Shellfish/Crustacean Standing Advisory Committee Morehead City, Central District Office April 18, 2023 6 p.m.

6:00 p.m. Call to Order*

Vote on the Approval of the Agenda**

Vote on the Approval of the Minutes from January 17, 2023 **

6:05 p.m. Marine Fisheries Commission Update – Lara Klibansky

6:15 p.m. Shellfish Lease Program and Enterprise Areas

- General Overview Owen Mulvey-McFerron
- Relay Program Update Zach Harrison

6:40 p.m. Spotted Seatrout Scoping Period Discussion (no presentation) – Lucas Pensinger, Jason Rock

7:10 p.m. July Joint Meeting Planning

7:30 p.m. Public Comment

7:40 p.m. Issues from AC Members

8:00 p.m. Adjourn

N.C.G.S. 138A-15(e) mandates at the beginning of any meeting of a board, the chair shall remind all members of their duty to avoid conflicts of interest under Chapter 138. The chair also shall inquire as to whether there is any known conflict of interest with respect to any matters coming before the board at that time.***

N.C.G.S. 143B-289.54(g)(2) states a member of the Marine Fisheries Commission shall not vote on any issue before the Commission that would have a "significant and predictable effect" on the member's financial interest. For purposes of this subdivision, "significant and predictable effect" means there is or may be a close causal link between the decision of the Commission and an expected disproportionate financial benefit to the member that is shared only by a minority of persons within the same industry sector or gear group. A member of the Commission shall also abstain from voting on any petition submitted by an advocacy group of which the member is an officer or sits as a member of the advocacy group's board of directors. A member of the Commission shall not use the member's official position as a member of the Commission to secure any special privilege or exemption of substantial value for any person. No member of the Commission shall, by the member's conduct, create an appearance that any person could improperly influence the member in the performance of the member's official duties. ***

Commissioners having questions about a conflict of interest or appearance of conflict should consult with counsel to the Marine Fisheries Commission or the secretary's ethics liaison. Upon discovering a conflict, the commissioner should inform the chair of the commission in accordance with N.C.G.S. 138A-15(e). ***

^{*} Times indicated are merely for guidance. The committee will proceed through the agenda until completed.

^{**}Action Items

^{***}Applies only to Marine Fisheries Commission members



ROY COOPER

ELIZABETH S. BISER

KATHY B. RAWLS

Jan. 18, 2023

MEMORANDUM

TO: Marine Fisheries Commission

Shellfish/Crustacean Advisory Committee

FROM: Anne Deaton, Habitat Program Manager, Habitat and Enhancement Section

Tina Moore, Southern District Manager, Fisheries Management Section

SUBJECT: Meeting of the Marine Fisheries Commission's Shellfish Crustacean Advisory Committee, Jan.

17, 2023 for orientation of new members and updates.

The Marine Fisheries Commission's Shellfish/Crustacean advisory committee (AC) held a meeting on Jan. 17, 2023, via webinar and a listening station at the Division of Marine Fisheries, Central District Office, Morehead City, NC. Advisory Committee members could attend in either setting and communicate with other committee members. Public comment could occur online if the public signed up in advance and also if public attended at the listening station.

The following AC members were in attendance: Mike Blanton, Ana Shellem, Mary Sue Hamann, Doug Cross, Mike Marshall, Brian Shepard (came online at 6:15 p.m.), Ted Wilgis, Lauren Burch, Jim Hardin, (Absent: Bruce Morris, Tim Willis, Adam Tyler)

Division of Marine Fisheries (DMF) Staff: Lara Klibansky, Paula Farnell, Hope Wade, Debbie Manley, Corrin Flora, Tina Moore, Anne Deaton, Steve Poland, Carter Witten, Jason Rock, Jeff Dobbs, Lee Paramore, Dan Zapf, Casey Knight, Joe Facendola, Brett Wilson (UNCW), Amanda Williard (UNCW), McLean Seward, Robert Corbett, Laura Lee

Public: None in attendance, 20 viewers watched on YouTube.

Shellfish/Crustacean Chair Mike Blanton called the meeting to order at 6:05 p.m.

