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DMF NEWS

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Unsettled Lobster Management

New area-specific lobster size increases and v-notch rules enacted. Statewide effort reduction plan to come.

Lobster fishery management is at a major turning point. The interstate management plan requires all state fisheries in the northeast to reduce fishing mortality substantially and to increase egg production for various stocks. This summer, DMF has enacted some of the regional plan's mandates while balking at some others.

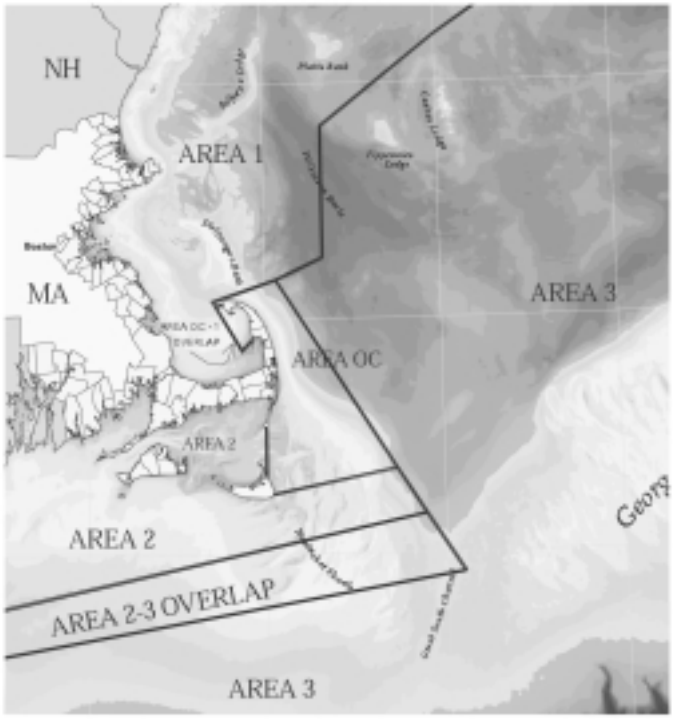
There is considerable dissension among the region's fishermen about these new rules. The challenge for managers is to craft regulations that not only accomplish the goals of conservation but also can be administered by DMF, enforced by law enforcement and supported by the industry. But these rules must be administrable and enforceable by government and have the backing of the industry. Managing this fishery is a task that is proportional to its size and economic value: lobster is the most valuable single species in the state with annual landings worth approximately $74 million.

In three of the state's four lobster management areas (LMA's), the first of four 1/32" minimum size increases was begun. But the Commonwealth's largest LMA, Area 1, which produces about 75% of total landings, will only see v-notching rules amended.

From a distance, management of this fishery looks easy. Almost exclusively, a single commercial sector harvests lobsters, trap fishermen, and their numbers and the number of traps that they fish are limited. Reducing lobster fishing mortality and increasing egg production could be accomplished with the usual management tools: changes in legal sizes, reductions in traps or licenses, closed seasons or quotas. The catch-22 in this process is meeting the expectations of four different industry-crafted lobster conservation plans that all converge along the Massachusetts coast. Since no other state has such a disparate set of rules to adopt, we have no model to follow.

Seven Lobster Conservation Management Teams (LCMT) along the Atlantic coast met independently for four years to craft plans that meet the egg-production goals for each area as mandated by the Atlantic States Marine Fisheries Commission (ASMFC). Because there are separate stocks of lobsters (Gulf of Maine, George's Bank, & southern New England) suffering from varying degrees of overfishing, the goals vary from area to area.

Although the plans were crafted with state oversight, the Commonwealth initially did not insist on uniform rules between areas. At the time this seemed logical, because the rebuilding targets for fishermen of Southern New England (Area 2 - New York, Connecticut, RI, and MA fishermen south of Cape Cod) were far different from that of northern



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

New England (Area 1 - Maine, NH, and northern Massachusetts).

The Area 1 plan relies on mandatory "v-notching" prior to release of all egg-bearing females that are captured by fishermen - a long-standing rule in Maine waters, but until now a voluntary one in Massachusetts because it's difficult to monitor for compliance. Meanwhile plans for the other areas relied on minimum size increases and fishing effort reductions. Once the plans were drafted, DMF raised concerns about the enforcement and compliance challenges caused by having different minimum sizes in Massachusetts, especially on opposite sides of Cape Cod.

Our four area plans are quite variable and collectively they would have made the state's lobster rules more complicated in Massachusetts than in any other state. After March public hearings, DMF struggled with the enforcement complexity and administrative burden of managing four differently regulated lobster fisheries. On top of that, the statewide recreational fishery was exempt from the interstate plan proposals.

Mindful of state government's dwindling resources to increase enforcement and administrative staff, DMF recommended no changes for this year to the state's Marine Fisheries Advisory Commission in April. DMF announced to the industry that it would try to craft more uniform proposals for statewide rules applicable to all commercial and recreational fishermen. A single minimum size for all of Massachusetts and a fishing effort control program (license and trap limits) was the goal.

In a letter to all commercial fishermen, Director Diodati credited the fishermen who participated on the LCMTs for working diligently to craft each area-specific management plan. He indicated his concern that the rules would result in an unprecedented level of regulatory complexity, and concluded "It would be impractical to expect state agencies to proficiently administer, enforce, and monitor such a variety of regulations for a single state fishery, especially at a time when agency resources are at a low." The proposals, if enacted would have created inconsistent rules across the state affecting minimum sizes, "v-notched lobster" definitions, and effort control programs.

- Effective July 1, 2002, lobster minimum size was increased 1/32" to 3 9/32 for commercial fishermen authorized to fish Areas 2, 3, and Outer Cape Cod.
- Effective December 31, 2002, lobster minimum size will be increased another 1/32" to 3 5/16" for commercial fishermen authorized to fish Areas 2, 3, and Outer Cape Cod.
- Effective July 1, 2002 commercial fishermen authorized to fish Area 1 are mandated to carve a "v-shaped notch" into the right middle flipper of all egg-bearing female lobsters encountered while fishing. *(For enforcement purposes, a v-shaped notch means a straight-sided triangular cut without setal hairs at least 1/4" in depth and tapering to a sharp point.)*
- No rule changes were made for recreational lobstermen.

