

MARINE FISHERIES ADVISORY COMMISSION

May 9, 2019

DFW Headquarters

Westborough, MA

In attendance:

Marine Fisheries Advisory Commission: Raymond Kane, Chairman; Michael Pierdinock, Vice-Chairman; William Doyle, Clerk; Lou Williams; Arthur “Sooky” Sawyer; Charles Quinn, Tim Brady and Kalil Boghdan.

Division of Marine Fisheries: David Pierce, Director; Daniel McKiernan, Deputy Director; Michael Armstrong, Assistant Director; Kevin Creighton, CFO; Jared Silva; Nichola Meserve, Melanie Griffin, Story Reed, Micah Dean and Cate O’Keefe.

Department of Fish and Game: Ron Amidon, Commissioner.

Massachusetts Environmental Police: Lt. James Cullen.

Members of the Public: Bill Amaru.

INTRODUCTIONS AND ANNOUNCEMENTS

Chairman Kane called the May 2019 Marine Fisheries Advisory Commission (MFAC) business meeting to order and thanked commission members for their attendance. The Chairman also welcomed Bill Amaru to the meeting. Bill previously served on the New England Fishery Management Council (NEFMC).

REVIEW AND APPROVAL OF MAY 9, 2019 BUSINESS MEETING AGENDA

Chairman Kane asked if there were any amendments to the May 9, 2019 MFAC business meeting agenda. No amendments were offered. The Chairman then asked for a motion to approve the agenda.

Sooky Sawyer made a motion to approve the agenda. The motion was seconded by Charlie Quinn. The Chairman called the motion to a vote. **The motion was approved unanimously.**

REVIEW AND APPROVAL OF MARCH 14, 2019 DRAFT BUSINESS MEETING MINUTES

Chairman Kane asked if there were any amendments to the March 14, 2019 MFAC draft business meeting minutes. Mike Pierdinock stated that the summary of his comment on page 7 regarding the efficacy of circle hooks across various fisheries was confusing and asked for it to be clarified.

Sooky Sawyer made a motion to approve draft minutes with the edits requested by Mike Pierdinock. Bill Doyle seconded the motion. The Chairman called the motion to a vote. **The motion was approved unanimously.**

COMMISSIONER'S COMMENTS

Commissioner Ron Amidon also welcomed Bill Amaru to the May 2019 MFAC business meeting.

The Commissioner's comments focused on two items. First, the state's FY2020 state budget was being drafted. DFG was working to secure funding for its agencies and he was optimistic regarding its prospects. Second, the Commissioner reported on upcoming events, including a May 14th celebration of work to improve fish passage on the Mystic River and DFG's State House Day on May 22nd. Commissioner Amidon invited the MFAC to attend these events.

DIRECTOR'S COMMENTS

Director Pierce provided a brief presentation on DMF's ongoing fish passage work. The presentation focused on the Town Brook, Forge Pond Dam and Pilgrim Lake projects. He noted that Governor Baker attended the event celebrating the work at Town Brook.

Matt Beaton resigned his post as Secretary of Energy and Environmental Affairs (EEA) to take an employment opportunity in the private sector. Kathleen Theoharides was appointed as the new EEA Secretary. She had previously worked for under secretary at EEA on climate and energy policy. Director Pierce and Commissioner Amidon would be working to bring her up to speed on the various fishing related issues.

Recent aerial surveys conducted by the Provincetown Center for Coastal Studies (CCS) demonstrated that right whales remain aggregated in the waters of Cape Cod Bay. Accordingly, DMF extended its seasonal trap gear closure and speed limit through May 14th. DMF would continue to monitor the results of CCS' surveys to determine if the duration of the closure should be further adjusted in response to the presence or absence of whales. South shore lobstermen were currently holding a rally in Plymouth in opposition to the trap gear closure extension.

In conclusion, Director Pierce stated he and his senior staff had attended a series of recent meetings. This included meetings of DMF's Shellfish Advisory Panel and Seafood Marketing Steering Committee, the Massachusetts Shellfish Initiative, and the Northwest Atlantic Seal Research Consortium.

Bill Doyle applauded DMF and DFG's work on fish passage and riverways restoration. Bill then brought up a construction project in Plymouth and fish passage issue that it created. Bill was interested into the state's involvement in the project. Director Pierce could not comment offhand, but stated that he would bring this issue to his staff's

attention. Commissioner Amidon indicated that Bill should address this with town officials and provided him with the municipal contact.

LAW ENFORCEMENT COMMENTS

Lt. James Cullen stated that he did not have a comprehensive law enforcement report for the MFAC and that marine fisheries enforcement issues were limited at this time.