Chair Blanton provided some general guidance for order of the meeting. Lara Klibansky went over the ethics statement for the MFC members. No conflict was noted among MFC members to serve on the AC

A call for attendance was performed. The Shellfish/Crustacean AC met quorum.

APPROVAL OF AGENDA AND APPROVAL OF THE MINUTES

A motion was made to approve the agenda by Doug Cross. Second by Jim Hardin. The motion passed without objection.

A motion was made by Ana Shellem to approve the minutes from the Shellfish/Crustacean AC meeting held on October 25, 2022. Second by Doug Cross. Motion passed without objection.

2023 ANNUAL ADVISORY COMMITTEE'S ORIENTATION PRESENTATION

Lara Klibansky thanked all members for volunteering their service on the committee. This presentation focused on the duties of the AC. She started with a brief history on the Division of Marine Fisheries, celebrating its 200-year anniversary this year. The first fisheries specific legislation was passed in 1822 for oysters. To put this long timeline in perspective; in 1822, James Munroe was the fifth President and there were 24 states that comprised the United States.

Fisheries management has been ongoing in NC for a long time and expanded from legislation from a single fishery to many fisheries with both commercial and recreational interests. The Fisheries Reform Act (FRA) adopted in 1997 ushered in new ways to manage fisheries in the state. The FRA is comprehensive legislation forming cooperation between stakeholders, restructured the MFC, mandated the creation of state managed Fishery Management Plans (FMPs) as well as the Coastal Habitat Protection Plan (CHPP), and a new licensing system. General Statute 143B-289.57 establishes the MFC ACs and provides the objectives of the committees to assist the MFC in the performance of its duties.

Klibansky described FMP process, showed the steps of development, and where the MFC ACs are formally brought the FMPs for their review and input. She noted there are other informal opportunities to provide feedback as well. This AC meeting is an example of an informal opportunity to provide feedback. There are 13 FMPs reviewed approximately every five years. Scheduling the reviews can fill up meetings quickly and DMF staff provides the MFC a workplan as a tracking tool to monitor varying work steps in a plan in development. It is recommended the AC members review the workplan at least once a year to see when a plan comes to the AC for review and input. Many other tools are available on the website — meeting recordings, annual FMP reviews, and the statistics report otherwise known as the "Big Book". A lot of resources are available to the AC. Klibansky noted the three DMF staff in the MFC office, with herself as the Liaison between DMF and the MFC. Paula Farnell is the new Program Assistant and Catherine Blum is the DMF Rule Coordinator. We also have an attorney with the Department of Justice. Klibansky and Farnell are the two main points of contacts in the MFC office for the MFC Advisory Committees and MFC Commissioners. Farnell went over some of the material provided to the AC and noted members can reach out to her by cell phone. After the January AC meeting the office will be sending the committees an overview of the year ahead and links to documents on the website.

Discussion of Stock Assessment 101 Presentation

A video was sent to the AC to review prior to the meeting. Laura Lee was also available online to address any questions on stock assessments. No questions were asked. Mary Sue Hamann thanked staff for preparing the information and noted it was helpful.

MARINE FISHERIES COMMISSION UPDATE

Klibansky followed up on an item this AC requested at their last meeting on the CCA lawsuit. In discussion with the DEQ attorney we can only provide a brief statement. The state did not appeal and the case is continuing in Superior Court. The State's response is due today, Jan. 17, 2023 and we are finishing up the response. No further background can be provided.

Klibansky gave an update on the newly appointed MFC commissioner, Sarah Gardner. Sworn in before the Finfish Standing AC in October and she participated at the MFC meeting in November. At their meeting in October the MFC discussed joint fishing waters delineation on the rules shared by MFC and

NC Wildlife Resource Commission (WRC). The MFC tasked DMF to work with WRC to make progress on a plan moving forward.

The MFC approved nominees for Mid-Atlantic Council obligatory seat. Nominees included: Mike Blanton, Thomas Newman, Robert Ruhle, and Jess Hawkins. The Striped Bass FMP Amendment 2 was adopted, which includes continuing the closure of gill nets above the Ferry Line on the Tar/Pamlico and Neuse rivers. The division is currently developing Amendment 2 to the Striped Mullet FMP as well as a supplement to Amendment 1 to allow management measures to be in place sooner than what can be developed through Amendment 2. The Supplement is looking at about a 22% reduction with a season closure from Nov. 7 – Dec. 31.

