2023 • 3rd and 4th Quarters • Volume 52

DMF News

Published by the Massachusetts Division of Marine Fisheries (DMF) to inform and educate its constituents on matters relating to the conservation and sustainable use of the Commonwealth's marine resources.

Inside

Striped Bass Management - Addendum II is moving forward for 2024

In early summer of 2023, the Massachusetts Division of Marine Fisheries and all the fisheries agencies from North Carolina to Maine implemented, through an Atlantic States Marine Fisheries Commission emergency action, a major change in the slot size for striped bass caught recreationally in the ocean along the Atlantic coast. The slot size was reduced from 28"-35" to 28"-31". This significant, some would say draconian, measure was in response to an almost doubling of recreational harvest in 2022 and also to protect the large 2015 year class (see DMF Newsletter 2023, Q1&2 for more information; https://www.mass.gov/news/dmf-news-2023-q1-q2). As difficult as this decision was, it was necessary to slow down the harvest in order to stay on track with rebuilding the striped bass stock. As we turn the page on 2023, the question is: where do we go from here regarding striped bass management?

Analyses subsequent to the emergency reduction of the slot limit indicate that a 14.5% reduction in total coastwide removals (or 16% recreational reduction if no cut is applied to the commercial fishery) in 2024 is needed to maintain the trajectory of increasing spawning stock biomass (SSB) with a target date of 2029 for full recovery. The ASMFC Striped Bass Management Board (Board) initiated Addendum II to address this necessary cut in removals.

Draft Addendum II includes separate options for the Chesapeake Bay recreational fishery, the Ocean recreational fishery, and the Commercial fishery. For the Ocean recreational fishery, maintaining the 28" – 31" slot in 2024 will accomplish the required cut. Additional options include a 30"-33" slot and for applying separate rules to the private /shore anglers and the for-hire fleet (specifically, a wider slot limit of 28"-33" for the for-hire fleet). For the Chesapeake Bay recreational fishery, a variety of slot sizes are proposed that would be applied uniformly throughout the Bay (currently there are differences in regulations among the Bay jurisdictions). The Addendum also contains options for the Bay recreational fishery to have more liberal rules for the for-hire fleet in comparison to the private /shore anglers (specifically, a 2-fish limit instead of 1-fish limit). For the Commercial fishery, the Addendum has an option to reduce the Ocean and Chesapeake Bay commercial quotas by up to 14.5%.

The Addendum also contains options to establish minimum requirements for states that allow filleting at sea in the recreational fishery, such as the retention of the rack after filleting, and to define whether a charter captain and mate(s) are subject to for-hire rules or private/shore rules when on a charter (this is only applicable if separate rules are adopted for the two sectors). Finally, the Addendum has an option to bypass the normal rule making process to

Recognizing the Conservation Efforts of Our Massachusetts Lobster Harvesters

DMF Releases Video Highlighting Right Whale Conservation and Industry Efforts

DMF's seafood marketing program created an educational video for seafood consumers highlighting ongoing efforts to protect right whales. The short video features Director Dan McKiernan speaking on camera about the state of affairs of right whale conservation, and the many significant accomplisments to date. The full story can be found on page 5, along with a link to the video.

implement rules more quickly should the next stock assessment (available next fall) show the need for additional conservation to keep us on track with rebuilding the SSB.

Public hearings on Draft Addendum II were held in November and December. The public comments are being tabulated and will be presented to the Board at the ASMFC Winter Meeting (January 23-25, 2024). During that meeting, the Board will choose among the options and the states will then be required to implement the selected rules through their individual rule-making processes.

On another but related note, the Board received some grim news at the October meeting: the Maryland striped bass young-of-year index for 2023 was the second lowest in the 66-year time series. Unfortunately, this joins the prior four years (2019-2022) in being well-below average. These five poor year classes are not the result of inadequate management or overfishing but rather the product of environmental conditions on the spawning grounds in the tributaries of the Chesapeake Bay. These year classes will make it very difficult to maintain the SSB at the desired level when these fish enter the reproducing population (beginning in about 2026). The challenge will be to maintain the fishing mortality at a very low level while these poor year classes pass through the fisheries. While the trajectory of SSB in a few years is uncertain, it is likely that preserving SSB in the coming years may be the greatest challenge that the Striped Bass Board has had in decades.

Where can management go next when such restrictive harvest measures are already in place? The recreational catch and release fishery is expected to remain the largest source of fishing mortality on the stock. This underscores the importance of the Division's ongoing studies into the factors that influence the survival of striped bass after they are released. Anglers can contribute to our understanding by being a part of our second year of the Striped Bass Citizen Science Project in 2024. Find out more, in the following article.

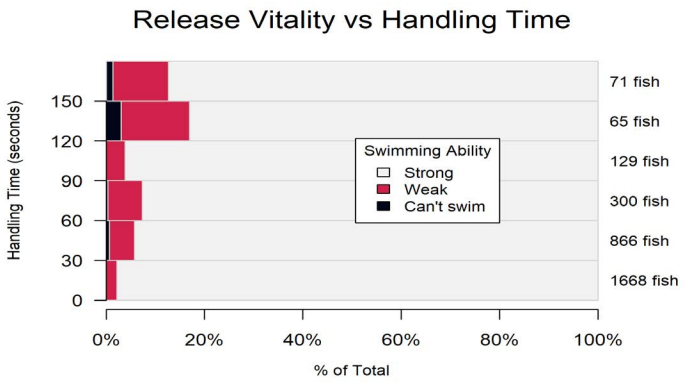
By Dr. Michael P. Armstrong and Nichola Meserve

Striped Bass Citizen Science Update

It took Finna Dean 3 minutes and 5 seconds to land this 43" striped bass, caught on a live mackerel. After a quick photo, it was released 1 minute and 8 seconds later. It was hooked in the mouth, uninjured, and swam away fine.

Earlier this year, we put out a request for volunteer anglers willing to record data while fishing for striped bass to help us understand the causes of post-release mortality. Nearly 700 people signed up to participate in the program, greatly exceeding our expectations! Volunteer anglers were supplied with some basic equipment (a digital thermometer, a stopwatch, and a tape measure) and asked to record a variety of data, including: air and water temperature, fish size and hooking location, injury and swimming ability, fight and handling time, as well as some details about the tackle used. Active participants were entered into a weekly raffle drawing from June through October, and 22 lucky anglers took home some Hogy fishing lures, and either a Shimano spinning combo or a pair of Costa sunglasses. Between April and November, these citizen scientists collected valuable information from over 3,700 bass. Here are some initial observations from the data that have been submitted so far:

- 75% of striped bass were caught via artificial lures, 25% were caught via baited hooks
- The greatest level of injury resulted from baited hooks, and lures with multiple treble hooks
- Fish were much weaker when kept out of water for more than two minutes
- Fish caught in water over 75 degrees had a much harder time recovering



Preliminary results for release vitality compared to handling time.

These and many other preliminary results can be found on a live data portal: madmf.shinyapps.io/striper/, generously sponsored by our partners at Backcountry Hunters & Anglers.

We are grateful to this community of dedicated anglers for becoming involved in striped bass research and the conservation of this iconic species. The Striped Bass Citizen Science project will continue for another year during the 2024 season. Anyone interested in participating can find out more and sign up at mass.gov/striper or email questions to striper@mass.gov.

By Micah Dean and Neil McCoy

Update on Lobster Regulation Changes for 2025

Size Changes, V-notch Possession Standards Made more Uniform and Trap Tag Issuance Tightened.

Beginning in January 2025, the vast majority of commercial lobster harvesters north of Cape Cod will see an increase in the minimum size from 3 ¼" to 3 5⁄16", and two years later, in 2027, the minimum size will increase another 16th of an inch to 3 ⅜", This adjustment will result in a harvest loss of some of the smallest marketable lobsters typically weighing less than 1.25 lbs. This is the first minimum size increase for lobstermen in this management area since 1989. The net result of this minimum size increase will be a uniform 3 ⅜" size limit among all Massachusetts inshore areas: Area 1, Area 2, and the Outer Cape Cod. Additionally, the maximum size of lobster allowed to be landed from the offshore fishery (Area 3) and Outer Cape Cod will be reduced from 6 ¾" to 6 ½".

These changes were precipitated by a documented decline in stock abundance of the so-called "Gulf of Maine/Georges Bank" stock. The ASMFC's Lobster Management Board ("Board") has been observing recent declines in the stock and voted to create a threshold that-if exceeded-would result in automatic conservation measures.

At the Board's October 2023 meeting, the Technical Committee reported that, with the inclusion of recently released 2022 data in the time series, the GOM/GBK recruitment index had declined 39% from the 2016–2018 reference period, surpassing the trigger point of a 35% decline. As a result, Addendum XXVII (as passed in May 2023) required states increase the LCMA1 minimum carapace size from 3 ¼" to 3 5⁄16" for June 1, 2024 with additional rule changes affecting LCMA1, LCMA3, and OCCLCMA scheduled to occur on June 1 of 2026, 2027, and 2028.

The trigger point was reached sooner than the Board expected when developing and approving Addendum XXVII. Commissioner Pat Keliher (Maine) made a compelling argument for delaying implementation to coordinate changes with Canada to avoid trade implications and provide gauge makers and harvesters sufficient time to prepare. While Maine sought a 1-year continuance (to start the 5-year implementation schedule on June 1, 2025), the Board agreed to a 7-month delay (to January 1, 2025) provided the implementation deadline for the "immediate measures" for OCCLCMA and trap tag issuance also be changed to January 1, 2025.

In addition to the conservation measures, other regulations changes were enacted by the addendum and were postponed seven months to January 1, 2025. These include all Outer Cape Cod harvesters (state and federal) must conform to the maximum size, and common standard for v-notch possession of 1/8" depth. (V-notching is the practice of harvesters cutting a notch into a specific tail flipper of an egg-bearing lobster. This notch is easy to notice and all harvesters must return that lobster to the sea when recaptured. The notch grows in over time and after 2-3 molts can become unrecognizable). Also, the issuance of trap tags will no longer include 10% extra tags in Area 1 and Area 3. The table below contains the new implementation schedule.

While states are not required to implement regulations until January 1, 2025, the Board encouraged states to move ahead with adopting such rules as soon as possible to avoid "kicking the can." Accordingly, DMF intends to go out to public hearing in early 2024 to implement these rule changes for 2025 and beyond. The public hearing and rule-making process will also include other draft regulatory proposals affecting trap gear fishing that DMF plans to implement for the 2024 fishing year (i.e., allowing the use of the fully-formed weak rope with "MA Lobster Tracer").