Lt. Cullen did raise recent complaints from charter and head boat captains regarding patrons using marijuana on their vessel. Given the uneven legality of marijuana across state and federal jurisdictions, captains were concerned that the use and possession of marijuana on these vessels may impact the standing of their USCG captain's license, as well as their state and federal fishing permits. Lt. Cullen was hoping that the Criminal Justice Training Council would be able to provide some guidance on this issue, but speculated that it likely requires case law to settle issues.

There was further discussion of this issue among Mike Pierdinock, Tim Brady, Lt. Cullen and Commissioner Amidon. Chairman Kane noted that this was a criminal law enforcement issue and not in the immediate purview of the MFAC and suggested that this be taken up outside of the business meeting.

Lt. Cullen then provided a presentation on MEP's hiring process, mission and personnel situation.

The hiring process is lengthy and expensive, as it requires background checks, police training and civil service exams. It takes up to one-year for an officer to enter the force and the associated costs are over \$25,000 to the agency. This \$25,000 figure does not include officer's cruiser, salary or benefits.

In 2018, MEP began the process to hire 12 new officers. Initially, 11 officers were hired, but two subsequently dropped out of the police academy. As a result, they have nine officers working their way into the field and three positions left to fill. Additionally, they anticipate four retirements before the end of the year and are hopeful to begin to backfill these positions.

MEP is tasked with working as enforcement agents for DMF, DFG, DCR, DEP, USCG, NOAA and the OHV Advisory Board. Additionally, they have to address calls from the public. At present, there are 68 MEP officers of which 62 are active. Of these 68 officers, 32 are assigned to the coastal bureau and 29 of the 32 coastal officers are active. The active officers are then divided over the six coastal regions. Accordingly, their personnel are spread thin, there is not an officer on duty around the clock in each region, and officers cannot always immediately respond to calls.

Mike Armstrong asked when the last time the agency had adequate staffing. Lt. Cullen stated that he came on in 1998 and there were 140 officers, not including command staff. Over the past 20-years, the field staff was cut by over 50% and the agency has

been forced to take on more missions. Mike Armstrong noted that MEP were embedded in DFG in 1998.

Mike P. asked if it would be possible to deputize officers to provide seasonal assistance. Lt. Cullen stated that this would be logistically impossible. Mike P. then asked what else could be done to ensure MEP had an adequate funding and personnel.

Commissioner Amidon stated that he continues to work with EEA on this issue. He was advocating that EEA increase MEP's budget to allow them to hire 10-12 new officers per year until their ranks are re-staffed at appropriate levels. Ron felt this would allow them to bring on an adequate number of new hires while minimizing the burden of the hiring process on the agency. The Commissioner also advocated for MFAC members and other stakeholders to state their concerns to EEA, as well as their legislators.

After this past year, Lt. Cullen personally felt that bringing on 12 new officers at one time was too much of an administrative burden on those officers involved in the hiring process. Instead, he preferred consistently bringing along a smaller number of new officers.

Kalil Boghdan stated the MFAC and DMF were consistently advocating for budget increases for MEP. However, MEP's duties extend beyond marine fisheries enforcement and that the various stakeholders needed to collectively address increase the MEP ranks.

ACTION ITEM

Sea Herring Effort Controls

Director Pierce stated that the ASMFC Sea Herring's Section recently approved effort controls for the June - September directed sea herring fishery in Management Area 1A (inshore Gulf of Maine). The measures close the fishery from June 1 – July 14 and then from July 15 – September 30 directed fishing for herring is allowed with catch limits based on permit type. Category A federal permit holders may fish and land sea herring Monday – Thursday with a 160,000 pound (4 truck) weekly limit. Category C federal permit holders may fish and land sea herring Monday – Thursday with a 55,000 pound trip limit. Category D federal permit holders may fish and land sea herring Monday – Thursday with a 6,600 pound trip limit. State-only permit holders may land sea herring Monday – Thursday with a 2,000 pound trip limit.

The Director recommended the MFAC approve his use of declaratory authority to implement these ASMFC approved effort controls. This would involve the Director closing the Area 1A fishery to all commercial fishing from June 1 – September with an exception for permit holders who applied for and received a Letter of Authorization (LOA). These LOAs would establish the approved effort controls through permit conditions based on permit type. If the ASMFC made in-season adjustments to these controls, the Director would then issue subsequent LOAs to implement the new measures.

Sooky Sawyer pointed out that Category C vessels had a 55,000 pound trip limit and could potentially land an aggregate of 220,000 pounds of sea herring per week with four open fishing days. Accordingly, their aggregate weekly limit was higher than the 160,000 pound weekly limit afforded to Category A vessels. He was curious if this was intentional.