Diodati pledged to work over the next 7 months with LCMT members and other industry representatives to craft more uniform rules for the Commonwealth. He hoped that fishermen would work cooperatively across the state's lobstering areas to craft consistent rules that meet the various area-specific conservation goals. Diodati noted, "Whenever fishermen feel they are part of the regulatory process, compliance with the rules will be enhanced."

But DMF's delay in implementing the Area plans didn't play well in Washington, D.C. At their May meeting, the ASMFC voted the Commonwealth out of compliance with its plan for not adopting the area-specific minimum size increases. ASMFC's action set the stage for the state's fishery to be closed by the Secretary of Commerce unless DMF enacted the minimum size increases in Areas 2,3 and Outer Cape Cod.

Diodati continued to express concern about the industry-crafted and supported Area 1 plan slated for July implementation and challenged the Lobster Management Board to ensure the plan will work as advertised. The stakes are high because Area 1 (Gulf of Maine) is the most productive lobstering area in the U.S. fishery. Diodati was concerned that the plan was difficult to monitor and would likely fail its conservation goals without controls on fishing effort.

Despite his lack of confidence in the Area 1 plan, he felt that the Commonwealth was best served by adopting the key features of the plan, but at the same time he insisted that the ASMFC Lobster Management Board identify and conduct monitoring programs to judge the effectiveness of all Area plans. Although most Massachusetts' lobster landings are produced in Area 1 they are just a small percentage of the overall Area 1 fishery. Maine fishermen harvest more than 75% of Area 1 lobsters, which makes it difficult for Massachusetts to affect the overall management scheme for this area. If any plan falls short of the targets, the ASMFC Lobster Board would be required to approve alternatives that satisfy the conservation goals.

After his return from D.C. and to avoid being out of compliance with the plan, Diodati recommended to the state's

Photo by Brian Kelly

Commercial lobstermen Steve Smith hauling traps off Nauset

Marine Fisheries Advisory Commission to increase the minimum size in Areas 2,3 and Outer Cape Cod and mandate v-notching for Area 1 fishermen. He recommended maintaining the existing definition statewide for "v-notched lobster" and not to adopt a "zero tolerance" rule for Area 1 as specified in the plan. Under "zero tolerance" any v-shaped mark on the right middle flipper would have made the lobster illegal. DMF felt that the "zero tolerance" rule would result in arbitrary enforcement standards and declining compliance over time.

The industry-crafted effort reduction program approved by ASMFC for the Outer Cape Cod Area was also not enacted by the state. This innovative and unprecedented effort control strategy would have issued license-specific trap allocations in the Outer Cape Cod area based on fishermen's year-2000 trap total fished. Consequently, fishermen without year-2000 history in this area would have been prohibited from fishing there unless traps were transferred to them from "qualified" Outer Cape fishermen. An individual trap transfer program would have to be created by DMF to accommodate the trap transfers.

Instead of adopting the Outer Cape's effort control plan, DMF opted to devise a simpler alternative that could be adopted for the entire state, and more likely, throughout the region. This action is necessary because there is potential for *tremendous* growth in the already effort-laden commercial lobster fishery. Most of the 1,541 permitted coastal lobster fishermen in Massachusetts do not fish their allowed maximum of 800 traps. Almost 400 permits were unfished in 2000, and of the 1,123 fishermen who reported fishing in 2000, the average number of pots is close to 400.

DMF will air its new proposals at November 2002 public hearings. It's likely that license-specific effort reductions will be proposed. The limits could be based on the amount of reported traps and landings submitted by each fishermen to DMF during some period of the 1990's up to the year 2000. Special consideration will be given to accomodate lobstermen who obtained their permit after 2000.

Meanwhile, DMF has already taken other steps to constrain growth in the fishery. A freeze has been placed on the re-issuance of retired licenses. As of June 6, 2002 DMF will no longer re-issue these permits. Furthermore, all current holders of lobster licenses have been removed from the waiting list. This action is consistent with the intent and wording of current regulations that prohibit holders of coastal lobster permits from acquiring additional lobster permits through transfers or from the waiting list. Those presently on the waiting list remian eligible to receive a permit through the transfer process established by regulation.

This fall as fishery managers and industry members debate lobster management strategies, they need not look far to see what indecisiveness in the groundfish fishery brought us. Reasonable levels of conservation today will help prevent potential resource collapse in the future, as well as to reduce possible public criticisms and legal crises that only serve to undermine the fisheries management process.

By Dan McKiernan

Last summer's shark frenzy

Should the Mass. swimming public be concerned about shark attacks?

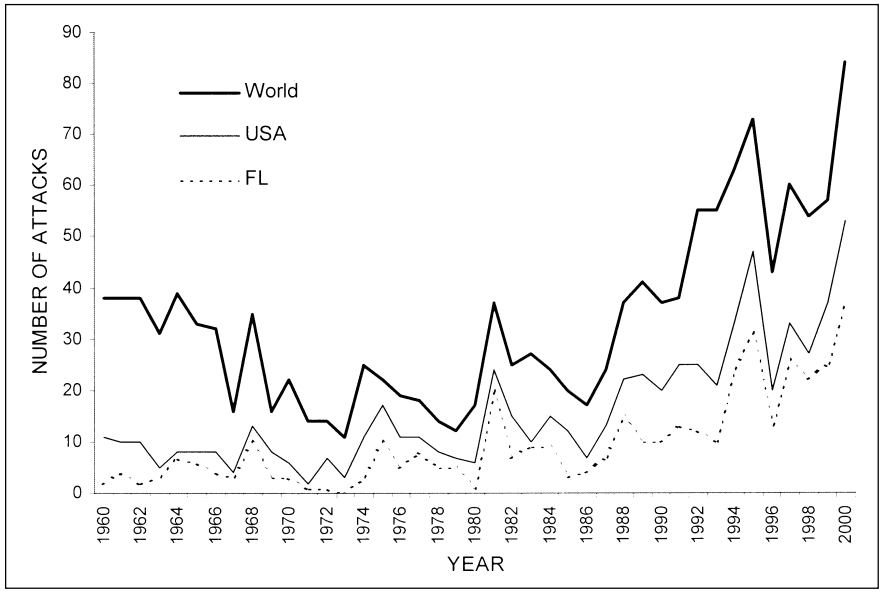
It's no secret that the buzzword of last summer (2001) was "shark". From Florida to Massachusetts, sharks dominated the media in newspapers, magazines, and on television. In its July 30 issue, Time magazine dubbed 2001 the "summer of the shark" and DMF's phones were flooded with shark-related questions, comments, and reports. The events of last summer certainly captured our attention and have raised the question: were those shark infested months real and can we anticipate more shark indidents at our beaches?