Effective Date	What Change Will Be Implemented		
	LCMA 1	LCMA 3	OCCLCMA
January 1, 2025	Limit trap tag issuance to trap allocation with no extra trap tags awarded. Minimum carapace size increase from 3 1/4" to 3 5/16".	Limit trap tag issuance to trap allocation with no extra trap tags awarded.	Establish 6 3/4" maximum carapace size for state waters. V-notch standard changes from ¼" sharp v-notch without setal hairs to 1/8" v-notch with or without setal hairs for state waters.
January 1, 2026	N/A	N/A	N/A
January 1, 2027	Minimum carapace size increase from 3 5/16" to 3 3/8".	N/A	N/A
January 1, 2028	Trap escape vent size change from 1 15/16" by 5 3/4" rectangular or 2 7/16" circular diameter to 2" by 5 3/4" rectangular or 2 5/8" circular diameter.	N/A	N/A
January 1, 2029	N/A	Maximum carapace size decrease from 6 3/4" to 6 1/2".	Maximum carapace size decrease from 6 3/4" to 6 1/2".

Effective schedule for implementation of Addendum XXVII.

Lobster Tracking Update

DMF implemented the vessel tracking requirement for federal lobster trap permit holders landing in Massachusetts beginning on May 1, 2023. Leading up to the implementation, staff began an outreach campaign, including a direct mailing, in March 2023. In May 2023, Kiera Lawlor was hired as the Vessel Tracking Coordinator to assist with day-to-day tasks in the tracking project including data validation, compliance tracking, and monitoring device performance. DMF, through ASMFC, provided $1,500 reimbursements to the impacted permit holders to offset the costs of the device, service plan, and installation costs.

To date, 261 vessels have certified the installation of a tracking device and 34 have opted out of fishing lobster trap gear during the 2023 federal fishing year. DMF staff confirm each device is functioning and provide a receipt to each permit holder as a confirmation. If data are not received from an installed device, permit holders are contacted to alert them of the issue. As of November 8, 2023 we have received data from 241 vessels. Staff provide phone and email support Monday through Friday and on weekends if necessary. The two device vendors, Viatrax and Woods Hole Group, provide customer support for device specific issues including installation and troubleshooting.

Massachusetts was the first state to implement the lobster tracker requirement. A considerable amount of work has been done with the two device vendors to troubleshoot issues during implementation. All lessons learned have been passed along to other states as they begin to implement this requirement.

By Dan McKiernan, Story Reed, and Nick Buchan

Protected Species Update: North Atlantic Right Whale

In October 2023, the National Marine Fisheries Service (NMFS) released an updated population estimate for the endangered North Atlantic right whale. Estimates of right whale abundance are generated from sightings data, which take time to process, thus previous estimates can be updated as analyses are completed. Data processed in 2023 allowed revised population estimates for 2021 and 2022, which resulted in an increased number of animals known to be alive. The population estimate for 2022 is approximately 356 animals. Although that is a slight decline from the 2021 estimate of 364 animals, the downward trend in the right whale population observed from 2015-2019 appears to be leveling off, likely due to reduced mortality and increased calving. While the right whale still faces significant threats from human impacts, the slowing of the sharp decline in right whale abundance is a positive sign.

The proactive conservation measures taken by DMF and Massachusetts lobstermen to protect right whales was recognized by NMFS this summer. On July 25, at the Massachusetts State House, NMFS gave its "Partner in the Spotlight Award" to DMF for our conservation efforts regarding the endangered North Atlantic right whale. This award is presented biennially to a single outstanding partner who has expanded and enhanced recovery of the most imperiled marine species. The award was presented to DMF by NMFS Deputy Assistant Administrator for Regulatory Programs, Samuel D. Rauch, III. Rauch added, "The Massachusetts Division of Marine Fisheries has led the way on the protection of endangered North Atlantic right whales when they are in Massachusetts waters by implementing regulations to reduce whale entanglements in fishing gear and the potential for vessel strikes. DMF regulations are especially important because they complement federal regulations and support right whale recovery efforts." Also as part of the program were Senator Bruce Tarr, and Department of Fish and Game Commissioner Tom O'Shea. Director Dan McKiernan received the award on behalf of DMF and recognized the contributions to the state's conservation program by the Center for Coastal Studies, who perform aerial surveillance documenting the presence of right whales; the Massachusetts Environmental Police for their patrol efforts to enforce conservation rules and to look after whales, including mother/calf pairs, when in vulnerable locations; the Massachusetts Marine Fisheries Advisory Commission for approving DMF's conservation rules; and commercial trap fishers for their leadership and cooperation.

Partner in the Spotlight Award Ceremony. Left to right: Michael Pentony, NOAA Fisheries Regional Administrator for Greater Atlantic Regional Fisheries Office; Samuel Rausch III, NOAA Fisheries Assistant Administrator for Regulatory Programs; Thomas O'Shea, Commissioner for the MA Department of Fish and Game; Daniel McKiernan, Director of DMF; Robert Glenn, Deputy Director of DMF; Julia Kaplan, Environmental Analyst for DMF; Kevin Creighton, Assistant Director of DMF; Story Reed, Assistant Director of DMF; Jared Silva, Policy Analyst for DMF; and Colleen Coogan, NOAA Fisheries Marine Mammal and Sea Turtle Branch Chief.

DMF is also in the process of updating its buoy line regulations to accommodate the new "MA Lobster" tracer weak rope. The Massachusetts Lobstermen's Association has worked to develop a fully-formed red and candy-cane colored weak rope that has a "MASS LOBSTER" tracer ribbon throughout the line and readily visible to the naked eye. The rope has been tested by NMFS and conforms to the 1,700-pound breaking strength limit. Given the "MASS LOBSTER" tracer is visible throughout the line, it would also make the gear uniquely identifiable to the Massachusetts Mixed Species Pot/Trap Fishery. Amending our existing rules to create an exemption to the buoy line marking requirements when fishing full buoy lines comprised of this fully formed weak rope would reduce the regulatory burden on commercial fishers by limiting their need to implement and maintain an extensive marking scheme in the buoy line. DMF intends to finalize the rule prior to the start of the 2024 fishing season to provide fishers the opportunity to install this buoy line when their gear is hauled out this winter. Dual state and federal permit holders who use the tracer rope to comply with state waters marking requirements will still need to add green markings when fishing in federal waters.

Fully-formed red colored weak rope that has a "MASS LOBSTER" tracer ribbon.

By Erin Burke, Protected Species Specialist

New Video Highlights Right Whale Conservation, DMF and Industry Efforts to Protect Right Whales

DMF's seafood marketing program created an educational video highlighting the ongoing efforts to protect right whales. The short video features Director Dan McKiernan speaking on camera about all the state's and region's significant conservation accomplishments and the state of affairs of right whale conservation.

McKiernan focused on the NOAA fisheries "Partner in the Spotlight" award for leading the way in implementing regulations to address both vessel strikes and entanglements in fishing gear. He recognized that none of our success to conserve right whales would be possible without the cooperation of the fishing industry that includes both lobster harvesters and vessel operators.

In the video, he credited members of the industry not just because it's the right thing to do, but more importantly because the general public and seafood consumers need to be educated on all the incredible accomplishments to keep right whales safe. The waters of Cape Cod Bay have the highest concentrations of this endangered species throughout the species' range.

It is routine for the aerial survey team flying over Cape Cod Bay to identify between 100 and 200 whales during our peak season of late March through Early May. That's an awesome abundance of right whales in this small embayment - considering the population there's only about 356. And over the course of each years field season, about 2/3 of all known right whales can be expected in Massachusetts waters.

This video also helps industry members overcome some of the negative publicity caused by a west coast conservation organization recommending consumers boycott all trap-caught lobsters in the US and Canada due to the risk of entanglement. It is a constant struggle to inform the public about the status of right whales and the sacrifices made by lobster harvesters to prevent entanglements. Because Massachusetts has the most stringent rules governing trap fishing in the U.S., it's critical to educate consumers about all the great work that has been accomplished over the past few years-going back more than two decades-to promote co-existence of endangered right whales and our maritime industries. You can find the full video on our YouTube channel (@massmarinefisheries).

By Dan McKiernan, Director

DMF & MFAC Give Belding Award to Mike Hickey for his Lifelong Contributions to Shellfisheries

On November 17, 2023, the Marine Fisheries Advisory Commission and DMF awarded the David L. Belding award posthumously to Mike Hickey who led DMF's shellfish program for over four decades and retired in 2020 after 51 years of service. The award dates back to 1989 and was created with the assistance of Belding's descendants to honor individuals who have done the most to promote the conservation and sustainable use of the Commonwealth's marine resources.

Dr. David L. Belding, was an icon. He was both a medical doctor as well as a marine biologist for the Commonwealth for the first half of the 20th century, conducting two distinguished careers simultaneously. Dr. Belding was extremely prolific, authoring dozens of papers on marine biology over half a century including detailed descriptions of the shellfish and anadromous fish resources throughout Massachusetts. Though these reports are a century old, they are still extremely informative. His wide array of research in marine biology, and particularly local shellfish populations, is continually referenced having become a cornerstone of the DMF.

Mike Hickey was a modern day likeness of Dr. Belding with an impressive career. He began with DMF in June 1968 as an Assistant Marine Fisheries Biologist, promoted to Marine Fisheries Biologist in 1972 as the new Shellfish Technical Assistance Project Leader. Mike's directive was to provide science-based shellfish management and shellfish propagation assistance to coastal municipalities. It was at this time he was first tasked with promoting private shellfish aquaculture under newly passed state legislation, and by 1980 was promoted to Senior Marine Fisheries Biologist. Then in 1988, Mike assumed leadership of newly acquired shellfish growing area classification responsibilities from the Massachusetts DEQE, now the Department of Environmental Protection. Mike is considered a founder of the Interstate Shellfish Sanitation Conference (ISSC), attending the ISSC conference on 26 occasions, his last in 2019. He was first elected and served as the Region 1 regulatory representative to the ISSC Executive Board in 1983, serving uninterrupted until 2020 making him the longest serving board member. During his tenure on the Executive Board, he was elected Chair twice, from 1997 to 2001 and then again from 2008 to 2013, also making him the longest serving board chair.