Cate O’Keefe explained that the 55,000 pound limit was the federal regulatory limit for these vessels. However, while the aggregate weekly trip limit for Category C vessels is larger than Category A vessels these vessels have typically landed only a small quantities of fish during the June – September fishery. If the high demand for bait encourages greater participation from Category C vessels this year and results in higher than anticipated landings, then this may need to be addressed.

Mike Pierdinock asked how management of the Area 1A fishery evolved over time. Cate explained that prior to 2017 the fishery was managed by no landing days (“days-out”). With the quota reduction in recent years, days-out were replaced by closed fishing days and trip limits.

Mike P. noted the importance of herring as forage for Atlantic bluefin tuna and hoped that adequate bait would remain in the water for the fall tuna run. Cate explained that the current quota figures integrate some eco-system management controls to address forage availability. Director Pierce suggested that even with these effort controls in place, it was likely the quota will be exhausted and the fishery closed by the fall, thereby limiting the conflict between the tuna fishery and the herring fishery.

Chairman Kane called for a motion. **Bill Doyle made a motion to adopt the Director’s recommendation as provided in the memorandum. The motion was seconded by Tim Brady.** No further comments were made. The Chairman called the motion to a vote. **The motion passed unanimously.**

DISCUSSION ITEMS

Review of Recent NEFMC Meeting

Director Pierce briefly reviewed the April NEFMC meeting. He stated that the focus of the meeting was on sea herring and groundfish management, wind energy development, right whale protections and research priorities.

Mike Pierdinock asked if the wind energy development discussions focused only on Vineyard Wind, or other Wind Energy Areas as well. Cate O’Keefe stated that the discussion focused on wind energy development coast-wide. Mike P. then asked if there was any discussion regarding the transit routes that the USCG released for public comment. Cate stated that the NEFMC met before the USCG released these routes for public comment. However, the USCG did discuss the transit routes with the NEFMC. She expected the USCG would provide a report on this issue in the near future.

Melanie Griffin mentioned that the ongoing NEFMC public listening sessions on potentially limiting access to the for-hire northeast multi-species groundfish fishery. The last of the listening sessions was scheduled for May 9th in Gloucester. Ray Kane stated that the listening session in Chatham was poorly attended and Mike P. added that attendance was low at these meetings coast-wide.

Director Pierce informed the MFAC that cod stock structure working group would hold a symposium on June 6th. He informed MFAC members to contact Melanie Griffin if they were interested in attending.

Review of Recent ASMFC Meeting

Director Pierce indicated that staff would review the ASMFC's 2019 spring meeting summary and would discuss those board meetings of interest to MA.

American Lobster Management Board

Deputy Director Dan McKiernan stated that the board approved a control date to potentially restrict the ramping up of fishing effort in LMA1 (Gulf of Maine). This was necessary given the mandate to reduce vertical lines to reduce the risk of lobster trap gear entangling right whales.

Dan then reviewed a presentation provided by the NMFS' Large Whale Take Reduction Team (TRT) to the board on the mandatory vertical line reductions. The TRT's objective was to develop consensus recommendations on a suite of measures to achieve a 60-80% reduction in mortalities and injuries to right whales in US fisheries. DMF had been hesitant to move forward with sweeping changes to how the lobster fishery is conducted without having any tools or reference points to adequately define and determine success. In response, a relative risk reduction tool was developed by the TRT to grade proposals and their likelihood of achieving entanglement risk reduction objectives.

Dan then reviewed the TRT's proposed suite of management measures. NMFS would begin rule making later this spring. He noted that Massachusetts received credit towards risk reduction for its existing seasonal trap gear closure in Cape Cod Bay.

He then highlighted some emerging issues in response to these proposals. First, there was a desire to see common rules across jurisdictions to prevent fishermen Maine, New Hampshire and Massachusetts fishing side-by-side under different rules in federal waters (e.g., Jeffery's Ledge). Additionally, there was a need to consider exemptions for inshore skiff fisheries, revisit weak links, and address how states monitor the number of endlines fished.

Sooky Sawyer anticipated that there would end up being several options to achieve 1,700 pound breaking strength line and he felt some of these options would be insufficient. If they proved to be insufficient, he was concerned about where management would end up. He noted that the April TRT meeting was already highly contentious with ENGOs and the industry at odds over potential management actions, including ENGOs pressing pushing for no vertical buoy line fishing ("ropeless") fishing.

Industry objected to the implementation of ropeless gear for a number of logistical reasons including gear conflicts, ocean zoning, and the efficacy and cost of the technology. Sooky also applauded DMF biologist Bob Glenn for his work at the TRT meeting.