According to the International Shark Attack File (ISAF), which is administered by the Florida Museum of Natural History, there are about 70-100 shark attacks on humans worldwide every year, resulting in about 5-15 deaths. On a global scale, this is not a lot, and the annual number of dog bites, bee stings, and lightning strikes each dwarf this number. However, a single attack can have profound effects on the human psyche as well as the local economy. Of particular interest is the apparent increase in the annual number of shark attacks over the last decade (Figure). In 2001, there were 55 shark attacks in the United States, a high number when compared to the 11 reported in 1960, but not high relative to 1995 (47), 1997 (33), 1999 (37), and 2000 (53). Was 2001 an unusual year? Not statistically, but clearly part of the increasing trend of late.

The bigger question, of course, is why are shark attacks on the apparent rise. First, can the numbers be trusted? There has certainly been an improvement in the efficiency of reporting. We now live in an age of communication where few shark attacks go unreported and, hence, the ability of the ISAF to discover and investigate attacks has greatly increased over the last decade. However, if we make the assumption that reporting efficiency has not driven all of this increase, then what is the cause? Unfortunately, we can only base our answers on simple correlation between factors that may influence human-shark interactions. By far, the most simple and logical correlation is the general worldwide increase in human use of marine waters for recreational activities, which increases the probability of human-shark interactions. Every year, there are more and more people in the water and, of course, there are sharks in the water. If one looks at population statistics in Florida, where most U.S. shark attacks occur (67% in 2001), there is a clear and strong relationship between the number of shark attacks and the number of people in the state. This is further supported by the simple fact that many of the 2001 shark attacks occurred over holiday weekends, a time when recreation activity spikes.

A number of other reasons for the apparent increase in shark attacks have been put forward. The Southern Offshore Fishing Association, which represents commercial fishermen, attributes the sudden increase in shark attacks to federal and Florida state management that has protected shark species and their prey in recent years. However, this theory/hypothesis is juxtaposed against the current federal stock assessment for sharks, which indicates that shark populations are severely depressed and require further protection.The slow growth and low reproductive rates of sharks make it biologically impossible for shark populations to rebound in the short duration of the management plan. In addition, if this was the case, shark attack numbers should have peaked in the 60's and 70's prior to the development of the commercial fishery, but they did not (Figure). Some shark researchers have countered the fishermen's contention by hypothesizing that the recent trend in shark attacks is due to the culling of benign sharks and the subsequent increase in the number of dangerous bull sharks, a species implicated in most shark attacks. However, reliable data are lacking to support this hypothesis as well.

There are many who attribute the sensational summer of 2001 to a relentless media, driven by increased competition and the subsequent need to titillate the public with shock stories. The situation was exacerbated by the lack of "real" news, further evidenced by the disappearance of the shark craze after September 11. Recall that the entangled right whale "Churchill" was a national news story as well. Indeed, the media was ravenous on the shark issue and those in Massachusetts were no exception. Although shark attacks occurred in Florida, Virginia, and North Carolina, every shark sighted in Massachusetts in 2001 was suspected to be a potential culprit, including harmless species that have always visited our coastline. The media took notice, the public took notice, and the situation snowballed into what many referred to as a media frenzy and not a shark frenzy.



Reported shark attacks, 1960-2000. Records kept by the International Shark Attack File at the Florida Museum of Natural History.

Let's look at the facts about sharks in Massachusetts. Of the dozen or so species of sharks that visit New England waters each summer, most, by far, prefer a pelagic offshore environment miles from land masses, rarely venturing into coastal areas. This group includes the blue, mako, thresher, hammerhead, tiger, dusky, and basking sharks. Some of these sharks can be aggressive and have been implicated in attacks on humans, but off our coast, this is simply not a concern unless you commonly swim 20 miles offshore. There are exceptions to this general rule because not all shark species remain far from land in Massachusetts. A few species penetrate inshore waters and are frequently taken by beach fishermen. The most common of these are the harmless spiny and smooth dogfishes, which are typically referred to as "sand sharks." Other coastal species include the sand tiger shark and the sandbar shark, two critters that are somewhat rare and absolutely harmless to swimmers.

What about the great white shark? This is a wide ranging predatory shark that can be found both inshore and offshore, but it is very rare in the Atlantic ocean and few white sharks are encountered by humans. That may be the reason why the large shark that was observed off Chatham last summer by a fishing charter captured so much publicity. White sharks do not typically feed inshore in Massachusetts as they do in other parts of the world. These animals are extremely rare to encounter, but one or two are typically reported to DMF every summer miles from land. The bottom line is simple: It is better to be concerned about traffic safety on your way to the beach rather than sharks at the beach. Sharks rarely attack humans and almost never in bay state water. There's been only three shark attacks reported in four decdes despite the hundreds of thousands of seasonal swimmers enjoying our beaches.

Since 1989, DMF Massachusetts Shark Research Program has been investigating the biology and ecology of sharks in our waters. Through interaction with fishermen and field surveys, the program has identified those species common in Massachusetts waters. In addition, a number of collaborative studies have been conducted by the program to further elucidate the biology of these somewhat elusive animals.

Members of the public are encouraged to report shark sightings to the program to further this research. Reports can be called in to 508-693-4372 or e-mailed to domf@capecod.net. Those who report sightings are encouraged to submit photos or video to aid in identification. Disposable cameras are ideal to carry because they are inexpensive and can be readily used to capture sharks and other unusual wildlife that frequent boaters may encounter. Finally, sharks are managed by a federal fishery management plan and commercial and recreational fishermen should be familiar with current regulations, which may be found at: http://www.nmfs.noaa.gov/sfa/hmspg.html.

