels must be individually licensed with a striped bass "special permit."

(2) Marine Fisheries Commission proposal to prohibit sale of striped bass by charter-boats when conducting trips with paying customers.

(3) DMF proposals to amend summer flounder regulations (322 CMR 6.22) for commercial and recreational fishermen.

Commercial fishermen

Option A: (1) Maintain status quo. Establish no specific fluke shares for hook commercial fishermen, and allow the same landing/possession limits for hook fishermen and draggermen. Option: Set different limits for each gear type.

Option B: (1) Allocate a specific percent share (range 5-25%) of summer/fall quota (beginning June 1) for hook commercial fishermen; set a season for hook commercial fishermen based on the percentage and 1998 landings; and establish a landing/possession limit (range 100-150 lbs.) for hook fishermen during that season; and (2) Begin the 300-lbs. season for draggermen on June 1 instead of June 24 and prohibit landing/possession of fluke from April 23 - May 31 (currently 100 lbs.). Option: Maintain the June 24 starting date, but prohibit the landing/possession of fluke from April 23 - May 31.

Recreational fishermen

To comply with the ASMFC management plan for 1999, maintain the 15" minimum size limit and 8 fish bag limit but and establish a closed season for recreational fishing from September 12 through May 28 (open May 29 through September 11).

(4) Moratorium on issuance of new summer flounder commercial fishery permits. Receive comments on a recently enacted emergency action limiting eligibility to summer flounder permits. Only those fishermen who held a regulated fishery permit for summer flounder prior to July 23, 1998 would be eligible to obtain the regulated fishery permit in the future.

(5) DMF proposal to lower the cod possession limit (322 CMR 6.03) in the Gulf of Maine from 400 lbs. to 200 lbs. effective May 1 and to enact additional seasonal restrictions on groundfishing for fishermen who hold state permits only to complement upcoming federal action, framework 27.

(6) DMF proposal to clarify the definition of total length to improve compliance with minimum size regulations (322 CMR 8.02 and 6.03). Total length shall be "the greatest straight line length in inches as measured on a fish with its mouth closed from the anterior most tip of the jaw or snout to the farthest extremity of the tail. For fish with forked tails, the upper and lower fork may be squeezed together to measure the tail extremity."

(7) Petition from the Mass. Chapter of the Coastal Conservation Association to regulate the use of gillnets to minimize by-catch of striped bass. This petition requests DMF to prohibit the overnight setting of gillnets during the months of May through October.

(8) Petition from Martha's Vineyard scup pot fishery permit holders to: (a) allow scup pot fishermen to possess and sell black sea bass by-catch provided bass are caught in compliance with sea bass pot fishery regulations, and (b) if the scup commercial fishery is closed, allow a directed sea bass pot fishery by scup pot permit holders with a maximum of 50 pots.

(9) DMF proposal for horseshoe crab fishery permits and catch reports. ASMFC's Horseshoe Crab Fishery Management Plan requires that states must permit all harvesters of horseshoe crabs including biomedical companies. Catch reports also will be required.

(10) DMF proposal to amend commercial tautog regulations with lower bag limits and/or seasonal closures to comply with imminent ASMFC management plan.

Three hearings have been scheduled: **Please note early hearing starting times**

Tuesday March 23 at 6:00 p.m. at the Fuller School Auditorium in Gloucester;

Wednesday, March 24 at 6:00 p.m. at the Massachusetts Maritime Academy in Buzzards Bay; and Thursday, March 25 at 5:00 p.m. at the Whaling Church (Baylie's room) in Edgartown, Martha's Vineyard.

Special May 4 Public Hearing Regarding License Transfers (322 CMR 7.00)

DMF and MFC have scheduled a special single-issue public hearing to present proposals to allow transfer of limited entry fishery permits. Only lobster and mobile gear permits are currently transferable. Proposals will pertain to all other - and future - limited entry fisheries. **The hearing will be at 7:00 p.m. on Tuesday May 4, 1999 at the Hyannis Airport Conference Room** Contact DMF for draft regulations and other details.

