

**PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
ATLANTIC STRIPED BASS MANAGEMENT BOARD**

**The Westing Crystal City
Arlington, Virginia
Hybrid Meeting**

May 1, 2024

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ATTENDANCE

Board Members

Megan Ware, ME, proxy for P. Keliher (AA)	Jeff Kaelin, NJ (GA)
Steve Train, ME (GA)	Adam Nowalsky, NJ, proxy for Sen. Gopal (LA)
Rep. Allison Hepler, ME (LA)	Kris Kuhn, PA, proxy for T. Schaeffer (AA)
Cheri Patterson, NH (AA)	Loren Lustig, PA (GA)
Doug Grout, NH (GA)	John Clark, DE (AA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Roy Miller, DE (GA)
Mike Armstrong, MA, proxy for D. McKiernan (AA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Raymond Kane, MA (GA)	Michael Luisi, MD, proxy for L. Fegley (AA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	Robert Brown, MD, proxy for R. Dize (GA)
Jason McNamee, RI (AA)	David Sikorski, MD, proxy for Del. Stein (LA)
David Borden, RI (GA)	Pat Geer, VA, proxy for J. Green (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Chris Batsavage, NC, proxy for K. Rawls (AA)
Justin Davis, CT (AA)	Chad Thomas, NC, proxy for Rep. Wray (LA)
Bill Hyatt, CT (GA)	Ingrid Braun, PRFC
Martin Gary, NY (AA)	Daniel Ryan, DC, proxy for R. Cloyd
Emerson Hasbrouck, NY (GA)	Max Appelman, NOAA
Amy Karlnoski, NY, proxy for Assbly. Thiele (LA)	Rick Jacobson, US FWS
Joe Cimino, NJ (AA)	

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Sgt. Jeff Mercer, Law Enforcement Representative	Mike Celestino, Stk. Assmnt. Subcommittee Chair
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Staff

Bob Beal	Tracey Bauer	Kristen Anstead
Toni Kerns	Caitlin Starks	Jeff Kipp
Tina Berger	James Boyle	Jainita Patel
Madeline Musante	Chelsea Tuohy	
Emilie Franke	Katie Drew	

Guests

Russ Babb, NJ DEP	Michael Celestino, NJ DEP	Micah Dean, MA DMF
Richard Balouskus, RI DMF	Haley Clinton, NC DEQ	Greg DiDomenico
Mike Bednarski, VA DWR	Richard Cody, NOAA	Olivia Dinkelacker
John Bello, Virginia Saltwater Sportfishing Assn.	Allison Colden, CBF	Russel Dize
Joseph Beneventine	Margaret Conroy, DE DNREC	Douglas Dockery, Cape Cod Salties
Alan Bianchi, DC DMF	Heather Corbett, NJ DEP	Roman Dudus
Tom Bleifuss, USCG	Caitlin Craig, NYS DEC	Paul Eidman, Reel Therapy Fishing Charters
Jason Boucher, NOAA	Scott Curatolo-Wagemann, Cornell Cooperative Extension of Suffolk County	Julie Evans, East Hampton Town Fisheries Advisory Cmte.
Michael Bowen, Cornell Univ.	Sarah Cvach, MD DNR	
Jeffrey Brust, NJ DFW		

Guests (Continued)

Sheila Eyler, US FWS
Peter Fallon, Maine Assn. of
Charterboat Captains
Lynn Fegley, MD (AA)
Corrin Flora, MA DMR
Tom Fote, JCAA
Anthony Friedrich, ASGA
Tom Fuda
Ben Gahagan, MA DMF
Matthew Gates, CT DEEP
Lewis Gillingham, VMRC
Angela Giuliano, MD DNR
Brendan Harrison, NJ DEP
Jaclyn Higgins, TRCP
Harry Hornick, MD DNR
Jesse Hornstein, NYS DEC
Bob Humphrey
Stephen Jackson, US FWS
James Jewkes
Raymond Kane
Kurt Karwacky
Rachel Kelmartin, George
Mason University
Gregg Kenney, NYS DEC
Andrew Konchek
Robert LaCava, MD DNR
Sarah Lalo, NOAA
Laura Lee, US FWS
Brooke Lowman, VMRC
Chip Lynch, NOAA
Ja MacFarlan, RI DEM
Shanna Madsen, VMRC
John Maniscalco, NYS DEC