By Gregory Skomal, Massachusetts Shark Research Program

Local sharks and their look-alikes

Although highly unlikely, there are a couple of harmless species of sharks that the surf fisherman or swimmer may encounter at a Massachusetts beach. It is extremely important to remember that these fish are more intimidated by you, than you by them. Nonetheless, as with any fish, care should be taken when handling them.

Spiny Dogfish: A small species of shark rarely exceeding four feet in length and one of the many species commonly referred to as 'sand shark'. This fish is probably the most abundant living shark and is readily distinguished from other sharks by the presence of a spine along the forward edges of each dorsal fin. These spines are extremely sharp and are used by the animal to inflict injury when bothered. Spiny dogfish travel in large schools segregated by sex and size. In the spring and summer, this species moves from its deep offshore wintering grounds into inshore waters along the entire coast of Massachusetts. It is often considered a nuisance by recreational fishermen who catch them while bottom fishing for other species. The spiny dogfish has clipper-like teeth, but does not attack humans.

Sandbar or Brown Shark: This species of shark occurs in Massachusetts' inshore and offshore waters from late June through September before migrating to southern coastal waters and the Gulf of Mexico. The species is remarkably similar to several southern species of closely related sharks with a large broad dorsal fin, triangular teeth, and brown to gray coloration. Recreational fishermen commonly take small (3 to 5 feet) sandbars from beaches along the southern shores of Cape Cod, Martha's Vineyard, and Nantucket. It does not occur north of Cape Cod. Maximum size for this species is 8 feet with larger individuals remaining in offshore waters. The sandbar shark is primarily a bottom feeder, but dogfish and larger fishes have been found in its diet as well. This shark has sharp teeth so care must be taken when handling it.

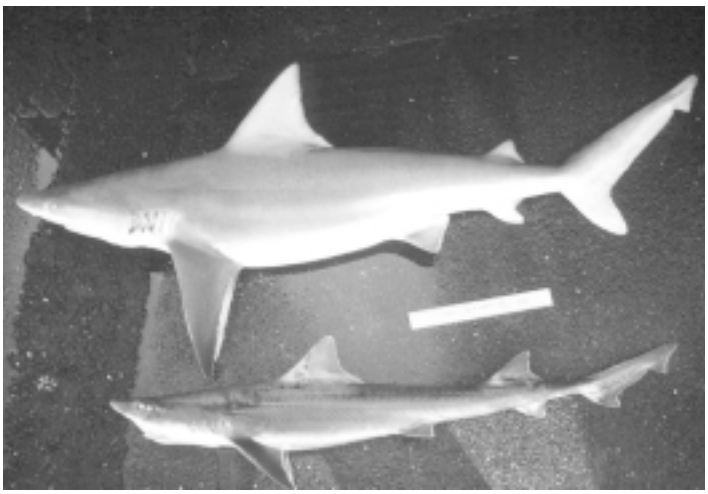


Photo by Greg Skomal

Sandbar shark (above) and smooth dogfish (below)

Smooth Dogfish: Although also referred to as a dogfish or 'sand shark', this species is not in the same family as the spiny dogfish. Like the latter, the smooth dogfish is a small species rarely exceeding five feet in length. As coastal waters warm in the spring along the eastern seaboard, smooth dogfish move northward from southern wintering grounds to coastal waters along the south side of Cape Cod and the Islands. While this species is the second most abundant New England shark, it is rarely encountered north of Cape Cod. Cooling October temperatures send this species southward again. Like the spiny dogfish, recreational fishermen frequently catch this species while targeting others. This species has molar-like teeth that are not sharp.

Basking Shark: This massive shark occurs in both the inshore and offshore waters off the coast of Massachusetts from June through October. Reaching a length of better than 40 feet, the basking shark closely resembles its distant cousin, the white shark, with one major exception. The basking shark is a filter feeder, lacking teeth and using massive gill rakers to sieve plankton from highly productive North Atlantic waters. Its large evenly triangular dorsal fin and mottled gray and black coloration readily identify the shark.

Photo by Frank Almeida

Don't fear the Basking shark, it's a toothless plankton-eating species

Ocean sunfish: Also called *Mola mola*, its scientific name, this is not a shark, but a large oval fish with a shark-like dorsal fin. This species is docile and shy, but is known to occasionally swim inshore during the summer along Massachusetts' beaches. Many confuse this fish with a shark because of its dorsal fin. However, the fin of an ocean sunfish flaps up and down, while that of a shark remains rigid.

Photo by Greg Skomal

Ocean sunfish (Mola mola) feeds primarily on jellyfish. Drifting in currents it is a common summer-time visitor.

Stellwagen Sanctuary Plan Review

The Gerry E. Studds Stellwagen Bank National Marine Sanctuary "State of the Sanctuary Report" is completed and released for comment. The public comment period is from July 1 through October 18, 2002 with public meetings throughout New England. Meetings are tentatively set for:

Sept 24 - Mystic, CT Aquarium (6:30 - 9:30 pm)
Sept 25 - New Bedford, MA Whaling Museum (6:30 - 9:30pm)
Sept 26 - Provincetown, MA Town Hall (6:30 - 9:30 pm)
Sept 28 - SEA campus, Falmouth, MA (10am - 1pm)
Sept 30 - Yokens Restaurant, Portsmouth NH (6:30 - 9:30 pm)
Oct 1 - Univ of So. Maine Ocean and Coastal Law Center, Portland ME (6:30 -9:30 pm)
Oct 2 - Boston TBA (6:30 - 9:30 pm)
Oct 3 - Gloucester TBA (6:30 - 9:30 pm)
Oct 8 - Plymouth TBA (6:30 - 9:00 pm)

After these meetings and the comment period closes, the Sanctuary's Advisory Council will meet with Sanctuary staff and representatives from the National Marine Sanctuary program headquarters to prioritize proposed management actions and develop action plans. DMF is a non-voting ex-officio member of the Council.