Dan McKiernan indicated that DMF may have to strike the state's maximum trawl length rule to accommodate longer trawls if fishermen are required to increase the number of pots per trawl that they fish. Sooky and Lou did not think this would be necessary; both thought that most 20 pot trawls are only a quarter of a mile long and would not double in size by adding 5-10 new pots per trawl.

Mike P. asked if these forthcoming TRT rules would apply only in New England. Dan stated that they would apply to the LCMAs from Rhode Island north and east.

Mike P. then asked about how interactions between fishing gear and right whales were being addressed in Canada. Dan stated that there would be a US-Canadian summit this summer to further address the issue. However, Canada had taken an aggressive approach to protecting right whales, including fixed gear closures. Sooky was concerned about the amount of risk being attributed to US fisheries, as opposed to Canadian fisheries.

Atlantic Sea Herring Management Board

Director Pierce stated that the board approved Addendum II to the Sea Herring FMP. This addendum providing additional spawning protections in Area 1A by reducing the trigger for the spawning closures for the Eastern Gulf of Maine and MA/NH spawning closures.

Lou Williams asked about the status of the federal herring closure east of Cape Cod. David stated that NMFS had not yet implemented a final rule. Ray Kane added that the NEFMC approved this closure in September 2018.

Atlantic Striped Bass Management Board

Dr. Mike Armstrong reviewed the findings of the most recent stock assessment that found striped bass to be overfished with overfishing occurring. The ASMFC was now tasked with reducing fishing mortality by 17% within a year. This would be accomplished through an addendum to the FMP. He expected a draft addendum to be approved at the August meeting, the ASMFC to hold public hearings on the draft addendum in September, and then the final addendum to be approved at the October meeting. Once approved, states would have several months to adopt implementing regulations for the 2020 calendar year.

To draft the addendum the board tasked the Plan Development Team (PDT) with analyzing several management options. This includes raising the coast-wide recreational minimum size from 28" up to 35" and the Chesapeake Bay minimum size from 19" up to 22"; implementing a recreational maximum size of 40"; allowing the use

of recreational seasonal closures as conservation equivalencies; mandating the use of circle hooks in all sectors; and reducing commercial quotas.

Discussions regarding how to reduce the commercial quota were proving to be complicated. A direct cut of 17% to the coast-wide quota would not achieve a 17% reduction in fishing mortality because only a minority of states land their entire quota. Therefore, quota cuts may need to be deeper to achieve a 17% reduction, particularly for a state like Massachusetts that typically lands its commercial quota. Mike A. opined that such an approach would be politically difficult to achieve, particularly given the fact that recreational fishing mortality was the major factor attributable to the current status of the stock. Accordingly, the PDT was considering a number of different methods for reducing the commercial quota. This included an option to reduce the quota proportionally based on historic removals, resulting in the recreational fishery bearing a more significant conservation burden. This approach presented its own challenges as well, given the recreational fishery is growing towards a point where discard mortality will reach or exceed the fishing mortality target for the stock.

In order to expedite the development of the addendum to decrease fishing mortality, the board chose not to begin the process of developing an Amendment to increase spawning stock biomass. He expected the process of developing this amendment would begin in late 2019 for implementation as soon as 2021.

Ray Kane noted that there was some concern about the ability of the board to implement the addendum on a timeline that would allow the southern states to change their regulations for the start of their fishery during the winter of 2020. Mike A. agreed that this was a challenge. However, he was optimistic that the addendum would move quickly in response to the stock assessment.

Ray also expressed concerns about increasing the minimum size as a means to reduce fishing mortality. In particular, he worried this may increase fishing mortality in the Chesapeake Bay states during their summer fisheries when their release mortality rate is thought to be higher than the accepted 9% value. Mike A. stated that the recreational fishery was already predominantly a catch and release fishery. As a result, an increase to the minimum size may reduce harvest mortality by a substantial number, while not contributing substantially to the overall number of fish released.

Mike P. did not support seasonal closures because they would not curtail catch and release fishing and would be difficult to enforce without limiting the ability to fish for other species (e.g., bluefish). Instead he thought there needed to be a concerted focus on improving how anglers fish for, handle and release striped bass. Mike P. added that On the Water just released a great video on the handling and release of fish.

Mike A. agreed with Mike P. regarding the need to improve how anglers interact with the fish. However, Mike A. added that it was difficult for assessment scientists to quantify the impacts of terminal tackle, handling and release on fishing mortality. Mike A. opined

that there needed to be a shift in how anglers pursued the fishery and a greater focus on limiting the overall catch of the species.