Mike would often reference Dr. Belding's work and championed those studies in Massachusetts shellfisheries to up-and-coming employees and town shellfish constables. Mike's frequent references to these works has helped continue Belding's hold as an authority on our state shellfish industries.

Accepting the award at the ceremony was Mike's family including his wife, Suzanne and his son Eric who currently oversees the MA Department of Public Health Food Protection Program. The event was attended by over sixty guests including Commissioner Tom O'Shea, DMF staff, Commission members, and leadership from the Massachusetts Shellfish Officers Association, an organization that Mike supported and provided substantial guidance. The event provided Mike's friends and colleagues an opportunity to honor his life's work and create a permanent memory of his contributions.

By Dan McKiernan, Director

ASMFC's 2023 Benchmark Jonah Crab Stock Assessment Approved for Management Use

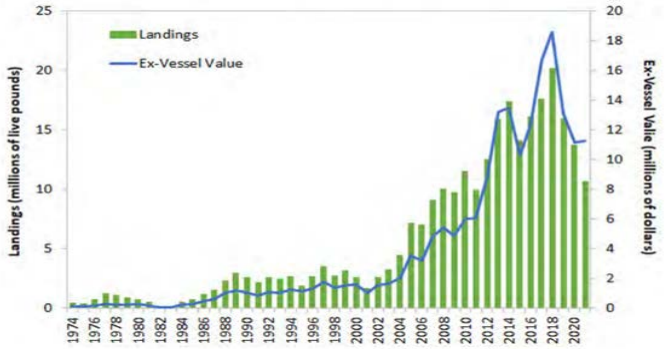
Jonah crabs (*Cancer borealis*) are part of a mixed crustacean fishery where permitted fishers can choose to target American lobster or Jonah crab with their traps. With the collapse of the Southern New England lobster stock in the early 2000s, some fishers switched from targeting lobster to targeting Jonah crab. The Jonah crab fishery has become increasingly important to Massachusetts. In 2022, the value of Jonah crabs landed in Massachusetts was $14 million, making it the 5th most valuable species in the state. More Jonah crabs are landed here than any other state, often accounting for more than 60% of annual U.S. landings. With the increased importance of the fishery, there is a greater need to evaluate stock status so fishery managers can make informed decisions.

The first U.S. Jonah crab stock assessment was approved for management use by the ASMFC Lobster/Jonah Crab Management Board at the ASMFC annual meeting in October. The stock assessment was conducted by a committee of state, federal, academic, and ASMFC scientists, and passed a rigorous peer review by external experts. The assessment committee evaluated fishery-independent (scientific surveys) and fishery-dependent data (commercial landings, effort, and observed catch) and divided Jonah crab into four stocks-Inshore Gulf of Maine, Offshore Gulf of Maine, Inshore Southern New England, and Offshore Southern New England/Georges Bank-based on regional differences in size at maturity, tagging/movement data, fishery exploitation, and regional trends of abundance.

There is a poor understanding of key Jonah crab life history characteristics, including estimates of size-at-age and how often adult crabs molt. There are also data set limitations, as many surveys did not start recording adequate data on Jonah crabs until after the release of the Jonah Crab Interstate Fishery Management Plan in 2015. Many surveys are not designed to catch Jonah crab, and therefore catch very few, and few surveys operate in offshore areas where most crabs are harvested. Because of these limitations, empirical indicators were used to assess the stocks instead of standard stock assessment models. Indicators derived from state and federal trawl surveys included recruit abundance, exploitable abundance, and adult abundance. Data from SCUBA-based settlement surveys (abundance of age-0 crabs) were also used as an abundance indicator. Commercial fishery data such as landings and fishing effort were used as fishery performance indicators. Current status (average of the last three years) for each indicator was evaluated relative to the indicator time series, and classified as positive, neutral, or negative.

Southern New England (SNE) Results

After steadily increasing for many years, overall coastwide landings peaked in 2018, and have declined since (see figure). Most of the commercial landings originate from offshore SNE, and the landings decline here has been most pronounced. Whether the cause of the landings decline is a function of crab abundance or market factors is unclear.



U.S. landings of Jonah crab and ex-vessel value. Data source: ACCSP Data Warehouse.

There are no annual settlement surveys in offshore SNE, so settlement conditions are unknown for this stock. Abundance indicators from the spring and fall show inconsistent patterns, which increases uncertainty and decreases confidence that either is accurately capturing abundance trends. Fishery performance indicators are also mixed, with some indicators in each of the three categories (negative, neutral, and positive).

Jonah crabs prefer cooler waters, which generally restricts inshore SNE crabs to deeper water found in Rhode Island Sound. Since surveys in this region cover mostly shallower, warmer waters, they do not overlap well with preferred Jonah crab habitat, which leads to limitations in the surveys' ability to track abundance in this region. Thus, abundance for inshore SNE is generally unknown.

Results from the fishery performance indicators for inshore SNE are neutral to positive. The number of permits and the number of trips landing Jonah crab were neutral, while the proportion of trips landing Jonah crab was positive.

The stock assessment committee does not believe that current surveys in SNE are accurately tracking Jonah crab abundance, and therefore consider the status of the SNE stocks uncertain.

Gulf of Maine (GOM) Results

Surveys (settlement, state and federal trawl surveys) conducted in both the inshore GOM and offshore GOM regularly catch Jonah crab, and generally show similar trends. The consistency in trends amongst surveys leads to greater confidence that the surveys are good indicators of abundance.

For inshore GOM, while there have been declines in abundance from time series highs observed in the mid-2010s, abundance indicators are generally positive or neutral. All fisheries performance indicators for this stock are neutral because fishing effort has been consistently low in this region.

Similar to inshore GOM, offshore GOM abundance indicators show declines from recent time series highs in the mid-2010's, but fisheries independent indicators and fishery dependent performance indicators remain generally positive or neutral. The proportion of trips landing Jonah crab in inshore GOM and offshore GOM are low, which can be attributed to the fishery in these regions targeting lobster instead of Jonah crab.

Jonah crab can be considered an underutilized resource in this region. The comparatively high value of lobster has kept Jonah crab landings in this region to modest levels. Data suggest there is potential for the Jonah crab fishery to expand in the GOM.

What's Next?

While the stock assessment committee does not believe management action is necessary at this time, peer reviewers were concerned over preliminary reports showing declines in catch per unit effort (CPUE) for offshore SNE crabs landed in Rhode Island. However, updated analyses including Massachusetts data did not show the same decline. While intensive fishing effort appears to be localized, there are plenty of areas where fishing effort is minimal, despite higher levels of crab abundance. In areas where Jonah crab and lobster are both abundant, fishers generally target lobster due to the higher value per pound.

There is still a lot to learn about Jonah crab. The assessment identified many sources of uncertainty, which hinders a comprehensive understanding of Jonah crab stock status. The assessment includes research recommendations to help focus future work, including determining larval duration and dispersal, growth of adult crabs, and improving our ability to monitor population size in offshore SNE. Improvements in population monitoring and our understanding of Jonah crab life history will lead to better management advice. This was the first Jonah crab assessment conducted in the U.S. and will hopefully serve as a building block towards improved future assessments.

The peer review panel recommended updating the assessment in five years and conducting the next benchmark assessment in ten years to allow for time to complete tasks recommended by the stock assessment committee and peer reviewers. In the meantime, annual or semi-annual meetings will be held to monitor fishery performance indicators.

By Derek Perry and Dr. Tracy Pugh

Creature Feature: Jonah Crab (*Cancer borealis*) and Rock Crab (*Cancer irroratus*)

Jonah Crab.

Jonah crab (*Cancer borealis*) and rock crab (*Cancer irroratus*) are commonly found in Massachusetts waters and are sometimes collectively referred to as "Cancer crabs." Though similar in appearance, these closely related crabs can be distinguished by the roughness of the edge of their shell. The leading edge (margin) of the Jonah crab shell is consistently rough (see above photo), or jagged, whereas the edge of a rock crab's shell is smooth between the major indentations (see figure below). Shell color for both species is usually brown but can have red or purple hues.

Rock crabs in a 'mating embrace.' The smaller female is cradled by the larger male.

Jonah crabs can grow larger than rock crabs; Jonah crabs have been recorded as large as 8.75 inches wide, whereas rock crabs don't exceed 5.5 inches. Males of both species attain larger sizes than females of the same species. Male Jonah crabs also tend to have much larger claws than male rock crabs. Jonah crabs are relatively slow moving and tend to avoid threats by burying themselves and hiding or relying on their bulk to deter predators. Rock crabs are much faster and are more likely to flee, or to raise their claws to fight.

Rock crabs are known by other common names which vary regionally, or for marketing purposes. They are commonly referred to as "peekytoe" crabs in some parts of Maine and marketed to high end restaurants under this name. They are referred to as "sand crabs" by many fishermen in Massachusetts, and in the mid-Atlantic they are often called "white-leggers." Some people also refer to Jonah crab as "rock crab", which can complicate fishery landings reports. Nearly all Jonah crabs landed by the commercial fishery in Massachusetts are male and caught in traps in federal waters. There is a 4.75" carapace width minimum legal size for Jonah crabs. Because female Jonah crabs are smaller, they are less likely to reach the minimum legal size and more likely to be able to escape through legally mandated trap escape vents. There is no minimum legal size for rock crab. With a recreational lobster/edible crab fishing permit, Massachusetts recreational fishers are allowed to keep 50 Cancer crabs (species combined) daily, either by trap or SCUBA diving. For more information on recreational fishing for Cancer crabs, please visit our recreational fishing guide at https://www.mass.gov/info-details/get-a-massachusetts-recreational-saltwater-fishing-guide.

While rock crabs occasionally have been featured at high end restaurants, Jonah crabs currently support the larger fishery. In 2022, nearly 8 million pounds of Jonah crab, worth over $14 million, were landed in Massachusetts, making it the fifth most valuable fishery in the state. The rock crab fishery is much smaller. Just over 100,000 pounds of rock crab were landed in Massachusetts in 2022, with a value of less than $200,000. Both species are marketed live, or as fresh or frozen picked meat. Large Jonah crab claws, or "cocktail claws", make a great appetizer. They can be found at seafood markets fresh or frozen, and pre-scored for easy cracking. In the mid-Atlantic, rock crabs are also sold as bait to catch tautog.