The end result will be a Draft Management Plan (Summer '03), additional public meetings (Fall '03) and a Final Management Plan (Summer '04). Serving as a starting point for discussions will be issues identified by the public at 1998/1999 scoping meetings. Additional comments from a broad range of stakeholders will fine-tune the finalplan.

The "Management Plan Review Update: 1998-2002" provides examples for the "eventual development of actual management strategies." Some of those possible strategies relate to five issues: (1) alteration of seafloor habitat and ecosystem protection; (2) impacts of human activities on marine mammals; (3) condition of water quality; (4) lack of public awareness; and (5) effective enforcement.

Commercial and recreational fishermen a well as boaters who fish in the Sanctuary should pay attention to this Management Plan development. Sanctuary staff wants your opinions and ideas, emphasizing a "community-based process." They indicate: *"…The management plan review process is your chance to provide important input regarding the Sanctuary's future and to ensure that its resources are protected, conserved, and properly used for benefit of current and future generations…"*

For copies of the reports go to stellwagen.nos.noaa.gov or by contacting the Sanctuary office via email at SBNMSPLAN@noaa.gov; by phone (781-545-8026); by fax (781-545-8036) or in writing at the following address: Management Plan Review, Stellwagen Bank National Marine Sanctuary, 175 Edward Foster Rd., Scituate MA 02066.

Striped bass proposals: Increased rec bag limit and commercial quota

DMF is proposing changes for the state's striped bass fishery to improve the socio-economic benefits for the Commonwealth's recreational and commercial anglers. These proposals are consistent with the Atlantic States Marine Fisheries Commission's (ASMFC) Interstate Striped Bass Fishery Management Plan (FMP).

The first proposal will increase the one-fish daily possession limit for recreational anglers to two fish as long as one fish measures at least 40 inches. By allowing this "trophy" fish, the incidence of "high-grading" should be substantially reduced. High-grading is the practice of discarding a smaller legal-sized fish (already retained) for a larger one. There are similar allowances in some other states. For example, Connecticut regulations allow fishermen to retain one fish between 24" and 32" and one over 41". New Jersey allows two fish that measure at least 28" and a third fish that is at least 40" in their "trophy" fishery. This New Jersey "trophy" fish rule was approved in the 1980's when the state opted to allocate its entire commercial quota to the recreational sector.

The second proposal increases the state's commercial quota from the current 807,000 pounds to 1,000,000 pounds. This increased harvest is allowed as a conservation equivalent measure in the striped bass management plan. Instead of harvesting our commercial quota with a 28-inch minimum size in place, we opted for a larger minimum size of 34 inches. When using a 34-inch minimum size, the conservation equivalent quota to 807,000 pounds with a minimum size of 28 inches exceeds 1.1 million pounds.

DMF has a history of developing and implementing innovative strategies to manage Massachusetts' fisheries, and over the years many of our state's rules have been more conservative than necessary. That is, we often add safeguards that go beyond what's stipulated by regional FMPs. Such has been the case with black sea bass, scup, weakfish, striped bass, and others.

Since the mid-1990s, the Commonwealth has declined to harvest stripers at levels allowed us by the Interstate FMP. We chose to harvest one fish per angler per day instead of two in our recreational fishery and we take a larger-size fish and smaller quota in our commercial fishery. Even after adoption of these proposals, Massachusetts would still be conducting a striped bass fishery that is more conservative than the FMP allows. Consider that if we took our second 28-inch fish allowed in our recreational fishery, our harvest would increase by an estimated 300,000 pounds, which would number over 20,000 fish. But allowing the taking of an additional 40-inch trophy fish will likely add less than 1,000 fish to our harvest. Increasing our commercial quota to 1 million pounds still conserves about 100,000 pounds that we are allowed to harvest given a 34-inch minimum size in that fishery. Thereby the Commonwealth continues to conserve nearly 25,000 fish weighing about 400,000 pounds that we otherwise could harvest.

While DMF has a history of conservative management, the interstate fishery management process has a poor track record of rewarding states for their conservation. Massachusetts' interest would be better served if the benefit that we expect from our conservative actions translated into a future advantage for our fishermen or for the resource. But unfortunately, such a positive and logical conclusion rarely happens.

In many management plans, fish that we save become a subsidy for fishermen in other states where regulations have been optimized to take full advantage of the Interstate FMPs. For example, right now all but a few ASMFC striped bass jurisdictions currently harvest their full allocation of stripers. Annual harvest rates used to measure the performance of a FMP are estimated for the entire coast and not for individual fishing areas or states. States are not rewarded for fishing below a plan's anticipated rates of harvest.

Not being rewarded for "underfishing" might be understandable if the contrary were also true. That it, if a jurisdiction also was not rewarded for "overfishing." But when new FMPs are developed allocation of resource is often done on a state-by-state basis by examining a state's past fishing performance. Thus there are instances where states could base their quota allocation on years when their landings were bolstered by high fishing rates; some states choose to employ the smallest minimum sizes, least restrictive gear requirements, and most liberal seasons and quotas that are legally available. At the same time, a state with more conservative fishing practices and having lower landings could have its allocation reduced.

Our current proposal to change 2002 striped bass regulations is an inventive and sensible way to advance our fishery within the guidelines of the FMP and thereby ensure improved future allocation prospects for the Commonwealth. It maximizes recreational opportunities by allowing the taking of two stripers in our recreational fishery, as most states have enjoyed since the mid-1990's. The increase in the commercial quota is justified because the commercial sector's harvest has been held fixed since 1995 and in essence, commercial markets have not shared in the benefits of resource rebuilding that has occurred during the past decade. This contrasts with our recreational fishery's growth in harvest as well as in number of participants during the same period, growth that occurred without benefit of harvesting two 28-inch fish as a daily creel.

Until Councils and Commissions create and adopt transparent processes that encourage fishermen to fish more conservatively than FMPs mandate, we will be obligated to propose regulations for our state water's fisheries that more fully implement plan guidelines. If annual harvest rates become excessive then we should promote region-wide cuts in harvest that are fair, equitable, and consistent among all jurisdictions.