Mike A. added that DMF was considering producing a “how to handle and release striped bass” video for educational purposes. However, he was impressed with the On the Water video and rather than produce duplicate work DMF may instead choose to publicize their video. DMF also intended to conduct release mortality studies to improve the data used in assessing the impacts of terminal tackle and fish handling on survival.

The board also sent a letter to the National Marine Fisheries Service in opposition to a federal proposal to open an area of the EEZ off Long Island to striped bass fishing. The board opposed this proposal due to the status of the stock, the need to reduce fishing mortality, and the prevalence of large breeding fish in this area.

Summer Flounder, Scup and Black Sea Bass Management Board

Nichola Meserve stated that the board dealt almost exclusively with potential strategies for reallocating the black sea bass quota in response to changing geographic distribution of the stock. The board decided to not move forward the auctioned seasonal quota approach and to continue developing the quota-trigger and dynamic resource distribution approaches. Nichola expected the board would debate initiating an addendum or amendment at the next meeting in August.

She stated that, as expected, reallocation was proving to be challenging with a geographic divide of opinion. The southern states would likely prefer a trigger-based approach similar to what was approved for fluke. Under this approach, the coast-wide quota would need to reach a certain level, and only quota above this level would be allocated differently. Nichola noted that if the quota above the trigger could be reallocated in a manner reflective of stock redistribution as recommended by the PDT that would at least be better than the outcome for fluke (which provides equal shares to all non-de minimis states). The northern states preferred the dynamic approach, which would transition away from allocation based solely on historical landings to also factoring in stock redistribution, in a controlled, science-based fashion.

Director Pierce expected that the MAFMC would likely succeed in having black sea bass reallocated using a trigger-based approach.

Nichola stated that the full ASMFC also reviewed the joint Summer Flounder Commercial Issues Amendment passed by the board and MAFMC in March. If approved by NOAA Fisheries, this amendment would reallocate the commercial fluke quota using a trigger-based approach. DMF supported remanding the amendment back to the ASMFC to consider the development of a dynamic resource distribution-based approach to quota reallocation. However, this motion failed and a motion to approve the Amendment as provided passed. Key to the outcome was NMFS’ input that it would likely implement the amendment for federal waters regardless of what ASMFC did resulting in complications for state vs. federal quota closure management. Nichola noted that regardless of the outcome, the overall fluke quota was increased by about

80% for 2019 affording MA fishermen more access to the resource, and additional quota once the amendment is implemented (likely for 2021).

Chairman Kane and Director Pierce further discussed the internal politics of the ASMFC's vote, including the role of NMFS in garnering support for the MAFMC approved amendment.

Lastly, Nichola stated that the board would also be looking into how to address recreational discarding of black sea bass in the inshore fishery compared to the offshore fishery given the difference in water depth and hence discard mortality where these fisheries occur. She credited Ray with keeping this issue at the forefront.

Review of South Coast Head Boat Meeting

Deputy Director McKiernan reminded the MFAC that this past winter DMF brought to public hearing several proposals to adopt uniform angler compliance measures on head boats participating in the springtime black sea bass and scup fishery. The head boat industry found the proposals onerous and did not support them. Based on feedback from industry, DMF instead chose to meet with the black sea bass and scup head boat fleet to discuss angler compliance and other issues germane to the fishery.

DMF held this meeting on April 12, 2019 at its New Bedford field office. The meeting was well attended and focused on angler compliance with fishing limits and cooperation with MRIP samplers. Based on the discussion, DMF was optimistic that there would be positive changes in these areas.

For several reasons, head boat operators felt that non-compliance was less of an issue on their boats and more of an issue on charter boats. They advocated for DMF and MEP to focus more on compliance in the charter boat industry. Dan noted that DMF intended to hold similar meetings with the charter boat industry, particularly given the level of non-cooperation with MRIP samplers.

Wind Energy Development Update

Director Pierce informed the MFAC that he had been working with and advising EEA on the fisheries issues related to wind energy development. Relying on Rhode Island's experience and working with the Responsible Offshore Development Alliance, DMF and EEA developed a fisheries economic mitigation package for Vineyard Wind and developed research priorities. Vineyard Wind informally vetted the mitigation package and it would be presented to the Fisheries Working Group on May 16. The Director was optimistic that the mitigation package would be approved. Then the challenge becomes how to administer the funding.

Commissioner Amidon applauded David for taking a lead role on this issue and working with the various players involved to develop a cohesive approach to addressing Vineyard Wind and fisheries mitigation.