Todd Mathes, NC DMF
Joshua McGilly, VMRC
Daniel McKiernan, MA (AA)
Nichola Meserve, MA DMF
Steve Meyers
Chris Moore, Chesapeake Bay
Foundation
Jeff Moore, NC DMF
Bob Munro
Allison Murphy, NOAA
Gary Nelson, MA DMF
T. Reid Nelson, George Mason
University
Thomas Newman, North
Carolina Fisheries Assn.
George Noleff, WFXR-TV
Tyler Oneill
Patrick Paquette, MSBA
Alexis Park, MD DNR
Gregory Pavlov
Michael Pirri
Will Poston, ASGA
Evan Priovolos
Stephanie Richards, MD DNR
Harry Rickabaugh, MD DNR
Bailey Robertory, Chesapeake
Research Consortium
Courtney Roberts
Steven Robichaud
Sefatia Romeo Theken, MA DFG
Cody Rubner, ASGA
Mike Ruccio, NOAA
Daniel Ryan, DOEE

Zachary Schuller, NYS DEC
Chris Scott, NYS DEC
Tara Scott, NOAA
Ross Self, SC DNR
Alexei Sharov, MD DNR
Marty Simounet, MCBA
Ethan Simpson, VMRC
Ross Squire, NY CRF
John Sweka, US FWS
Rustin Taylor, Maine Elver
Fisherman's Assn.
Kristen Thiebault, MA DMF
Chad Thomas, NC Marine &
Estuary Foundation
Taylor Vavra, Stripers Forever
Beth Versak, MD DNR
Ralph Vigmostad, NY CRF
Tim Wheeler, Bay Journal
Peter Whelan
Ritchie White
Kyle White
Patrick Whittle
Al Williams
Charles Witek
Steven Witthuhn, NY MRAC
Gregory Wojcik, CT DEEP
Michael Woods, Backcountry
Hunters & Anglers
Chris Wright, NOAA
Daniel Zapf, ND DEQ
Jordan Zimmerman, DE DNREC
Renee Zobel, NH FGD

The Atlantic Striped Bass Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia, via hybrid meeting, in-person and webinar; Wednesday, May 1, 2024, and was called to order at 1:15 p.m. by Chair Megan Ware.

CALL TO ORDER

CHAIR MEGAN WARE: Good afternoon, everyone. We're going to go ahead and call the Striped Bass Board to order this afternoon.

APPROVAL OF AGENDA

CHAIR WARE: We're going to start with Approval of the Agenda. Are there any additions or modifications to the agenda? Seeing none; I will just note. I think John Clark had one item under Other Business that we'll get to.

APPROVAL OF PROCEEDINGS

CHAIR WARE: Moving on to our next item, it's Approval of Proceedings from March 2024. Are there any edits to the proceedings from March of 2024? Seeing none; the proceedings will be approved by consent.

PUBLIC COMMENT

CHAIR WARE: We'll now move into Public Comment. This is for comment on items that are not on the agenda.

I'll look for raised hands both in the room and on the webinar, and we'll see how many folks would like to give public comment. I am not seeing any hands online or in the room, so just doublechecking that. Seeing none.

CONSIDER REVISED ADDENDUM II STATE IMPLEMENTATION PLANS

CHAIR WARE: We will move on to our agenda item, which is to Consider the Revised Addendum II State Implementation Plans, and we will be hopefully taking action on this today.

Just a reminder to the Board of where we stand on this agenda item. States were required to implement the Addendum II measures by today, which is May 1st. We had a March webinar Board meeting, where the Board approved the Addendum II state implementation plans with three exceptions, which were Pennsylvania's timeline for implementing its new spring slot limit, and Maryland and Potomac River Fisheries Commission timeline for paying back any commercial quota overages from 2024.

To address those issues, the three jurisdictions have submitted revised state implementation plans, and those were included in your meeting materials today. We're going to be considering final action to approve those three revised implementation plans.