Court UPDATE: State Prevails Over Secretary of Commerce in Scup Appeal

On April 27, 1998 Chief U.S. District Judge Tauro (1) voided that portion of the 1997 regulatory amendment establishing state-by-state allocation of the summer commercial scup fishing quota; (2) forbade enforcement of the voided portion of the regulatory amendment including the calculation and enforcement of "overages;" and (3) ordered the Secretary of Commerce to promulgate, in due course, a regulation which sets forth state-by-state quotas in compliance with National Standard #4 of the Magnuson-Stevens Act. This decision was in response to a lawsuit brought by the Commonwealth on June 19, 1997 against the Secretary of Commerce regarding equity and fairness for Massachusetts scup fishermen and dealers who also involved themselves in the case individually and through the S.E. Massachusetts Inshore Fishermen's Alliance by filing an amicus curiae brief.

The Secretary of Commerce appealed this decision. Now, just a few weeks after hearing the appeal, the U.S. Court of Appeals for the First Circuit on February 24 affirmed the judgment of the District Court. **Consequently, there will be a scup commercial fishing season in Massachusetts this summer.** We now await the response of NMFS, the Mid-Atlantic Fishery Management Council, and the Atlantic States Marine Fisheries Commission regarding Judge Tauro's order.

For details, contact Daniel Hammond, Assistant Attorney General, at 617-727-2200 (ext. 2078) or DMF's David Pierce, Ph.D at (617) 727-3193 x 366

Legislative UPDATE

The Joint Committee on Natural Resources and Agriculture held a public hearing on March 3, 1999 to hear testimony on a number of bills. DMF testified (as opposed) on two bills: H. 696 An Act to enhance the Aquaculture Industry of the Commonwealth and H. 1410 An Act Prohibiting Local Control of Shellfisheries. H. 696 seems to give sweeping exemptions for aquaculture and gives regulatory authority over aquaculture to the DFA Commissioner, which directly affects the DFW and DMF Director's authority. In addition, Section 3, as it is presently written, would exempt shellfish aquaculture from the provisions of the Wetlands Protection Act. H. 1410 would end the long tradition of home rule over shellfish in Massachusetts. DMF believes the present system which grants the 52 coastal cities and towns primary regulatory control over the shellfish fisheries within city or town boundaries provides for effective enforcement and management by knowledgeable local officials which could not be duplicated at the state level. For information on these bills or other legislative matters, please contact Leslie-Ann McGee, DFWLE. Phone: (617) 727-1614.

Regulatory UPDATE

During the period November through February, the following actions were taken by DMF and the Massachusetts Marine Fisheries Commission:

New lobster regulations enacted to comply with the new interstate lobster management plan, to exempt non-commercial gear in 1999 from state trap tag rules required of commercial fishermen, and to bring non-commercial lobstermen's gear in compliance with the gear specifications of the federal Large Whale Take Reduction Plan to reduce the risk of entanglement.

(1) New lobster plan rules apply to all commercial and non-commercial lobstermen:

(A) Escape vent height increased from 1 7/8" to 1 15/16" (or 2 circular vents of 2 7/16"). The minimum width of the vent was 6" and was lowered to 5 3/4" as well.

(B) Prohibition on the harvest or possession of v-notched female lobster.

V-notched female lobster means any female lobster bearing a v-shaped notch in the right flipper adjacent to the middle flipper or any female lobster which is mutilated in a manner which could hide, obscure, or obliterate such a mark. The right flipper will be examined when the underside of the lobster is down and its tail is toward the person making the determination. V-shaped notch means a straight-sided triangular cut without setal hairs at least one-quarter inch in depth and tapering to a sharp point.

(C) Prohibition on use of lobster traps larger than a maximum volume of 22,950 cubic inches. This rule accommodates the use of all existing "standard" lobster traps that measure about 4 feet or less in length.