If you haven't tried them yet, pick up some Jonah crab cocktail claws for your next social gathering!

By Derek Perry

Offshore Wind Update

MA DMF engages in offshore wind by conducting technical review of permitting documents, fulfilling advisory roles for regional research efforts, providing best management recommendations to state and federal agencies in response to developer permitting submissions, and is committed to engaging fishery stakeholders in all phases of industry development. In the last year, DMF has reviewed permitting documents, fisheries economic exposure and environmental impact assessments, and monitoring plans associated with the South Fork Wind, Sunrise Wind, Beacon Wind, South Coast Wind, and New England Wind (Park City Wind and Commonwealth Wind) projects.

DMF also assisted in the development and review of fisheries compensations plans among a variety of offshore wind projects in Southern New England including Sunrise Wind and New England Wind that will be used to offset economic impacts to Massachusetts commercial and for-hire fishing due to loss of access or reduction of harvest during construction and operation, including within the wind energy area and the export cable. All drafts of the fisheries compensation and economic exposure analyses were presented to the MA Fisheries Working Group in September. Sunrise Wind's compensation package totaled $11,288,000 including $8,788,000 for the direct compensation program (commercial and for-hire fisheries); $1,000,000 for a fishery decommissioning fund (offset direct losses during decommissioning); $1,000,000 for a coastal community fund that will support the co-existence of the fishing and wind industries. $500,000 for the Navigation Enhancement and Training Program that will support upgrades to navigation equipment, professional training opportunities, and experiential learning. New England Wind's first phased project (Park City Wind LLC) entered into a two-part fisheries compensation agreement with the Commonwealth that totaled $7,359,471. Park City Wind LLC will provide a total of $5,859,471 in funding to the direct fisheries compensation program and $1,500,000 to support the Massachusetts Fisheries Innovation Fund (MFIF).

The MFIF's purpose is to support programs and projects that ensure safe and profitable fishing continues as offshore wind development continues through grants for technology and innovation upgrades and studies that assess the impacts of offshore wind development on fishing industries and resources. Currently, the MFIF is separate from the Fisheries Innovation Fund established by Vineyard Wind LLC ($1.75 million). The Executive Office of Energy and Environmental Affairs plans to merge these two separate innovations funds into one combined legislative trust named the Massachusetts Fisheries Innovation Fund.

Southern New England Wind Projects

As of late December, two of the nine offshore wind projects in Southern New England south of Martha's Vineyard have installed the export cable, several wind turbine foundations (monopile), electrical service platforms, and inter-array cables. Vineyard Wind has installed four complete wind turbines and is expected to start generating power by the end of 2023. Vineyard Wind has currently installed 34 of 62 monopile foundations- four have turbines installed- and one electrical service platform. The export cable installation (landfall at Covell's beach in Barnstable County) and testing was completed for Vineyard Wind in October 2023. All turbines in Vineyard Wind 1 are expected to be installed by early 2024. DMF continues to support EEA in hosting and administering the $1.75 Fisheries Innovation Fund established through an MOA between Vineyard Wind LLC and EEA to enhance fisheries coexistence with offshore wind development. DMF is currently working with the fund's advisory panel to provide recommendations for the disbursement of funds that are directed towards projects pertaining to fishing vessel technology and safety innovations or conducting studies that monitor effects of fisheries and vessel impacts to offshore wind.

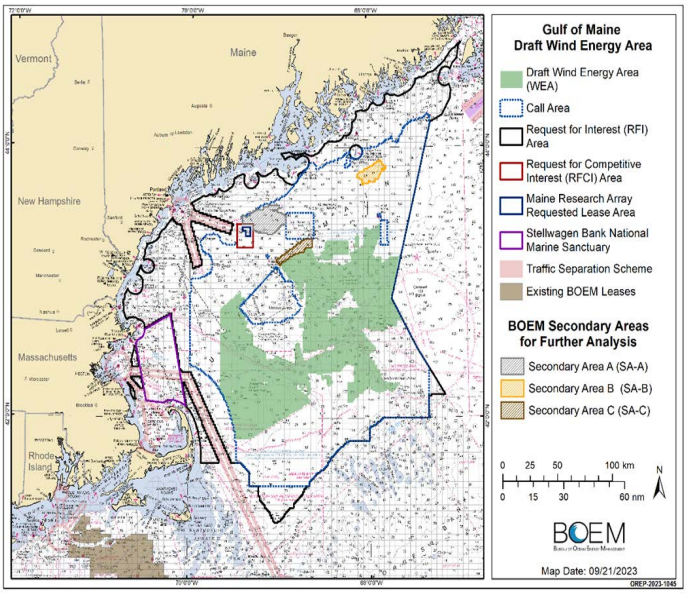
As of December 2023, South Fork wind has installed all 12 of its monopile foundations, one electrical service platform and has installed its first wind turbine. In November 2023, South Fork Wind installed the offshore export cable from the wind farm to its onshore landfall site in Westhampton Beach, NY. In November 2023, Revolution Wind was approved for construction and operation by the Bureau of Ocean Energy Management (BOEM) and is expected to start offshore wind construction in 2024 and is anticipated to be operational in 2025. All other RI/MA offshore wind projects are in various stages of the environmental review and site assessment process. Sunrise Wind, SouthCoast Wind, and New England Wind currently have their Draft Environmental Impact Statements published. In November 2023, Beacon Wind published the Notice of Intent to Prepare an Environmental Assessment for Additional Site Assessment activities. Bay State Wind recently submitted its Construction and Operations Plan and Vineyard Northeast is currently in its site assessment phase. All current and proposed export cable routes with landfall in MA are primarily traversing through the Muskeget Channel export cable corridor (width ~3500 ft.) and around the southern end of Martha's Vineyard (10 nautical miles offshore) through the Sakonnet River. Sunrise Wind's export cable will traverse Southwest with landfall connections in Long Island, NY.

Seabed preparation activities prior and during construction consisted of displacing boulders from wind turbine foundation and cable route locations. Relocated boulder's location information is available on Notice to Mariners webpages on Vineyard Wind's and Orsted's websites. MA DMF, MA Coastal Zone Management (CZM), and NMFS have developed a draft boulder relocation mitigation framework and guidance document for BOEM and offshore wind developers that requests the need to characterize types of disturbances from boulders, understand how changes may affect fish habitat, and evaluate how relocated boulders influence fishing activities and gear conflicts.

Gulf of Maine

On October 20, BOEM released the draft Wind Energy Area (WEA) for the Gulf of Maine.The draft area encompasses a total area of 3,519,067 acres (a 64.11% reduction of the Call Area). The draft WEA has a combined capacity of over 40 Gigawatts (assuming a power density of 3 megawatts per sq. km). This energy production capacity of the draft WEA exceeds the current combined offshore wind planning goals for the Gulf of Maine states (10 GW from Gulf of Maine for Massachusetts by 2050 and 3 GW for Maine by 2040). All areas currently identified in the draft WEA are deeper than 120m and at least 20nm offshore. Given the depth of the draft WEA, all potential offshore wind development will likely consist of floating technology. BOEM will finalize the WEA in the Gulf of Maine by February 2024.

DMF collaborated with CZM and other EEA departments on a comment letter to BOEM outlining areas and conflicts of most concern. The EEA comment letter on the draft Gulf of Maine WEA incorporated input received from the Massachusetts fishing industry across several workshops and meetings in October and November, as well as subject matter experts from EEA agencies and offices. The stakeholder meetings focused on topics such as fisheries navigation considerations (wind farm spacing, orientation, etc.), impacts to federal and state surveys, and identifying key fishing features (swells, ledges, banks, etc.) within the Gulf of Maine to facilitate BOEM's decision-making on establishing Final WEAs. Once the WEAs are finalized, engagement and commenting opportunities will be available during the formation of bidding credits, lease stipulations, lease characteristics, and state energy procurement.



Draft Gulf of Maine WEA (green). BOEM is considering public input on the three secondary areas (colored dashed fill) for further consideration as potential WEAs. Figure Credit: BOEM.

Draft WEAs were established by BOEM from a spatial suitability model that included four sub-models (wind industry, fisheries, natural & cultural resources, and industry & operations) and other fisheries/navigation considerations (e.g., Lobster Management Area 1, Cashes Ledge, Jeffreys Bank). All sub-models were weighted equally, while data layers within sub-models comprised of different weighting schemes. The fisheries sub model contained 6 data layers that each contributed 4.16% to the overall spatial suitability model. Among all sub-models, a total of 98 data layers were selected to represent major ocean characteristics for the Gulf of Maine and identify space-use conflicts and environmental constraints for each 10-acre hexagonal grid in the Call Area (984,797 grid cells). Using an autocorrelation cluster analysis, one draft WEA was identified based on the most suitable areas. Of note, the current draft WEA represents the area identified by BOEM for potential wind lease areas and therefore, the cumulative area of the leasing areas could be smaller than the WEA. BOEM has also identified three Secondary Areas for further analysis from the spatial suitability model that are not included in the draft WEA but could receive consideration when finalizing WEAs, contingent on the public comments received electric export cable routes from the Gulf of Maine WEA will not be proposed and finalized until after lease areas have been identified and sold to wind developers.

For those interested in the spatial suitability model used for the Gulf of Maine in more detail, the draft NOAA-NCCOS report can be downloaded from the BOEM webpage.

After the Final WEAs are designated for the Gulf of Maine, BOEM will release a series of notices and a lease auction that will span approximately a 1.5-year period. The first notice, a Proposed Sale Notice, is used by BOEM to inform offshore wind developers about upcoming lease auctions and its duration is at least 60 days. Once the Proposed Sale Notice comment period closes, BOEM will publish a Final Sale Notice aimed at developers and provides the final terms and conditions for a lease sale, including the date, time, and location for the sale itself. The Final Sale Notice will also include the list of the companies that have legally, technically, and financially qualified to participate in the lease sale. After at least 45 days from the Final Sale Notice, BOEM will hold a lease sale and will subsequently identify the winner through an auction (final lease sales expected by December 2024).