The upcoming MFC meeting is Feb. 22 - 24, 2023 at the Doubletree Hotel in New Bern. Items on the agenda include an information paper on False Albacore, overviews on the spotted seatrout and striped mullet fisheries, and the revision to the latest Blue Crab FMP amendment to look at diamondback terrapin excluder devices that is in consultation with this AC tonight. In February, the MFC will be provided the public comments received on the supplement for striped mullet and will vote on its final approval.

Striped Mullet FMP Supplement Update

Klibansky noted DMF staff are working on Amendment 2 while the supplement is open to public comment. The MFC selected their preferred recommendation Option 2 – end of season closure from Nov. 7 – Dec. 31 at its Nov. 2022 business meeting. The closure would apply to both recreational and commercial harvest and is estimated to achieve a 22% reduction. The floor was open for striped mullet leads, Jeff Dobbs or Dan Zapf, to address any questions. No questions were provided from the AC.

BLUE CRAB AMENDMENT 3 REVISION: CONSULTATION FOR DIAMONDBACK TERRAPIN EXCLUDER DEVICE CHANGES

Joe Facendola provided background from the Blue Crab FMP Amendment 3 on Diamondback Terrapin Management Areas (DTMAs) and the devices required to exclude diamondback terrapins (DBT) from crab pots Mar. 1 through Oct. 31 in these designated areas. The issue of diamondback terrapins in crab pots have been discussed in all blue crab FMPs since the later 1990s. Diamondback terrapins have low reproductive output and are vulnerable to impacts from humans, including fishing gears and habitat loss. Independent researchers along the Atlantic and Gulf states of the U.S. have determined crab pots pose a serious threat to their populations as well as coastal development. Amendment 2 passed an MFC Rule in 2014 to allow the DMF Director proclamation authority to impose gear modifications in pots to reduce impacts on DBT. The framework for the criteria behind DTMAs and approved excluder devices for use was adopted in Amendment 3 in 2020. The first DTMAs in Masonboro Sound (Masonboro Island) and the Lower Cape Fear (Bald Head Island) were initiated through a revision in 2020 to Amendment 3 of the Blue Crab FMP and implemented in 2021. The goal is to provide a highly targeted approach to minimize crab loss and maximize DBT survival. His approach considered the seasonality of DBT activity, water depth and distance from shore, DBT presence, consider use of existing designated conservations areas, and stakeholder input. The two areas where DTMAs now exist, off Masonboro and Bald Head islands, had documented DBT presence and there was no development on the islands, so it's not likely many other factors are impacting DBT in these areas except crab pots. Facendola went over the excluders approved for use under the plan and criteria needed to approve new excluder devices. To approve new devices, they are to be built in consultation with industry and evaluated in field studies. The new device should consider cost to crabbers, blue crab loss in catch, while reducing impacts to DBT. There is also a required consultation with the Shellfish/Crustacean Standing AC as part of the criteria in the framework.

University of North Carolina – Wilmington (UNCW) researcher Brett Wilson, graduate student working with Dr. Amanda Southwood-Williard, provided an overview of their work on the use of different funnel designs as DBT excluders. They had two local crabbers working with them to evaluate the crabber proposed modifications to the pot funnels. The sampling used 3 designs: 1) Standard pot as a control with 12 hex meshes at the funnel - Control, 2) A reinforced design with 10-gauge wire and 12 hexagon mesh shrunk to size – RFD, and 3) Narrow funnel design with 9 hexagon mesh at the entrance – NFD. The NFD was designed by crabbers and was successful in the trials; it also gained the most interest from fishermen. Three sites were selected for the study where DBT and blue crabs overlapped. The field trials did triplicate sets of each design, so one set equaled three pots – Control/RFD/NFD. Five to ten sets were completed at each site and fished every 24 hours.