(D) Fishing Zones. Commercial fishermen are required to choose which ASMFC approved lobster management zone(s) they intend to fish. However, **non-commercial fishermen will be exempt** from having to choose zones in 1999.

(E) New zone-specific regulations are being developed under the interstate plan with more expected in the future. Beginning in 1999, a **maximum size limit (5" carapace length)** will be in effect for all lobster taken from so-called Area 1 (Inshore Gulf of Maine - excluding Outer Cape Cod) or by commercial lobstermen who've chosen Area 1 as one of their fishing areas. Non-commercial lobstermen fishing north or east of Cape Cod will be prohibited from possessing lobster larger than 5" unless they fish exclusively along outer Cape Cod and get their permit stamped by DMF with an appropriate exemption.

(F) Non-commercial lobstermen will be exempt from new trap tag requirements in 1999 but they will be required in the year 2000. **Non-commercial lobstermen will be required to add the letter "N"** preceding the 4-digit permit number to the marking of lobster buoys, traps, diving flags, cars and boats as required by M.G.L. s 38 and 322 CMR 3.07.

(2) New statewide gear rules to reduce risk of whale entanglement.

(A) All fishermen are prohibited from setting gear that results in line floating at the water's surface. Nearly

all fishermen already use "sinking" (heavier than water) buoy lines to prevent their lines from floating at the surface at slack tide. This common sense rule is both a state and federal regulation.

(B) Non-commercial fishermen are now required to comply with the so-called Federal Lobster Technology List. The federal Large Whale Take Reduction Plan affects all commercial fishermen but does not affect non-commercial fishermen. To ensure that non-commercial gear has been similarly modified to reduce risk to whales, DMF has decided to require non-commercial lobster gear to comply with the same rules of the so-called Federal Lobster Technology List. This list is expected to evolve in the future when state and federal researchers devise new gear specifications that reduce the risk of entanglement without resulting in gear losses or operational failures. At this time, the list includes features already used by most fishermen.

Fishermen who fish anywhere in state waters except Cape Cod Bay Critical Habitat must comply with at least one feature from the list. Those fishing in Cape Cod Bay Critical Habitat during May 16-Dec 31 must comply with at least two features. Those who fish in Critical Habitat during the right whale season (January - May 15) are subjected to tighter restrictions. Contact DMF for details.

Lobster Technology List:

All buoy lines are 7/16" diameter or less;

All buoy lines attached to the buoy with a weak link of 1100 lbs. breaking strength;

All buoy lines composed entirely of sinking line;

Ground lines (between traps in a trawl) made of sinking lines.

New Groundfishing Closures Spring-time seasonal area groundfish closures adopted to complement federal management closures in Massachusetts Bay and Cape Cod Bay. See related article. **This new state closure was enacted to close a loophole where fishermen without federal permits were exempt from the federal closures when fishing in state waters.** State-licensed scallopers using a single scallop dredge (smaller than 10 ft width) will be allowed in these areas. Most other gear types are prohibited (gillnets, trawlers, hook and line). A 400-lb. year-round trip limit remains for those remaining areas and times open to fishing North of Cape Cod. Recreational fishing remains open year round with a 10 fish bag limit, for cod and/or haddock combined.

There are two components to the closure:

(A) February 1 through April 30 state waters in upper Cape Cod Bay & Massachusetts Bay are closed. This encompasses waters north of the 42 degrees line off Plymouth to the 42 degree 30 minutes line (off Marblehead).

(B) During April only, state waters north of the 42 degree 30 minutes (off Marblehead) line to the Massachusetts/New Hampshire border will be closed.

State and federal managers are currently crafting more restrictions to save the collapsing Gulf of Maine cod stock.

New Shad Possession Limit 6-fish possession limit for American Shad enacted. Note: taking of shad by nets in Mass. has been prohibited since 1987.

For more information contact DMF in Boston at 617 727-3193.

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DMF NEWS

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