Review of Recent Shellfish Management Meetings

Dan McKiernan reviewed the recent meetings of the Shellfish Advisory Panel (SAP) and the Massachusetts Shellfish Initiative (MSI). Dan stated that many shellfish interests have been historically underrepresented and poorly organized and the SAP was formed in 2014 to enhance communication between government and stakeholders, and to provide an ad-hoc organization for stakeholders to address a multitude of shellfish issues. Typically, DMF would convene the SAP for bi-annual meetings. However, the SAP did not meet in 2018 because it appeared that the MSI was assuming many of the responsibilities that DMF gave to the SAP on an ad-hoc basis. Yet, the MSI was slow to gain traction and there was a lot of distrust among unaffiliated shellfish fishermen regarding its purpose and membership. In response to these concerns, DMF reconvened the SAP on May 6th for its first meeting since 2017. The SAP discussed shellfish aquaculture, Vp management, shellfish sanitation and received a presentation on the MSI.

The MSI is similar to initiatives started in other coastal states. It was founded in order to take a holistic approach to analyzing the various aspects of the state's shellfish fisheries and the challenges they face in order to describe problems and suggest potential solutions. While its purpose was reasonable, there was a lot of distrust towards the group, in part due to a lack of progress that was misconstrued as a lack of transparency.

Deputy Director McKiernan has since stepped up to serve as Chair of the MSI Task Force. The Task Force met in April in Duxbury; the meeting minutes were shared with the MFAC and are publically available. At the April meeting, the MSI Assessment Committee was tasked with drafting a white paper on the various shellfish resources and fisheries in Massachusetts. The Scoping Committee would then follow-up and hold regional meetings to identify and discuss various pertinent issues. The white paper and scoping meetings would be used to inform the development of the MSI's Strategic Plan. Former State Senator Rob O'Leary will chair the Scoping Committee and help develop the strategic plan. Dan felt very positive about Sen. O'Leary's involvement.

Bill Doyle thanked Dan for getting the MSI back on track. He stated that the initial response to and speculation about the MSI was probably the best case of bad boat yard talk he had ever witnessed. Bill then discussed the recent SAP meeting. Bill stated that he would like to have DPH and MEP attend future SAP meetings. Bill was also concerned about representation on the ISSC once DMF's Senior Shellfish Biologist Mike Hickey retired.

PRESENTATION ON RECREATIONAL COD AVOIDANCE

DMF biologist Micah Dean provided the MFAC with a presentation regarding ongoing research to assist recreational fishermen in avoiding cod when fishing for haddock. While cod were at record low levels of abundance, haddock were at record high levels. Accordingly, cod bycatch and discards in the recreational haddock fishery was a leading limiting factor in providing recreational fishermen with greater access to this abundant

haddock resource. To address this, DMF wanted to educate recreational anglers on how to avoid cod while fishing for haddock.

The project used trawl survey data, primarily from the IBS, to build spatial models for where cod and haddock may occur. Environmental data (bottom temperature, depth and habitat complexity) were then integrated into the model. The model then showed that the CPUE of cod and haddock in the IBS survey data corresponded to certain environmental factors, and depth and bottom temperature data could be used to predict the CPUE of cod and haddock in the trawl survey tows. However, trawl CPUE does not directly translate to hook and line CPUE, and algorithms were developed to account for this.

Using these data, DMF was able to develop maps for each of the months between April and September that demonstrated where recreational fishermen were likely to be able to target haddock with a reduced bycatch of cod. The areas highlighted to targeted included areas with a predicted recreational catch rate of greater than 4 haddock per hour and did not include areas where water depth was greater than 100 meters due to the limited ability for recreational fishermen to access these fishing grounds.

DMF is now spending this spring and summer validating the predictions of the model. Several trips will be taken per week, anglers will fish with rod and reel gear in these areas, and catch and effort data will be logged. Micah invited MFAC members to join them to go fishing as part of the study.

If the guidance maps are validated, DMF will produce outreach material for recreational anglers. This includes the distribution of about 10,000 full-color waterproof 8x11" map books with a map for each month and a smart phone application. DMF will also hold an angler workshop and follow up with angler surveys.

Director Pierce asked about the extent of NMFS' involvement. Micah stated that they are funding the project, DMF was partnering with their staff on it, and DMF provides NMFS with regular grant's progress reports. Informally, NMFS staff told Micah that they are very excited about the work and the potential for similar work to be conducted in other multi-species fisheries where bycatch is an issue.

Sooky Sawyer asked what the study was using for bait and tackle. Micah stated that a past DMF already found baited circle hooks have the highest hook up rates for haddock. Accordingly, this is the single bait and tackle being used in the verification process and will be recommended as part of the final outreach information.