The Atlantic States Marine Fisheries Commission will be holding hearings and accepting public comments on Amendment 6, a new Striped Bass Fishery Management Plan. Public hearing will be held in Massachusetts sometime in September. Please visit DMF's and ASMFC's web sites for meeting announcements. However, DMF hopes to have this proposal approved and in place prior to the adoption of Amendment 6.
by Paul Diodati

Above: DMF's Karen Rypka handles a "keeper."

New England Fishery Management Council Amendment 13

Council must reduce fishing mortality further for groundfish rebuilding

Long delayed groundfish restrictions are on the horizon. The New England Fishery Management Council is currently obliged by Judge Kessler's ruling to accomplish the difficult task of getting groundfish management back on track in a very limited timeframe.

The outcome will depend on whether the Council, and ultimately the federal government, can find some creative ways to achieve legally mandated conservation objectives without devastating fishing communities and their underlying socio-economic foundations. Simply put, without great care and foresight, the Council and the National Marine Fisheries Service (NMFS) could set Massachusetts groundfish commercial and recreational fisheries reeling.

By now the New England Fishery Management Council should have selected those management alternatives that will be analyzed - as best they can be - with respect to National Standards of the Sustainable Fisheries Act and the National Environmental Protection Act (NEPA). The Council expects the entire package will be ready for public review later this year. August 2003 is the Court-ordered deadline for implementation, and there is every intention to meet it.

It's helpful to understand the extent of fishing mortality and effort reductions required for the Council to meet its biological objectives for groundfish. Currently, the Council limits the number of days at sea (DAS) commercial fishermen can fish. The Council has been advised by its Plan Development Team (PDT) that to achieve its objective for some species (Gulf of Maine and Georges Bank cod, plaice, white hake, and Cape Cod yellowtail) a 50% reduction in allowable used DAS (not just allocated DAS) is necessary (31,000 used DAS down from current 62,000 used DAS). If this approach becomes the centerpiece of Council action, it will have a major impact on many fishermen who will find it difficult if not impossible to stay in the fishery with such a dramatic and quickly required cut in effort.

The Council recognizes this problem and will propose a DAS leasing program involving leasing DAS to/from more than one vessel. Program details likely will be finalized after Amendment 13 public hearings. If eventually adopted, this strategy will result in the leasing (transfer) of fishing rights, and in some cases fish, between fishermen. For example, in Amendment 13 for every DAS commercial fishermen might be allowed to land 800 lbs. of Gulf of Maine cod. Therefore, if a fisherman leases 10 DAS to another fisherman, he in effect will transfer a potential 8,000 lbs. of GOM cod.

Every DAS has great value, and fishermen competing to lease a DAS will determine what that value is. Therefore, for some species, fishermen will have a version of individual transferable quotas (ITQs) without calling them such. This might be the only alternative for the Council to choose if a 50% cut in used DAS is unavoidable.

Is there another alternative(s) that allows the Council to reach its biological objectives? There is one that is quite notable especially for its inequitable impact on Massachusetts' fishing communities. Relying on closed areas as a major way to reduce fishing mortality, the Council has been advised by the PDT that year-round closures of fishing grounds in Massachusetts Bay and off Cape Ann will achieve its objective for cod in the Gulf of Maine. However, the PDT admits that this alternative would have a "disproportionate impact on some fishing communities in Maine, New Hampshire, and Massachusetts." This comment is very true, and more so for vessels that only fish close to shore due to their size. We find this option intolerable and we will not support it under any condition.

DMF enacted new regulations to comply with April and May Court orders. Additional proposals will be aired at August 12-13 public hearings. See Page 10-11.

Another option that will cause quite a stir is "hard" quotas - total allowable catches (TACs) that cause fisheries to be shut down when target catch levels are reached. The Council will include "hard" TACs in the mix of proposed measures. For those without first-hand knowledge of the beginning of New England groundfish management in the late-1970s and early-1980s, "hard" TACs seem to be a sensible alternative. But for those who lived through those chaotic years of cod, haddock, and yellowtail flounder recall the chaos and disruption that will be exacerbated when applied to over 11 species and three major geographic areas. Nevertheless, the "hard" TAC options will be presented such that when the TAC for any stock is reached, fishing will be prohibited on a multispecies DAS by gear capable of catching that species.

Recreational fishermen, particularly charter and party boat fishermen, also will bear some of the conservation burden. For example, the Council will propose that the recreational fisheries' cod catch in the Gulf of Maine be limited to 20% of total catch. Of note, the PDT has concluded that bag and trip limits will prove unsuccessful in controlling recreational harvest, and closed areas and seasons may be needed in the future. Closed areas to recreational fishermen will be very controversial and opposed by most recreational fishermen. DMF will be very critical of this approach applied to recreational fishermen.

Clearly, the Council has no painless options expected to achieve biological objectives. Past actions have been inadequate to met the biological objectives. Landings over the past few years have consistently exceeded the Council approved "soft" quotas (quotas used to judge success of management). For example, the GOM cod percent of the target quota for fishing year May 2001 through April 2002 is 229% (as of March!). About 9.6 million pounds were landed versus a target of 4.2 million pounds. For Georges Bank cod, percent of the target quota was 190%.

Only a few options are available because fishing mortality estimated to rebuild stocks are very low - in some cases so much lower than current mortality that they are even lower

than the assumed value for natural mortality due to predation and other causes. For example, for GOM cod about 54% of the stock now is being removed due to fishing. To rebuild it's estimated only about 16% could be removed each year. Questions for the Council to consider with its new proposed stepwise approach for achieving progressively higher biomass targets, are how fast do we get to those targets with the $F_{rebuild}$, and can a somewhat higher mortality be justified provided the rate of rebuilding is delayed slightly? The Council likely will ask these and similar questions as it evaluates all options for rebuilding and their ensuing social/economic impacts.

Examining slightly higher fishing mortality "targets" is the approach recently adopted by the Council as a sensible, pragmatic way to move towards new spawning stock biomass targets recommended by federal scientists. In some cases the "new" targets are dramatically higher than current targets and are speculative. Tentatively, some targets do seem achievable provided certain assumptions used to calculate those targets prove true with time.