General Commonwealth Offshore Wind Updates

By 2027, previously enacted Massachusetts law codified a goal of receiving 5,600 megawatts (MW) of electricity from offshore wind. In June 2023, Massachusetts procured over 3,200 MW of electricity from power purchase agreements (PPAs). However, Massachusetts currently has less than 1,000 MW procured due to many developers reneging on PPAs from increased inflationary costs and supply chain issues. On October 4, 2023, Governor Healy announced a multi-state memorandum of understanding (MOU) between CT, RI, and MA to procure up to 6,000 MW of electricity to New England states. Through this MOU, the three states will review multi-state offshore wind proposals with project selection depending on each state's evaluation criteria in their respective request for proposals (RFPs). Any two or three states may agree to select a multi-state proposal(s) up to each state's procurement authority and split anticipated MW from a single project. DMF plans to work with our counterparts in CT and RI to determine potential areas for overlap pertaining to environmental mitigation and assessing cumulative impacts associated with offshore wind within each state's RFP.

On April 20, 2023 Secretary Tepper announced the establishment of the EEA Interagency Offshore Wind Council (IOWC) to advance the responsible development of offshore wind to meet the Commonwealth's climate goals. The IOWC will be responsible for developing and maintaining an Offshore Wind Strategic Plan (Plan) with stakeholder and community input. The Plan will: 1) lay out the status of the offshore wind industry to the Commonwealth, existing legal and policy frameworks, and progress made to date, 2) identify key drivers, gaps, and needs and findings, and 3) recommend specific actions and strategies necessary to advance the Plan's goals and objectives before 2040. The Plan's objectives will be relevant to its three primary components for balancing economic development, socioenvironmental considerations, and energy advancement needs. The main objectives within the Plan are to grow Massachusetts as a national hub for offshore wind economic development; promote research and innovation for new technologies, solutions, and services; ensure comprehensive planning with robust stakeholder engagement; implement efficient and effective environmental reviews and support for mutual co-existence; establish long-term offshore wind energy targets and plan for procurements; and develop a modern and resilient transmission system with efficient interconnection of offshore wind. The approval and issuance of the Plan is expected by September 2024.

By Justin Bopp, Offshore Wind Specialist

Diadromous Fisheries Update

Diadromous, or sea-run fish, are the migratory fish that switch between marine and freshwater habitats to complete their life history. Most diadromous fish populations have declined sharply from historical periods when valuable fisheries were supported. Presently, minor fisheries occur for a few diadromous species and collectively these fish remain important forage for a wide range of fish and wildlife. The DMF Diadromous Fish Project actively monitors river herring, American shad, American eel, and rainbow smelt spawning runs in coastal rivers to contribute to population assessment and management of these species and to inform restoration planning.

River Herring Counts. A river herring harvest ban was implemented by DMF in 2006 out of concern for uniformly declining runs after droughts in 2001 and 2002. Most coastal regions experienced improving spawning run counts soon after with increases during 2012 to 2019 that encouraged public interest. After that, declines and instability were seen in herring counts during 2020-2022 in many coastal rivers. The declines were less apparent on the northern coast of Massachusetts during this period but common for Cape Cod, Buzzards Bay and Narragansett Bay. Improvements in counts were welcome in 2023 for many runs from Cape Cod north, while concerns remain west of Cape Cod.

Our project staff spends much time "counting the beans". We conduct field monitoring to count the number of river herring, shad, eel and smelt that run up coastal rivers each spring. Additionally, large numbers of volunteers count river herring at over 30 locations each year: a huge effort requiring much coordination and impressive dedication. There was positive feedback in 2023 that offers promise that the counting is contrib- uting to resource management and public goals. Among coastal rivers with counts in 2023, five rivers reached time-series highs in numbers of river herring. These rivers were the Parker River, Newbury; Herring Brook, Pembroke; Town River, Plymouth; Herring River, Wellfleet, and the Marston Mills River, Barnstable. This is a noteworthy as the latter three time-series are 15 years long or more and the Parker River is a 27-year series. Although not time-series highs, the three rivers with the highest 2023 counts in Massachusetts deserve mention for approaching or exceeding the half million fish mark, a modern threshold for a large river herring run: Herring Brook, Pembroke (570,000); Herring River, Harwich (520,000); and the Mystic River, Medford (470,000). When numbers like these run up a river it attracts widespread public attention and is a marvelous harbinger of spring.

One goal with the spring diadromous fish counts is to contribute data to population assessment and management. Five rivers (Mattapoisett River, Monument River, Nemasket River, Parker River, and Town River, Plymouth) contribute river herring counts to the Atlantic States Marine Fisheries Commission stock assessment for river herring. Until 2023, only one of our counting series for American eel, the Jones River Sheldon trap in Kingston, had adequate data quality and duration to be accepted within the ASMFC American eel stock assessment. This year, the eel stock assessment accepted two new series: the eel bycatch in the Fore River smelt fyke net, Braintree, as a yellow eel index of abundance and the Saugus River eel ramp, Saugus, as an elver index of abundance. Reaching this status is a credit to all Diadromous Fish Project staff and local volunteers, past and present, who assisted with these stations. Unfortunately, all three eel indices have significantly declining trends.

Fish Passage Restoration. Every year, numerous fish passage restoration projects are in development both by the DMF Fishway Crew and cooperatively under local, State and Federal partnerships. This past year was also noteworthy for reaching restoration milestones at several locations where passage improvements were long contemplated but challenging to achieve. With limited space to give due credit to an exciting and active restoration scene in Massachusetts now, we will highlight three projects that are reaching the finish line after years of hurdles to hopefully become future examples of increasing counts of river herring and other diadromous fish.

Fore River Watershed, Braintree. Four locations in the Fore River watershed prevented river herring from reaching over 200 acres of natal spawning and nursery habitat for over 200 years. The challenge of providing passage at four locations is further compounded by Great Pond serving as a water supply for three towns. The project began with field investigations over 30 years, and formal discussions with property owners and the water supply and feasibility analyses followed 15 years ago. A fishway was installed at Great Pond in 2017 and this past summer the Armstrong Dam and Ames Pond Dam were removed under a cooperative project led by the Town of Braintree with essential contributions from the MA Division of Ecological Restoration, NOAA Restoration Center, US Fish and Wildlife Service and DMF. The final piece is the construction of a fishway at the scenic Rock Falls slated for this winter. The work is not complete as deliberate planning is needed to provide stream maintenance at key watershed locations and to work with the water supply to get fish in and out of Great Pond. With these fish passage improvements done fish will have the chance to move up the watershed for the first time since the Adams clan cultivated crops and presidents in the great town of Braintree.

High Street Dam, Bridgewater. The High Street Dam on the Town River, a tributary to the Taunton River, was removed this summer. This was another large removal project with over 10 years in the making requiring dedicated funding and efforts from many of the same partners as the Fore River project. In this case, a fishway built in 1919 was present at the dam that allowed river herring to reach the 370 acre Lake Nippennicket. An electronic river herring count was diligently managed here by the Town River Fisheries Committee for 23 years with peak counts occurring early in the time series of between 200,000 and 300,000 river herring. However, the fishway and surrounding dam were in disrepair and removal was the best option for this site in terms of ecological benefits and infrastructure management. The removed dam and reconditioned river channel will allow efficient passage for the target species of herring and eel and hopefully contribute to a resurgence of American shad in the watershed (see report on new Taunton River shad stocking project reported in DMF News Spring 2023).

Stump Brook Reservoir Dam, East Bridgewater. One of the more complex diadromous fish restoration concepts in coastal Massachusetts has been reconnecting fish to the large spawning and nursery habitats of the Monponsetts Pond (528 acres) of the Taunton River watershed and Silver Lake (640 acres) of the Jones River watershed. Many obstructions and alternative uses of surface water have made this concept a restoration Holy Grail to some. Monponsett Pond connects to the east to Silver Lake and drains to the west via Stump Brook. Stump Brook flows to the 168-acre Stump Brook Reservoir and into the 124-acre Robbins Pond which in turn drains to the Satucket River, another Taunton River tributary. In 2010, fish passage was blocked to all of these 1,460 acres of spawning and nursery habitat: easily the largest potential habitat restoration target for river herring in Masschusetts. The wheels started turning when the Wapping Road Dam was removed in the Jones River in 2011 and the Cotton Gin Mill Dam was removed in the Satucket River in 2017. The next step was to provide fish passage at the Stump Brook Reservoir Dam, an impassible dam used for water management at several cranberry farms in East Bridgewater and Halifax. DMF began discussions with the cranberry bog farmer who owns the dam in 2018 and prepared a survey and fishway design in 2021. The Taunton River Stewardship provided a $25,000 grant to DMF to hire GZA to finalize the fishway design and prepare permit applications. DMF staff completed the permit process, provided recycled Alaskan steeppass sections, fabricated the remaining components and installed the fishway during one day this summer working with the bog owner. With material costs, the total project cost was approximately $35,000. Similar to the Fore River project, work is not done given miles of stream channel that has no consideration for fish passage maintenance for decades and the need to work with water suppliers to manage seasonal water flows for fish migrations. This small project involves much more than just an aluminum fishway and river herring. It is another cooperative step towards a multi-generational dream on the resuscitation of priceless and neglected coastal rivers.

By Brad Chase, Diadromous Program Leader

DMF Hosts another Successful Saltwater Fishing Derby

The Massachusetts Saltwater Fishing Derby has a longstanding history that adds a splash of competition to every fishing season in Massachusetts. The derby, also known as the Governor's Cup, was hosted by the Division of Tourism until 1983, when it was passed on to the Division of Marine Fisheries (DMF). More recently, in 2017, DMF made a few changes to the popular Saltwater Fishing Derby. We lowered the minimum Junior weigh-in qualifying weights for many species to give young anglers a better chance at catching a Derby winning fish. We also expanded the Catch & Release part of the Derby for anglers who prefer not to harvest a fish. This addition allows these fishers a chance to showcase their angling skills while keeping with the wide-spreading angling trend of catch and release fishing.

The Derby has also expanded to include 32 eligible species for weigh-in and catch and release awards. Anglers must catch a fish that meets or exceeds the minimum qualifying length or weight in order to be considered for a Derby pin. At the end of each season we now present an Angler of The Year award. This special annual award is given out to both the Adult and Junior anglers who have the most Derby winning fish: weigh-in, catch and release, or combined.

The 2023 Derby concluded on November 30. There was a lot of participation, and we wrapped up the season with a total of 40 winners. Among the many highlights of the year, the Junior Angler of the Year entered nine winning fish! Derby participants entered some exceptional catches this season, including several large tuna, a sailfish, and a false albacore that was just two ounces shy of tying the state record!