Mike P. asked several questions. First, he was interested about dogfish bycatch when fishing with baited circle hooks. Micah stated they had not yet encountered this problem. However, the study was set up with a protocol to abort a sample area if high rates of dogfish are encountered. Second, he asked if this study had demonstrated any geographic shift in stock distribution due to potential climatic factors. Micah stated that there was not enough data to parse out whether or not any stock distribution information

was attributable to climatic shifts. Last, he asked if DMF will ask anglers to provide any information back about areas fished and their catch. Micah stated that it was not part of the project. The goal of the project was narrowly to develop outreach information to recreational anglers that would help them avoid cod while fishing for haddock. Mike P. and Micah then discussed the ability to utilize this data over a long time-period. Micah noted that given the abundance of haddock, the primary goal was to show more nearshore areas where haddock can be caught with less cod mixed in. He was hopeful that by the time the data became antiquated that the status of the cod population will be improved.

Kalil Boghdan asked Micah if cod and haddock were ecologically competitive. Micah did not think there was a strong link. Cod are omnivorous and haddock have a more limited diet. Those limited prey that haddock eat do not represent a substantial component of what cod eat.

Director Pierce applauded Micah for his work. He stated it was one of the best examples of creative research to utilize the best available data to address another challenging and complex issue..

FUTURE RULE MAKING AND PUBLIC HEARINGS

Petition to Reduce Ocean Quahog Trip Limit

Jared Silva stated that DMF received a petition from a prominent shellfish dredge fishermen requesting DMF reduce the state-waters ocean quahog trip limit from 26 cages to 8 cages. The petitioner argued that this action would prevent the proliferation of new, large boat fishing effort in state-waters from vessels that may be displaced from the offshore fishery due to federal rules (e.g., Nantucket Shoals habitat closure). This would in turn protect the inshore ocean quahog beds that can only support relatively low levels of fishing and allow these beds to be fished by traditional participants for a longer period of time.

Over the late winter, DMF scoped this petition with the public and did not receive any comments in support of or in opposition to the action. At present, the Director wanted to move the petition forward to public hearing to further engage industry on the issue and better determine if such an action is warranted.

Dan McKiernan noted that ocean quahogs are typically fished for in the deeper waters of Cape Cod Bay. So, one of the unintended consequences of new fishing effort may be an increase in gear conflicts with lobstermen.

Lou Williams stated that he spoke with shellfish dredge fishermen about this petition. These fishermen did not think the action was necessary because the economics of the fishery and the limited resource in state-waters would naturally limit participation. However, he sees the value in obtaining further comment before making a final decision.

Petition to Constrain Exemptions to Owner Operator Rules for Trap Fisheries

Deputy Director Dan McKiernan reviewed the history state's owner-operator rules for trap fisheries. He noted that DMF issues LOAs to exempt fishermen from the owner-operator rule in strict circumstances. This includes only: (1) military service; (2) disability and posthumous use; and (3) use by immediate family. The disability and posthumous exemptions are limited to two-years to allow the permit to be fished in the short-term while the individual recovers (in the case of disability) or a transferee is found. The military service and immediate family exemptions may be renewed annually with no limitations. The petitioners wanted to constrain the issuance of these LOAs, so that they may only be issued in the case of death, disability or military service for a period of no longer than two-years. After an analysis of the petition, DMF determined that it would not adopt it and move it forward. DMF found the current regulations and use of the LOA was consistent with its purpose and constraining flexibility was not necessary.

Sooky Sawyer and Lou Williams agreed with DMF's decision.

Menhaden Permitting

Deputy Director Dan McKiernan stated that the state's menhaden permitting scheme developed over time and was complex and multi-tiered. With bait shortages likely this year, DMF felt it was important to better communicate to the public what permits are necessary to fish in the commercial menhaden fishery.

Dan then reviewed the permitting tiers as set forth in the memo. He noted that this does not change how the menhaden fishery is permitted, but rather clarifies what each permit authorizes. DMF intends to publish the draft policy document attached to the memorandum and then to codify the tiers in regulation for 2020.

Sooky Sawyer asked if a fisherman with a CAP endorsement but no menhaden endorsement could seine in harbors and retain the 6,000 pound open access limit. Dan stated that they could fish under the 6,000 pound open access limit, but they could not fish in the harbors without an inshore net endorsement.

BYCATCH DISCUSSION

Director Pierce indicated that following the March vote to approve increasing scup bycatch limits in the squid fishery, he received several questions and comments from Kalil Boghdan regarding bycatch management. David provided the MFAC a memorandum that responded to Kalil's questions. He indicated that DMF would be able to provide a more in depth view of bycatch and discards in the squid fishery following the completion of its squid report.

David stated that bycatch and discard management has been a historic issue in fisheries management and a difficult challenge to address for all gear types. Additionally, the issue evolves overtime in response to stock abundance and decline. It is typically managed through gear modifications, spatial temporal closures, and regulatory limits. However, the solutions are often imperfect.