For many stocks the Council proposes to increase current biomass targets by 25% and then hold mortality to $F_{rebuild}$ until those targets are achieved. Once reached, those targets will be increased by another 25%. The emphasis is on controlling mortality at low values. Biomass will increase with effective constraints on catches and landings. This is a given provided other factors (e.g., environmental and predation) don't act to prevent future recruitment (young fish) needed to continue rebuilding.

Without question the next 4-6 months will be dominated by groundfish management analyses and debate with hot tempers and high emotions in evidence. The recent Court decision and pressure placed on the federal regulators to solve the overfishing problem will cause 2003 to be a defining year for the groundfish industry. Council members, state and federal scientists, and fishermen must work together to identify alternative management ideas, which will result in sustainable yet economically viable levels of fishing.

By David Pierce, Ph.D., Deputy Director

DMF *Rules UPDATE*

Public Hearings • Regulations • Legislation

During the period February through July, the following regulatory changes were enacted by DMF and the Marine Fisheries Commission.

Actions affecting fishing for summer flounder, scup, and black sea were discussed at March 25-26 public hearings and approved at the April business meeting of the Commission.

1) Changes to summer flounder (fluke) commercial and recreational seasons:

For commercial fishermen the "directed fishery" was opened on June 10, instead of July 8. The trip limits (300 lbs. for netters and 200 lbs. for hook-and-line fishermen) and the no-fishing days (Friday and Saturday) remained the same as previous years. Minimum size of 14" remains unchanged

For recreational fishermen, the closed seasons (Jan. 1 - May 24 and Sept. 6 - Dec. 31) were eliminated. Minimum size 16.5" and the seven-fish daily possession limit remained unchanged.

2) Changes to scup commercial trip limits and seasons:

For trawlers fishing during the squid season (April 23 through May 31) scup trip limit was increased from 100 to 300 lbs. This increased limit was designed to accommodate the occasional by-catch of scup and prevent unnecessary discard mortality.

For the weir fishery, the overall set-aside of the state's summer/fall quota was increased from 75,000 to 120,000 lbs.

For the summer-time directed fishery, the opening date was July 1 instead of July 17 and the daily possession limit was increased from 200 to 250 lbs. The summer-time no-fishing days of Saturday and Sunday remained unchanged.

3)Changes to scup recreational bag limits for anglers aboard party or charter vessels:

The daily possession limit for recreational anglers aboard for-hire vessels will be 100-fish for the entire recreational season, which ends October 6. Previous regulations allowed 100 scup for anglers aboard for-hire vessels during May and June and then dropped to 50 scup during July through October 6.

Limits for shore anglers and for those on private vessels remain unchanged: 50 fish per angler with a maximum of 100 fish per vessel regardless of the number of anglers aboard.

4) Black Sea Bass trip limits and pot vent size amended to comply with the management plan:

A) The following possession limits were in effect per quarter with adjustments when 60% of the quarterly quota is projected to be taken:

For Quarter II (April through June) the daily possession limit was 1,500 pounds/day and it was adjusted to 150 pounds/day for all gears or 1,000 pounds/week for the directed sea bass pot fishery.

For Quarter III (July through September) the daily possession limit was be 500 pounds/day and then adjusted on July 16 to 100 pounds/day for all gears or 700 pounds/week for the directed sea bass pot fishery.

For Quarter IV (October through December) the daily possession limit will be 750 pounds/day and then will adjust to 100 pounds/day for all gears or 700 pounds/week for the directed sea bass pot fishery.

B) Fish pot vent size was increased to 1 3/8 by 5 3/4 inches for rectangular vents, or a circular vent of 2 3/8 inches in diameter; or a square vent with sides of 2 inches inside measure.

5) Area-specific changes to lobster commercial minimum sizes and v-notching rules. Lobster minimum size increases were approved for commercial lobstermen fishing in certain areas (Area 2,3, and Outer Cape Cod). There will be two scheduled increases. The first was enacted for July 1, 2002 and the second will occur at the year's end on December 31. These actions brought the state into compliance with certain interstate management plan deadlines. These actions are expected to satisfy the Atlantic States Marine Fisheries Commission that recently found the Commonwealth out of compliance. The state's fishery could have been sanctioned if these actions were not taken. See page 1-3 for more details.

6) Goundfish rules enacted to comply with recent court order

To uphold terms of the mediated "Settlement Agreement" in the federal litigation, DMF enacted emergency measures to complement federal rules. These will be discussed at the August 12-13 public hearings.

(a) Area Closures (322 CMR 8.12):

• Groundfish closures were extended for one month for each of the groundfish "rolling closures" for the month of May in upper Cape Cod Bay and Mass. Bay north of 42° and south of 42° 30'; and for the month of June in waters north of 42° 30' from Marblehead north to N.H. border.

• Commercial groundfish fishery re-opened during January through March in waters of upper Cape Cod Bay and Mass. Bay north of 42° and south of 42° 30'.

(b) Mesh Size Increases (322 CMR 8.07):

• For gillnetters minimum mesh size opening was increased effective May 1, 2002 from 6" to 6.5" for "stand-up" gillnets for taking of cod and other "roundfish," and from 6" to 7" for "tie-down" nets used to catch flatfish.

• For trawlers, minimum mesh size opening was increased effective June 19, 2002 for "diamond" mesh from 6" to 6.5".

(c) Cod minimum size increases (322 CMR 8.09):

• For recreational fishermen, cod minimum size was increased from 21" to 23", this rule pertained to all anglers whether fishing from shore, private vessels, or charter/party vessels.

• For commercial fishermen cod minimum size was increased from 19" to 22" effective August 1, 2002. This action comes after two prior emergency actions that increased the limit on May 1, 2002 to 22" and then decreased it back to 19" on June 15 consistent with the federal actions under Court orders.

(d) Cod possession limits (322 CMR 6.03):

• For recreational fishermen, daily possession limit of 10 cod and/or haddock combined was enacted for anglers aboard for-hire vessels effective May 1, 2002. [Note: This limit was already in place for private anglers and those fishing from shore]. Cod daily possession limit was further reduced to five fish during the months of December through March.