Mike Pieropan with a 39 inch bluefish, one of the many Saltwater Fishing Derby winners.

A Derby ceremony will be held on January 13, 2024, at the New England Boat Show in Boston to celebrate the winners. Department of Fish and Game Commissioner Tom O'Shea, DMF Director Dan McKeirnan, and DMF Assistant Director Mike Armstong will present awards and certificates to the winning anglers. An ice cream social will follow for the lucky anglers and their families.
The 2024 Derby starts January 1. It'll be a little while before the fish return to our waters, but it's a good time to come up with a strategy for catching a pin fish in the coming year. Let's hope the new season brings us excellent fishing weather and plenty of trophy fish!

By John Boardman and Neil McCoy

Stem4Girls Outreach Event

DMF's Chrissy Petitpas, Alyson Mello, and Maggie Leary put on a shellfish-themed workshop at the 11th STEM4Girls Day hosted by UMass Dartmouth's Kaput Center on October 28, 2023. Statistics show that while women occupy 47% of all jobs in the country, only 24% of them hold positions in STEM fields. The STEM4Girls Program strives to inspire girls from local communities, particularly disadvantaged communities, to explore careers in science, technology, engineering, and mathematics (STEM) by providing engaging, hands-on learning experiences. At this workshop, the young ladies took a dive into the Phytoplankton-Shellfish-Human marine food chain. The girls observed different types of plankton through a microscope, learned about toxic phytoplankton that can contaminate shellfish and make people sick, and had a hands-on shellfish encounter with bay scallops, quahogs, and oysters. There were giggles a plenty when the unsuspecting young ladies got "spit" at by the bay scallops. Perhaps some were inspired to be our next generation of shellfish biologists! A special shout out goes to DMF's John Mendes and the Town of Edgartown Shellfish Department for donating shellfish for the event.

DMF's Maggie Leary helping with the Stem4Girls event.

Saltwater Angler Education Program Update

Our Saltwater Angler Education initiative works to promote responsible recreational saltwater fishing in coastal Massachusetts waters, specifically reaching out to those who are new to the sport. Major components include fishing clinics, training seminars and fishing festivals.

DMF hosts and partners with various organizations to offer beginner fishing clinics connecting many communities to resources in their own "backyard." Saltwater angling clinics are free and open to the public, offering families and individuals the opportunity to try out the sport of saltwater fishing under the help and guidance of DMF staff and volunteers. Our mission is to teach basic angling skills in a fun and enthusiastic environment and to create future saltwater anglers. Each clinic offers knot tying, casting, proper fish handling and identification, and catch and release fishing.

At the end of each clinic participants walk away with fun educational handouts, instructional guides, and more importantly the basic angling skills to successfully continue fishing on their own.

Over the course of the 2023 summer DMF offered various family fishing clinics highlighting some of the Boston Harbor Islands, fishing piers and access points along the coast of Massachusetts. DMF partnered with the Fall River Police Department in its first Cops and Bobbers Family Fishing Clinic, and the Army Corp of Engineers for its Water and Boating Safety Day along the Cape Cod Canal. Each clinic offers DMF staff a means to connect and educate the public not only in the act of fishing, but the importance of fisheries management, regulations, and inform them of the many ongoing projects and programs the Division has to offer.

DMF staff with members of the Fall River Police Department at the Cops and Bobbers Fishing Clinic.

DMF offered a series of saltwater training seminars geared towards youth organizations and summer camps tailored to the needs of those participating. Seminars often covered setting up saltwater gear, knot tying, casting, and responsible angling. In the future after attending one of the training seminars those attending would be able to loan out gear and tackle in order to host their own youth saltwater fishing clinics.

DMF staff teaching kids at Peddocks Island how to cast a fishing rod.

For those who could not attend a clinic, the DMF website offers a comprehensive saltwater kids field guide that is available to download and a series of educational video tutorials covering saltwater angling basics. Those interested in learning more about the Saltwater Angler Education Program or to find a list of future saltwater fishing clinics should visit: https://www.mass.gov/info-details/saltwater-angler-education-program

By Kim Trull, Saltwater Angler Education Program Coordinator

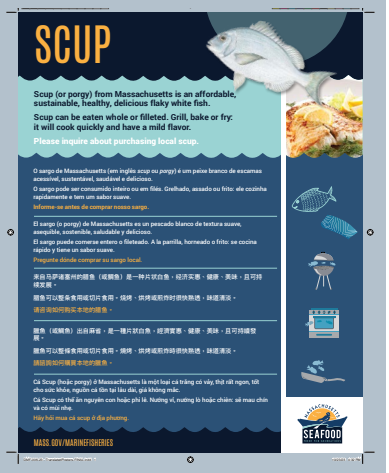
Seafood Marketing Update

The Seafood Marketing Program partnered with Mass. Agriculture in the Classroom for a teaching-the-teachers event in July. Fifteen people met at Red's Best on the Fish Pier for a Massachusetts Seafood/Aquaculture 101 presentation, a tour and conversation with Jared Auerbach (owner of Red's Best), and a local seafood lunch. The day concluded with an educational activity.

The Seafood Marketing Program visited six farmers markets during September and October: Framingham, Franklin, Hudson, Norwood, Dedham, and Lowell. We used MA Department of Agricultural Resources list to target non-coastal towns with robust weekday markets. We provided education regarding Massachusetts seafood, games, and free swag. We also provided gyotaku: a traditional form of Japanese art that began over 100 years ago as a way for fishermen to keep a record of the fish they caught. We set up using block ink, silicone fish and rice paper for children and adults to make a fish print. Additionally, the Seafood Marketing Program tabled at the Gloucester Fishing Heritage Festival and the Marshfield Lobsterfest for the first time. We returned to the Boston Seafood Festival and Seafood Day at the State House.

The Seafood Marketing Program filmed and distributed a message from our Director entitled, "Recognizing the Conservation Efforts of our Massachusetts Lobster Harvesters." This was directed by DMF's Seafood Marketing Coordindator Wendy Mainardi, produced by On The Water, and funded by DMF's Environmental Economic Innovation Grant. The video gained traction over YouTube, Instagram, Facebook, Twitter/X, and email.

The Seafood Marketing Program worked with stakeholders to create language inclusive marketing material for the first time. We created printable, color, 8.5"x11" posters for anyone to use. The species featured for our pilot series included scup, whiting and flatfish in these languages: Spanish, Portuguese (Brazilian), Mandarin, Chinese, Cantonese, and Vietnamese.



Translated scup poster.

The Seafood Marketing Program ran a summer internship program for the fourth time. Audrey MacLellan has an undergraduate degree in Marine Biology from UMass Dartmouth and her family runs St. Ours & Company, a producer of surf clam and lobster broth. Audrey helped organize the farmers markets, created an email list of seafood restaurants so that we have a listserv to reach restaurants directly, and created content. She has been much appreciated interacting with the public at all in-person DMF Seafood Marketing Program events.

By Wendy Mainardi, Seafood Marketing Coordinator

CHEF KWASI KWAA'S JERK SKATE WING

INGREDIENTS:

2 lbs Skate Wing (cleaned and trimmed)
4 bu radish greens
2 bu breakfast radishes
2 tbs garlic scapes (minced)
1 lemon

JERK MARINADE

(can made beforehand)

- Scotch Bonnet
- 1 tbsp dried thyme
- Ground allspice
- Cloves
- Garlic (minced)
- Onions (minced)
- Scallions (minced)
- 1 cup brown sugar
- Salt to taste
- Black pepper
- Cinnamon
- Nutmeg
- Ground ginger
- Olive oil
- Soy sauce (TAMARI for gluten free)
- Lime juice
- Orange juice
- Cider vinegar

COOKING INSTRUCTIONS:

- Blend all ingredients for marinade together and set aside
- In a medium sautee pan, heat about a table spoon of olive oil and add garlic scapes for a quick sautee
- Once scapes are tender, add radish greens, a dash of salt and pepper, and gently sautee for about a minute and a half. Remove from heat and allow to cool
- Gently brush cleaned skate wing with some jerk marinade and add a conservative amount of salt to taste. In an oiled heated pan, add skate wing to sear once the oil is ripping hot
- Sear skate on both sides for about a minute each (when fish turn opaque, it is done)
- Once seared, add a pat of butter to the pan and wait for foam to subside in the pan, then gently baste the fish with the browned butter
- Remove the fish from pan and set aside, add the halved breakfast radish to the same pan and gently pan roast on high heat for a minute

DMF and MEP meet with International Delegations to discuss Fisheries Management and Enforcement

Indian, Australian, and Japanese Delegations with DMF and MEP staff aboard the Thomas Paine.

The US Department of State's International Visitor Leadership Program (IVLP) is an exchange program that brings professionals from abroad to the US for short-term visits to gain first-hand experience in their areas of expertise in the American system and cultivate long term relationships with their American counterparts. Through World Boston, these delegations periodically meet with staff from the Massachusetts Environmental Police and Division of Marine Fisheries to discuss issues germane to fisheries and wildlife management and enforcement. On November 16, we welcomed a delegation from the Kingdom of Jordan as part of a project titled "Understanding Sustainable Tourism: the Role of Marine Protected Areas in Mitigating Climate Change". Then on December 4, we welcomed delegations from India, Australia, and Japan as part of a project titled "Enhancing Regional Maritime Governance and Cooperation in the Quad." The delegations enjoyed a boat ride onboard the MEP Patrol Vessel Thomas Paine from Sandwich Marina to New Bedford Harbor providing an opportunity to discuss a variety of issues relevant to marine fisheries management and enforcement, eco-tourism, and Massachusetts' diverse recreational and commercial saltwater fisheries. In attendance from DMF were Assistant Director Story Reed, Senior Policy Analyst Jared Silva, and Communications Specialist Julia Kaplan.

Division Comings and Goings

Michael Blanco joined DMF in December as a Shellfish Classification Biologist. He will plan and conduct field investigations leading to the classification of shellfish growing areas, including collection and interpretation of water quality data, shoreline surveys to identify contamination sources, and sanitary surveys in support of classification decisions. Mike graduated from the University of Rhode Island in 2018 with a B.S. in Marine Biology. He spent three seasons working with DMF's Sportfish and Habitat programs as a fisheries technician before moving over to the Shellfish program. Prior to working with DMF, he worked as a fisheries observer and a fish and wildlife technician in NY.