David then highlighted DMF's work in developing the bycatch avoidance system and move along strategy currently employed by the mid-water trawl sea herring fleet to avoid river herring bycatch. Lou Williams discussed the difference in catch between tie down and stand up gillnet gear, with tie down gear catching more flatfish and lobsters and stand up gear catch cod, haddock and pollock. Director Pierce and Charlie Quinn also mentioned the gear modification work to increase the escapement of yellowtail flounder from sea scallop dredges.

Kalil again expressed his reticence regarding the March vote on scup bycatch in the squid fishery and his concerns regarding the ubiquity of bycatch issues in fisheries management.

Dan McKiernan stated that DMF would have been better served to have brought its proposal to the MFAC before the MAMFC considered it. However, he viewed the scup bycatch tolerance in the squid fishery as more of a question about quota utilization than it was conservation. The scup stock is healthy and the quota is largely underutilized coast-wide and in Massachusetts. Dan added that DMF has historically been comfortable about the appropriateness of the management of the inshore squid fishery due existing limitations on when and where it may occur.

Bill Doyle asked if the ecological impact of discarding dead fish had been studied, as the discard fish would provide a food source that otherwise may not be available for immediate consumption. Director Pierce noted that the dead discards would likely be consumed or decomposed, but he was unaware of any work to quantify this activity.

COMMENTS FROM THE PUBLIC

Bill Amaru stated that he enjoyed attending the meeting and looked forward to serving on the MFAC in the future if appointed.

COMMISSION MEMBER COMMENTS

Bill Doyle recalled a conversation he previously had with a teenager who worked on his oyster farm. The individual was passionate about fishing and wanted to pursue a career as a waterman. However, opportunities were limited for new entrants given the cost and availability of limited entry permits. Bill then read a letter from this individual to Director Pierce regarding his interest in pursuing a career as a fishermen and the lack of opportunity for him to begin this career. Bill suggested that DMF and the MFAC create a forum on how to bring along a new generation of fishermen. Chairman Kane suggested that this be placed on the June MFAC agenda. Director Pierce was amenable to this suggestion.

Sooky Sawyer expressed his frustration with the federal government and their regulation of the lobster fishery as it pertains to large whales. He stated that the Massachusetts Lobsterman's Association has worked hard to solve problems related to

whales, including the development of a weak rope that was recently adopted by the Large Whale Take Reduction Team a conservation strategy. However, the efforts of fishermen never seem to be acknowledged.

Mike P. touched on ICCAT and HMS issues. He stated that stock assessments for yellowfin tuna and white marlin were forthcoming, and he expected they would find the stocks to be overfished with overfishing occurring. NMFS was expected to address commercial bluefin tuna limits at an upcoming HMS meeting. There was strong support for a one fish per day limit to extend the season with most participants, except harpooners. At the Northwest Atlantic Seal Research Consortium meeting, Mike P. and others advocated for studies to better understand the ecological impacts of seal predation, as well as fecal coliform studies to assist beach and shellfish closure issues in areas where seals aggregate. Lastly, Mike P. asked if DMF's for-hire recreational fishing limit poster had been updated for 2019. Story Reed stated that an updated poster should be online this week. Jared Silva added that this poster would not include the 2019 limits for cod and haddock and a revised poster would have to be published once National Marine Fisheries Service promulgated these limits.

ADJOURNMENT

The Chairman thanked everyone for attending the May 2019 MFAC business meeting. He then requested a motion to adjourn. **A motion was made by Tim Brady to adjourn the May 9, 2019 MFAC business meeting. The motion was seconded by Mike Pierdinock. The motion was approved unanimously and the meeting was adjourned.**

MEETING DOCUMENTS

- May 9, 2019 MFAC Business Meeting Agenda
- March 14, 2019 MFAC Business Meeting Draft Minutes
- Recommendation on Sea Herring Management Area 1 Effort Controls
- April 2019 NEFMC Meeting Agenda and Summary
- ASMFC 2019 Spring Meeting Summary
- Review of Recent Meeting with South Coast Head Boat Industry
- Shellfish Advisory Panel Agenda
- MSI Task Force Meeting #2 Summary
- Review of Petition to Reduce Ocean Quahog Trip Limits
- Review of Petition to Revise Owner-Operator Exemptions for Trap Fisheries
- Menhaden Permitting Memo
- Bycatch Discussion Memo

FUTURE MEETINGS

9AM

June 13, 2019

Division of Fish and Wildlife Field HQ

1 Rabbit Hill Road

Westborough, MA