Over 200 DBT were caught over two seasons with the majority being caught in the standard Control pots. The NFD pots had a 74% reductions in DBT and the RFD pots had a 49% reduction in DBT. Further analysis determined that significantly lower numbers of DBT were caught in the RFD and NFD pots when compared to the Control pots. DBT are sexually dimorphic, meaning females tend to grow larger than males, and the NFD pots excluded females more. NFD pots were successful at reducing capture of DBT and modelling on crab loss determined no significant difference between pot types on legal-sized blue crabs caught. The largest crabs were captured in NFD pots.

Comparisons were also conducted in a commercial setting and added to routine fishing operations with observers onboard to capture data on a per pot basis. Sixteen onboard trips were observed with 24 DBT caught in total, 23 from the standard crab pot and one DBT in a RFD pot. No DBT were caught in NFD designs in the observed commercial trips. Comparison of blue crab CPUE showed no significant difference in crab catch between pot types and crab catch was slightly higher in NFD than in the other two pot deigns. Soak times were typically 24 hours in duration. The NFD worked well at excluding DBT and retaining crab catch. Wilson noted that he understood that requiring crabbers to modify their pots comes with a cost and also time. The NFD is a less expensive way to modify the gear and can be included in the initial manufacturing of new pots. They are also looking at ways to use hog rings to shrink the funnel entrance by two meshes on each side. They tested these modifications for a few weeks at the end of this summer with similar results. Twelve DBTs were captured all in the standard pots and no difference in the size and CPUE of crabs in the catch. Future work will continue testing on the NFD and expanding to other regions in the state. There was also a separate study conducted in tandem with this one looking at DBT genetics to determine their dispersal and site fidelity. The Baldhead Island DBT seem to be genetically distinct from the DBT in Masonboro Sound.

Hamman asked whether it was worth expanding the sampling of these excluders to areas where DBT are less abundant and how will compliance be handled? Wilson noted it would be worth it in that it shows no reduction in crab catch, in fact the fishermen felt the crab retention rates were better in the NFD pots because the crabs have a harder time escaping the pots once they move in. There are plans to host workshops with crabbers to show them how the design is effective and minimizes crab loss. The definition of the funnel has to be clear in its measurement and mesh requirements so that Marine Patrol can assess and enforce.

Hamman also asked if this would impact the peeler crab fishery? Wilson said they have not looked specifically at the peeler crab fishery. Lauren Burch asked questions on the number of data points collected in the study and whether it is enough to use for these changes. Wilson went into details on the data collected at each site and it was noted the study was robust, considered a gold standard in the sample size compared to other DBT research in the pot fishery. The study also was conducted in a real-world commercial situation and strongly endorsed by the fishermen who worked on the research. Further discussion entailed on costs and time needed to modify the pots. Many crabbers have over 1,000 pots they would have to convert. Ideally there would be a phase-in period for the modifications. When asked if the

requirement would be expanded to other areas less than ten feet deep or 800 feet from shore, Facendola said this was a starting point because of known terrapin occurrences. At the workshop for crabbers, the researchers would like to ask what the life expectancy of a pot is in their area to determine a realistic phase-in period. It was noted that pot durability varies with salinity, lasting a shorter time in higher salinity waters (1-2 years).

Ted Wilgis asked whether there are concerns for the funnels staying rigid and keeping to the same size and is there confidence in maintaining the season in DTMAs from Mar. 1 – Oct. 31 to require excluders to protect the DBT? Wilson noted minimal warping in the funnels throughout the testing and it is really keeping the funnel to the meshes. The research was not conducted much outside the time window, but it is fair to say these months are when DBT are most active. Telemetry work in Masonboro Sound is a little shorter but within the window from Mar. through Oct.

Cross praised the crabber and UNCW for this study and mentioned that once they convert to using the NFD they may not switch back because of the good retention of crabs. It should also be noted the Commercial Fishing Resource Funding committee endorsed and provided the money for this grant. This funding was initially provided to assist in getting NC's classification on the Seafood Watch by Monterey Bay upgraded from red. Dialogue needs to be pushed with Monterey Bay to end red-listing NC crabs. Cross said this needs further discussion at the MFC and need to get both DMF and the MFC to send letters to Monterey Bay. Cross thinks this NFD is beneficial to all potters and suggested giving crabbers a year to switch their gear over.