Ivy Guyotte began as a Permitting Clerk in the Gloucester office. Ivy previously worked as an interviewer for the MRIP program this past summer. She is SCUBA certified and has a Biology degree from Plymouth State University.

Dr. Sam Truesdell, the Division's Stock Assessment Specialist working on black sea bass, summer flounder, tautog, and scup, left in October to pursue a career opportunity with the National Marine Fisheries Service. Sam was an excellent analyst, and made major contributions on ASMFC technical committees and to the Division. His contributions will be sorely missed. Sam will be working out of the NMFS Regional Office in Gloucester and will be in charge of population assessments for several North Atlantic fish species including bluefish.

Simone Wright, DMF Shellfish Classification Area Biologist, left DMF in August 2023 to join the Cape Cod Conservation District as an infrastructure project manager. Simone worked on the shellfish classification team supporting classification of shellfish growing areas, including collection and interpretation of water quality data, shoreline surveys to identify contamination sources, and sanitary surveys in support of classification decisions. We wish Simone well and look forward to collaborating with her in the future.

Jeff Kennedy retired from DMF's Shellfish Sanitation and Management Program in July after over 40 years of public service. Jeff began his career at DMF in 1982 at the Newburyport clam depuration plant. Before long, Jeff was the north shore regional shellfish program supervisor, managing all the north shore staff and operations including shellfish growing area classification, the depuration plant and two National Shellfish Sanitation Program conforming laboratories. In addition to the many contributions he made to shellfisheries management in Massachusetts, Jeff also left his mark on the national stage at the Interstate Shellfish Sanitation Conference (ISSC), serving on many committees and task forces through the years. In fact, upon Jeff's retirement the ISSC expressed appreciation for his technical expertise coupled with sound judgement and an even keel that won the day during many intense ISSC debates. In 2020, at the height of the pandemic, Jeff took the helm to lead the Shellfish Program for the next three years. During his tenure as program leader, Jeff lead with steady guidance and graciously mentored the next generation of shellfish program leaders. Jeff will be dearly missed by the shellfish program team and all who worked with him. We wish Jeff all the best as he and his wife, Lesley, journey together into retirement and hope he gets to fill some of his newfound time with lots more Red Sox and Bruins games.

Tom Shields, Shellfish Program Policy Analyst, retired from DMF after more than seventeen years of service. Tom worked on numerous shellfish restoration and mitigation projects during his tenure, including mitigation for shellfish resources impacted by the historic B-120 oil spill in Buzzards Bay. Tom also was integral in Massachusetts hosting the Northeast Shellfish Sanitation Conference in 2019. He served as the agency's liaison to the Massachusetts Shellfish Officer's Association and organized the most recent Constable Training Course which is a multiple disciplinary training course provided every 2-3 years for new shellfish constables – and as a refresher course open to all shellfish constables. We wish Tom a long, healthy and rewarding retirement.

Staff Transitions: In March, **Anna Webb** was promoted to the Fisheries Statistics Program Leader at the Division's Gloucester office. In July, **Erin Burke** was promoted to be the Protected Species Policy Analyst at DMF's New Bedford SMAST office. In August, **Derek Perry** was promoted to Senior Fisheries Biologist at DMF's New Bedford SMAST office. In December, **Alex Boeri** started a new position with the Shellfish Sanitation and Management Program as the Aquaculture Project leader. In December, **Whitney Sargent** was promoted to Procurement Specialist at the Division's Gloucester office. Lastly, **Joseph Holbeche** started a new role in December as an Aquatic Biologist working in the Diadromous Fisheries Program.

Recent Publications

The following publications are recent articles written or co-written by DMF staff and published in scholarly journals or the DMF technical series. A full list of publications can be found at https://www.mass.gov/marine-fisheries-publications.

Annual Report

DMF published its 2022 Annual Report and it is available for viewing online at: https://www.mass.gov/doc/2022-division-of-marine-fisheries-annual-report/download

Technical Reports

John Sheppard recently published Technical Report 80 regarding River Herring Spawning and Nursery Habitat Assessment in the Acushnet River Watershed.

Gary Nelson published the Striped Bass Monitoring Report for 2022 (Technical Report 81).

Quota Outlook for 2024

The quotas described herein are subject to change. Check the Division's quota monitoring webpage for updates.

Atlantic Herring: 42.3 million pounds (Coastwide Quota)

The coastwide quota for herring is increasing for 2024 per the stock's rebuilding plan. While still well below the levels set prior to the stock's overfished determination (e.g., >200 million pounds during 2013-2017), the quota of 42.3 million pounds is roughly double that of 2023 (27.4 million pounds) and continues the upward trajectory from the quota's lowest point of 9–10 million pounds in 2021–2022. The limit was derived from the most recent stock assessment for herring (data through 2021), which indicated the stock is still overfished (21% of the biomass target) but not experiencing overfishing (very low F of 31% of the overfishing limit), and hampered by continued poor recruitment. The coastwide limit is allocated among four management areas: 28.9% to Area 1A (inshore Gulf of Maine), 4.3% to Area 1B (offshore Gulf of Maine), 27.8% to Area 2 (south of Cape Cod), and 39% to Area 3 (Georges Bank).

Atlantic Menhaden: 10,838,902 pounds (MA quota)

Massachusetts is headed into 2024 with same menhaden quota a 2023. For 2023, the state saw a near doubling of its starting quota, due to the combined effects of a roughly 20% increase in the coastwide quota plus revised state-by-state allocations being implemented that increased MA's share from 1.27% to 2.12%. The revised state shares were meant to better reflect recent menhaden distribution and fishery performance; the prior 10 years had witnessed increased resource availability in the northeast, with the states increasingly relying on quota transfers and harvest allowances outside of their quotas (i.e., bycatch and the "episodic event" quota set-aside). With the change to the states' allocations and other interstate management plan provisions in 2023, DMF made a number of changes to our quota management approach meant to temper the pace of landings. The changes that were adopted to season, open days, and trip limits were heavily based on recent fishery performance; however, the menhaden fishery is by nature episodic in the northeast and distribution can fluctuate from year-to-year. While we have enjoyed consistent and prolonged nearshore availability of menhaden in recent years, there was a shift in the temporal and spatial distribution of menhaden this past year that reduced local abundance. This was likely influenced by environmental factors, such as the significant influx of freshwater into coastal habitat due to heavy rain events during the late spring and early summer. As a consequence, landings declined in 2023, and only about 27% of the 10.82-million pound quota was taken (less than 3 million pounds harvested). This is not a reflection of the overall menhaden stock status, which remains highly abundant. For 2024 and under the same quota, DMF is considering adding more flexibility into the management approach to allow the fleet to catch the quota under a wider range of stock dynamics.

Black Sea Bass: To Be Determined (MA quota)

Massachusetts' baseline commercial quota for black sea bass is increasing by 25% or about 185,000 pounds for 2024—from 741,071 pounds to 926,338 pounds; however, part of this increase may be unavailable due to a state quota overage in 2023. The full coastwide accounting for 2023 is still in progress, but were MA's full 2023 overage to be paid back in 2024, this would still result in a roughly 15% quota increase for 2024. The baseline quota increase reflects a 25% increase in the coastwide commercial quota. While the overall catch limit is equal to 2023, the projection for commercial discards in 2024 declined (based on recent trends), causing an increase in the harvestable portion of the commercial catch limit (i.e., the quota). The state-by-state quota allocation formula is influenced by stock distribution. At present, MA's share of the coastwide quota is 15.4% (up from the original 13%). Massachusetts' 2023 black sea bass fishery closed in mid-September. If catch rates are similar in 2024, the increased quota will provide additional access for the fishery into the early fall without any additional rule changes (hence none are being proposed).

Bluefish: 198,205 pounds (MA quota)

The Massachusetts bluefish fishery will see a 40% decline in its quota for 2024. This is on account of a 43% decline in the coastwide quota. MA's percent reduction is slightly less due to the ongoing 7-year phase-in of revised state-by-state allocations in which our state's quota is increasing from the historical share of 6.71% to 10.12% based on the incorporation of more recent years' landings into the allocation formula. We are in year three of the transition, putting our state share at 8.17%. The reduction in the coastwide quota results from the most recent stock assessment, which included revised data and methods, and caused the overall estimates of stock biomass to decline significantly. The biomass-based refence points were also adjusted down though, and the stock is on an increasing trend since being declared overfished in 2019. Biomass is now above the threshold, but the fishery will remain in its rebuilding plan until achieving the biomass target. MA's 2023 bluefish fishery landed about 309,000 pounds of its 329,578-pound quota (94% quota utilization). The 2024 fishery may face an early closure with the reduction in the quota, depending on fish availability in 2024, fishing effort, and the potential for quota transfers from other states.

Horseshoe Crab: 140,000 bait crabs and 200,000 biomedical crabs (MA quotas)
Beginning in 2023 and continuing into 2024, Massachusetts' long-standing commercial quota for horseshoe crabs harvested for bait purposes was reduced from 165,000 crabs to 140,000 crabs and the state's first-ever commercial quota for horseshoe crabs harvested for biomedical purposes was set at 200,000 crabs. Placing a cap on biomedical harvest recognized the importance of limulus amebocyte lysate production for human health and safety while also eliminating the potential for uncontrolled growth in this sector which could negatively impact the resource moving forward. The specific biomedical quota was set slightly above 2022 harvest levels, which was offset by the reduction in the bait crab quota. Crabs harvested under the bait quota may be borrowed from bait dealers for bleeding by biomedical firms prior to sale to bait users, whereas crabs harvested under the biomedical quota are returned to the ocean immediately after bleeding by a biomedical firm. In 2023, the bait quota was taken earlier than usual and the fishery closed in early August; the biomedical fishery was expected to harvest its quota by year's end.

Scup: 1,778,071 pounds (MA Summer Period quota)
At 21.15 million pounds, the 2024 coastwide commercial scup quota is rebounding to prior year levels following the dip to 14.01 million pounds in 2023. A new stock assessment indicating the stock remains at 2.5 times its target informed the setting of this quota. The seasonal and state-specific quotas are likewise increasing 51%. The Winter I (January–April) and Winter II (October–December) Periods, which are open to all states at federally set trip limits, receive 45.11% and 15.94% of the quota, respectively; this equates to 9.54 and 3.37 million pounds for 2023. The Summer Period fishery (May–September) receives 38.95% of the coastwide quota (8.23 million pounds for 2023), which is further distributed into state shares, with Massachusetts receiving 21.6%. No aspect of the commercial fishery is expected to be constrained by these quotas. For example, the 2023 Summer Period fishery is Massachusetts landed only about 550,000 pounds of scup. Public and private efforts are trying to increase market demand for this ample, yet underutilized, species.