• For commercial fishermen fishing in waters north of north of 42° 00' N latitude including all waters of Cape Cod Bay, cod daily limit was increased to 500 lbs. effective August 1, 2002.

The *NEW* Division of Marine Fisheries Internet web site has been launched!

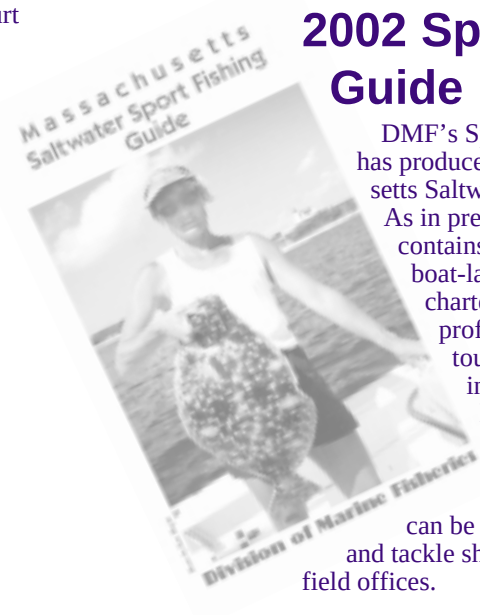
After smoothing out a few unanticipated "road blocks," our revamped Internet web site is ready for your viewing and navigating pleasure. The new DMF address is www.mass.gov/marinefisheries. We hope you find the new site's additional information and its presentation useful, pleasing to the eye and user friendly. We welcome your feedback.

Over the remainder of the year, we will be adding more information to various pages and keeping the site updated. In the near future our goal is to offer even more intricate marine fisheries data for you to access, including a reorganization of our regulations that will assist everybody in keeping track of the current marine fisheries laws. Thank you for your patience.

John Pappalardo appointed to New England Fishery Management Council

U.S. Secretary of Commerce Donald Evans announced on June 17 that Massachusetts fisherman John Pappalardo will succeed Vito Calomo on the Council.

John, the Membership Director for the *Cape Cod Commercial Hook Fishermen's Association*, is a commercial fisherman and certified charter boat captain. He's familiar with the fishery management scene as a member of the Council's Enforcement Advisory Panel and the Mid-Atlantic Council's Dogfish Advisory Committee as well as DMF's Marine Fisheries Advisory Commission and Striped Bass Advisory Panel.



2002 Sportfishing Guide

DMF's Sport Fisheries Program has produced the 2002 "Massachusetts Saltwater Fishing Guide." As in previous years, the guide contains current information on boat-launch sites, tackle shops, charter and party boats, fish profiles, and fishing tournaments to assist you in enjoying our spectacular array of fishing opportunities from shore or by boat.

A copy of the guide can be obtained at most bait and tackle shops, or at one of the field offices.

Notice of Public Hearings

Scheduled for August 12 & 13, 2002

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

1) Accept comments on previously enacted groundfish emergency actions complementing federal rules and Court orders. To uphold terms of the mediated "Settlement Agreement" in the federal litigation, DMF enacted emergency measures to complement federal rules.

(a) Area Closures (322 CMR 8.12):

• Groundfish closures were extended for one month for each of the groundfish "rolling closures" for the month of May in upper Cape Cod Bay and Mass. Bay north of 42° and south of 42° 30'; and for the month of June in waters north of 42° 30' from Marblehead north to N.H. border.

• Commercial groundfish fishery re-opened during January through March in waters of upper Cape Cod Bay and Mass. Bay north of 42° and south of 42° 30'.

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• For commercial fishermen fishing in waters north of north of 42° 00' N latitude including all waters of Cape Cod Bay, cod daily limit was increased to 500 lbs. effective August 1, 2002.

(2) DMF proposals to enact commercial fishing gear restrictions and effort limitations to complement federal actions (322 CMR 8.00):

(a) Effort Limits

• For state-licensed gillnetters, DMF proposal to limit each permit holder or vessel to a maximum of fifty 300-ft nets of any type within state waters; and for enforcement purposes require fishermen to tag each of their nets with DMF approved sequentially numbered tags.

• For commercial fishermen deploying longlines, DMF proposes to prohibit the setting of more than 2,000 hooks at any one time.

(b) Gear restrictions

• DMF proposes to prohibit the possession of cod for any longliner using hooks smaller than size 12/0.

• DMF proposes to prohibit use of de-hookers ("crucifiers") with less than 6" spacing between the rollers.

3) DMF proposals to amend striped bass regulations (322 CMR 6.07):

(a) Proposal to authorize holders of the new for-hire permit to be authorized to filet striped bass at-sea for their customers consistent with existing regulations, thereby negating the need for written letter of authorization from the Director.

(b) Proposal to amend the recreational striped bass bag and size limit from the current 1-fish per angler at 28" or greater to a limit of 2 fish where the first fish must measure at least 28" and the second fish must measure at least 40".

(c) Proposal to increase the commercial quota from 807,000 to 1,000,000 lbs.

4) DMF proposal to amend lobster regulations (322 CMR 6.31) to exempt non-commercial lobster permit holders from the trap tag requirement. DMF proposes to require non-commercial lobster pot fishermen to add a dash (-) with a single digit from 0 to 9 which follows the 4-digit permit #. The dash followed by the 1 digit number from 0 to 9 indicates the sequential pot number in the series (up to ten pots) that the permit holder is fishing.

Two Hearings Have Been Scheduled:

❖ Monday, August 12, 2002 (7-10 P.M.) in the auditorium at the Massachusetts Maritime Academy and

❖ Tuesday, August 13, 2002 (7-10 P.M.) at the Annisquam River Marine Fisheries Station.

Written comments (by mail or fax) will be accepted until 5 P.M. on August 14, 2002.

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- Stellwagen hearings
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- Striped bass proposals
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- August 12-13 Public Hearings
- New Regulations

Surfers • Surfers • Surfers

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

http://www.mass.gov/marinefisheries

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.

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