Shellem noted that stone crab catches are also of importance in Masonboro Sound. She builds her own traps and catches them by hand. Stone crabs are abundant and may want to take into consideration if catches of stone crabs decline when using NFD. Facendola said the study did not take into consideration impacts to stone crabs while using NFD. The next step in the study is to look at bycatch in the samples. Very few stone crab landings occur in the DTMAs.

Blanton brought the discussion back to the rigidity of the NFD, because his concern was that any mesh regardless of size can be manipulated or change in shape due to weakening. He asked if this be addressed with the 10-gauge wire instead or lose the term rigid? Facendola said Marine Patrol had similar concerns with defining the term "rigid" and using 10-gauge wire will lose the ability for the pot to have the NFD manufactured. Requiring the excluders to be rigid also diminishes the appeal and adds an extra step for the crabbers to modify their pots. Blanton added that higher salinity areas degrade the pots quicker and he is unsure how often crabbers in different regions have to replace their pots. Cross noted the easiest way to enforce the NFD is to include a percentage not to exceed the size of the opening. Blanton said easiest way would be for Marine Patrol to have something to use as a measure. Sam Romano really stuck to this work endorsing through the funding groups and working on the water to get the results. This research has been tremendous for the industry and glad to see the positive results as it will likely be needed in more areas.

Cross asked if this committee needs to provide recommendations to take to the MFC. Chair Blanton said he would entertain any motions from the committee. Klibansky said tonight the committee does not need to put forward a motion since the AC is just being consulted about this adaptive management. The committee can put forward a motion though if it wants. Blanton said a supporting motion would be important to be on the record, but not necessary for the MFC to see.

Doug Cross made the motion to support the approval of the NFD for use in DTMAs and support all items including to remove the "rigid" language as provided by DMF. Ana Shellem seconded the motion.

Discussion revolved around the rigid language and whether the tunnel can maintain a certain size. Burch requested a clarification on whether the NFD would take the place of the need for a DBT excluder. Blanton noted that the allowed excluders would be in the revision and include the NFD as one. More discussion ensued on the funnel maintaining its shape and dimensions. Cross suggested a pattern be provided as well to aid crabbers to make adjustment to the pots. Blanton said an expected shape must be kept for it to work as intended.

A friendly amendment was accepted to the original motion. The motion now reads:

Doug Cross made the motion to support the approval of the narrow funnels for use in DTMAs and to remove the option to use a 4×16 cm plastic or 10-gauge wire, and "made rigid" language. Also, recommend the Division consider developing a pattern to ensure compliance and enforcement. The motion was seconded by Ana Shellem.

The motion passed with one abstention.

PUBLIC COMMENT

Chris Matteo said he had no planned comments but had a suggestion. Simple solution to maintain the rigidness to the funnel. Shellfish leaseholders with cages use Aquamesh. That may work to maintain a more rigid mesh for the excluder.

PLAN AGENDA ITEMS FOR THE NEXT MEETING

Klibansky said the next meeting in April is scheduled in-person and so far, the only agenda item is the February MFC update. The only other item in the long-term planning for the AC is the Striped Mullet FMP Amendment 2 in Oct.

A meeting location in April will be determined after further discussion amongst staff and the co-chairs. Ana Shellem will chair the next meeting. Blanton noted in discussion with staff leads, the co-chairs had provided a list of items for the upcoming meetings. They would like for the committee to have the opportunity to discuss so the committee members can prepare in advance and be more informed when the FMPs come to them for recommendations. The list of topics include:

- Monterey Bay Seafood Watch red list for blue crabs.
 - o The history behind the listing and process to be upgraded to yellow/green on this list.
- Background information on Blue Crab FMP Amendment 3.
 - Review last assessment, timeline for development of new assessment, potential management actions if stock status changes.
- Overview of adaptive management across the various FMPs, including blue crab, and how adaptive management is used.
- Update on the NC State oyster research.
- Background information on Oyster FMP Amendment 4 and moving forward with development of Amendment 5 in 2023.
- Update on the Shellfish Lease program.

The meeting adjourned at 8:15 p.m.