Spiny Dogfish: To Be Determined (ME–CT Regional Quota)
The spiny dogfish fishery operates on a May 1–April 30 fishing year, and at this time, only one of the three management bodies that jointly manages this species has met to set the quota for the fishing year beginning May 1, 2024 (FY2024). In December, the Mid-Atlantic Council voted for a 10.7-million pound quota, down from 12.0 million pounds for FY2023; the New England Council and ASMFC meet in early 2024, after which time the quota will be finalized. The setting of the FY2024 quota is being informed by a new stock assessment for spiny dogfish completed this year, which includes significant data and modeling improvements from the prior assessment approach. The assessment concludes that biomass is near an all-time low, yet still slightly above a revised target level which takes into account the stock's reduced productivity (as driven by slower growth and less large females in the population). Some states' fisheries may face early closures in FY2024 under the pending quota cut, and there is industry concern about the fishery becoming economically unviable following repeated quota reductions. The Northern Region of which Massachusetts is part shares a 58% quota allocation.

Striped Bass: To Be Determined (MA quota)
A coastwide quota reduction is possible for the commercial striped bass fishery in 2024 under the interstate management plan. Draft Addendum II, for which two public hearings were held in Massachusetts in December 2023, proposes up to a 14.5% quota reduction to contribute (alongside restricted recreational measures) to lowering the overall fishing mortality rate to its target level and aid in stock rebuilding. A 14.5% reduction would lower MA's quota from 735,240 pounds to 628,630 pounds. The ASMFC Striped Bass Management Board meets in late January 2024 to take final action on the addendum. While the last stock assessment showed that the existing management measures through 2021 were very likely to achieve stock rebuilding by the 2029 deadline, new projections—which the addendum is responding to—indicate additional restrictions are needed to stay on track. DMF will consider amendments to commercial fishing regulations (e.g., number of open days per week) in response to the anticipated quota reduction and recent fishery performance. The past two seasons have concluded with fishery closures in early August. On the plus side, there was not a quota overage in 2023 to account for in 2024.

Summer Flounder: 599,507 (MA quota)
Massachusetts' 2024 state quota for summer flounder is subject to a substantial 56% quota reduction. This reduction is the result of a 42% cut in the coastwide quota plus a reduced share of that quota for Massachusetts. The 2023 management track assessment indicated that the summer flounder stock, while not overfished, was experiencing overfishing in 2022. While the catch limits have not been exceeded in recent years, it appears the projections associated with the previous assessment were overly optimistic (causing the overfishing). The prior assessment overestimated stock biomass, which is also now trending downward given that the 2018 year class was much smaller than initially estimated and recruitment has been below average since 2011. With the coastwide quota being cut to 8.79 million pounds, Massachusetts' allocation reverts to its historical share of 6.82% rather than the 8–9% received since the allocation formula was changed in 2021 amidst higher quota levels. Amendment 21 established equal allocations of 12.375% for any coastwide quota above 9.55 million pounds (quota below this amount remains allocated based on 1980-1989 landings, or 6.82% for MA). While greatly reduced from the state's 2023 quota of roughly 1.36 million pounds, the impact on industry is not expected to be proportional due to recent quota underages. DMF will be proposing minor reductions to the trip limits for 2024 at public hearings this winter should there be industry input to slow quota consumption.

Tautog: 60,868 pounds (MA quota)
Massachusetts' 2024 tautog quota will be slightly higher than in 2023 due to there being less of a prior-year quota overage to account for. The state's baseline quota of 64,753 pounds has remained unchanged since 2008, but minor fluctuations in the effective quota are common. The combination of small quota, many fishery participants, variable weather conditions, and pot gear that needs time to be brought in, make for challenges with closing the fishery precisely upon full quota use. The 2023 quota of 55,541 pounds (after accounting for a 2022 quota overage) sustained the fishery from its opening on September 1 through October 13, several weeks shorter than typical, and the landings came in about 7% over quota. The next stock assessment for tautog, which could alter MA's baseline quota, is scheduled for 2025.

Regulatory Updates

Below find the changes made to DMF fishing rules by regulation, emergency action, and in-season adjustment from July 1, 2023 through December 31, 2023. Regulatory changes follow an extensive public process and remain in effect permanently unless otherwise amended; emergency actions go into effect immediately upon adoption and without any public process, remain in effect for a period of 90-days, and may be adopted on a more permanent basis following the public process; and in-season adjustments goes into effect immediately upon adoption, requires a truncated public process, and allows DMF to timely respond to quota availability or use in-season and only affect that calendar year.

Commercial Horseshoe Crab Rules (322 CMR 6.34). For 2023, DMF capped total commercial harvest and mortality by the commercial horseshoe crab fishery. This was accomplished through the adoption of the first-ever biomedical quota, which was set at 200,000 horseshoe crabs annually to be divided evenly among active biomedical processors, and by reducing the bait quota by 25,000 horseshoe crabs from 165,000 horseshoe crabs to 140,000 annually. DMF also enacted several measures to enhance the transparency of the biomedical fishery management program. This included establishing the best management practices adopted by the Atlantic States Marine Fisheries Commission as regulation, and for 2024, creating new permit categories specific to biomedical harvesters, dealers, and processors. Lastly, DMF implemented an in-season adjustment affecting the trip limits in the 2023 horseshoe crab bait fishery to slow quota consumption, delay an early season quota closure, and reduce regulatory discarding in mixed species mobile gear fisheries. Effective July 11, 2023 until the fishery was closed on August 6, 2023, this in-season adjustment reduced the limited access horseshoe crab trip limit for mobile gear from 300 crabs to 200 crabs and the open access trip limit from 75 crabs to 50 crabs.

Commercial Smooth Dogfish Limit (322 CMR 6.37). To enhance the utilization of the state's 2023 smooth dogfish quota, DMF increased the daily trip limit from 100 pounds to 300 pounds through an in-season adjustment in July 2023. DMF intends to review the performance of the 2023 fishery to determine if it is appropriately to adopt this trip limit increase by regulation moving forward.

Commercial Period I Summer Flounder Limit (322 CMR 6.22). For 2024, DMF reduced the Period I (January 1 – April 22) summer flounder trip limit by 50% from 10,000 pounds to 5,000 pounds through an in-season adjustment. This responds to an anticipated 56% reduction in the summer flounder quota for 2024 compared to 2023. For 2025, Massachusetts is expected to receive a similar quota to 2024 and will consider adopting this 5,000-pound trip limit by regulation.

Commercial Period II Sumer Flounder Limits (322 CMR 6.22). In July 2023, DMF made several regulatory adjustments to it commercial summer flounder rules. This includes increasing the April 23 – August 31 trip limit from 500 pounds to 600 pounds for net fishers and 300 pounds to 400 pounds for hook fishers; increasing the October 1 – December 31 trip limit from 3,000 pounds to 10,000 pounds if more than 5% of the annual quota remains on October 1; lengthens the so-called "landing window" when vessels are allowed to possess and land summer flounder from 6AM to 8PM to 6AM to 10PM; and revises the small-mesh trip limit language to clarify that only vessels fishing with small mesh are subject to the 100 pound incidental catch limit.

Recreational Cod and Haddock Limits (322 CMR 6.03). In mid-August 2023, NOAA Fisheries implemented its recreational fishing limits for Gulf of Maine cod and haddock and Georges Bank cod for the 2023 Fishing Year (May 1 – April 30). DMF complemented these limits through an emergency action in mid-September and later adopted them as final regulations. For Gulf of Maine cod, the April 1 – April 14 season was eliminated in favor of extending the fall season from September 1 – October 7 to September 1 – October 31; the 1-fish bag limit and 22" minimum size were maintained. For Georges Bank cod, the open season was shifted by one month from August 1 – April 30 to September 1 – May 31 and the 22" to 28" slot limit was eliminated in favor of a 23" minimum size; the 5-fish bag limit was maintained. For Gulf of Maine haddock, a split mode management approach was adopted providing disparate rules for private anglers as compared to anglers on for-hire vessels. For private anglers, the bag limit was reduced from 20-fish to 10-fish and the April 1 – February 28 open season and 17" minimum size were maintained. For for-hire anglers, the bag limit was reduced from 20-fish to 15-fish and the minimum size was increased from 17" to 18"; the open season of April 1 – February 28 was maintained.

Adjudicatory Proceedings

Under state law, DMF may sanction commercial and recreational fishing permits for violations of the state's marine fishery laws and regulations subject to a due process adjudicatory proceeding. These adjudicatory proceedings are held before a magistrate. They may be initiated by the agency, the Environmental Police, or municipal officials (constables) authorized to enforce the marine fishery laws of the Commonwealth.

During the period of July 1, 2023 through present, DMF initiated three new adjudicatory proceedings. These matters involve lobster trap limit violations; the commercial harvest of contaminated shellfish and shellfish tagging violations; and the unlawful sale and misreporting of shellfish. All three matters resulted in the immediate suspension of the individuals' commercial fishing permit. The matter regarding the commercial harvest of contaminated shellfish and shellfish tagging violations has been resolved through a settlement agreement resulting in a suspension of the individuals shellfish permit and transaction card through December 31, 2024. The other two matters remain ongoing.

DMF also resolved one matter that was previously initiated involving menhaden overages during the 2022 fishing year and intentional misreporting. This matter was resolved through a settlement agreement with the respondent agreeing to forfeit their retail boat permit, transfer out of the menhaden fishery, and not apply for menhaden endorsement or participate in Massachusetts menhaden fishery again.

Want to Stay Connected?

To subscribe to the new DMF emails visit www.mass.gov/marinefisheries and click on the link to subscribe.

DMF News

Editors: Julia Kaplan
Nichola Meserve
Maura T. Healey, *Governor*
Rebecca L. Tepper, *Secretary*, EEA
Thomas K. O'Shea, *Commissioner*, DFG
Daniel J. McKiernan, *Director*, DMF

@MAMarineFisheries

@MassDMF

@MassMarineFisheries

@MassMarineFisheries

www.mass.gov/marinefisheries