OVERVIEW OF PENNSYLVANIA, MARYLAND, AND POTOMAC RIVER FISHERIES COMMISSION PLAN REVISIONS

CHAIR WARE: I'm just going to go to each of the three jurisdictions to provide a brief recap of what has changed in their implementation plan since March, and then we'll open it up for any Board discussion. I will start with Ingrid; would you like to start?

MS. INGRID BRAUN: Thank you, Madam Chair. PRFC submitted a plan to revise the commercial overage payback that we believe would satisfy the FMP requirement to pay back in the next fishing year. In our plan we detailed the specifics of our tag distribution and our timing, so that at our Commission's September and December meetings they would consider the projections for the 2024 fishing year, and take action in either delaying issuing tags for the next year or reducing the number of tags, based on those projections. I would be happy to take any questions based on what I submitted.

CHAIR WARE: I'm going to go through the three states, and then we'll open up for questions after those three states. Next, I'll go to Mike Luisi from Maryland.

MR. MICHAEL LUISI: Our revised plan differs slightly from what Potomac River Fisheries has put forth. If it's okay with you, I'll just step through a few of the details. Just to bring everybody up to speed, all of our recreational measures are in effect as of today. They go into effect today. What I would like to focus on is what we were able to come up with for a revised plan, based on the feedback that we got at the board meeting in March.

We got a lot of suggestions in March, things to think about, and I spent time with my staff working through the different suggestions that were made, and we concluded that there were a couple of the suggestions that we just can't do. I wanted to spend a second highlighting that, to let you know that we did discuss it.

But things like reducing the 2024 quota post sending it out to our fishermen, is something that we just can't do. We can't pull back the quota that was already distributed in 2024. Just for transparency, we have more quota out there this year than Addendum II requires. But we're going to allow that fishery to operate this year, and part of our revised plan and the details that I'm going to go through, help address how we would handle potential overages.

That is something that we could not do. Another thing that we can't do is hold quota, hold tags, and do multiple rounds of distributing the permits to our ITQ holders. I detailed it in the revised plan, so I am not going to spend the time addressing all of the reasons why. But it comes down to staff resources and the time that it would require, and the complexity that would occur as a result of us going through the motions of multiple mailings, however you want to think about it.

Getting the quota out in different stages throughout the course of the year is just something that we can't do. But what we can do, is we can focus on more timely and accurate understanding of the catch throughout the year. I think you'll see that as the highlight in our revised plan. What happens in our state is that for each fish that is caught, the fish have to go through what we refer to as check stations, and

there are 33 of those check stations all throughout the state of Maryland.

The check stations act as kind of a branch or an arm of the Natural Resources Department in verifying what has been harvested, and then reporting that harvest to us on a weekly basis, so much timelier than the annual reporting that is required under the ITQ. What our plan is, in moving forward, is that we are going to stay on top of our check station reporting this year, more so than we have in the past. We are going to pay particular attention to the catch in 2024, around the December 1st time period this year. When we get to December, we are going to have a pretty good handle on what has been caught to date. Then we are going to use a projection of the month of December to take an educated guess as to how many fish will be caught during that month. We're going to add it to the catch that we already know occurred. That number that we generate from that is what we are going to use as a projected 2024 harvest.

If the projected 2024 harvest is greater than Addendum II's 2024 quota, we will reduce the amount of the Addendum II 2025 quota by that overage amount, so if fishermen are catching more than what they should have caught under Addendum II right now, that will be deducted from the future Addendum II quota.

As the year progresses into 2025, we'll have a better handle on actual catch, and we'll consider all of what we've distributed, what has been harvested, and make any slight adjustments that still might be necessary, but that will not be able to be adjusted until 2026. While we realize that that was the whole reason why we are here, is because our original plan was asking to be allowed to take the full brunt of the reduction in 2026.

We might be dealing with very small numbers of just making sure that our numbers are all aligned for our compliance report. That is our plan moving forward. We appreciate the Board's interest in assuring that we are following along with the FMP as it states. Like Ingrid, I will be happy to take any questions on the

details of that plan following Pennsylvania's presentation.

CHAIR WARE: I'll now go to Kris Kuhn from Pennsylvania.

MR. KRIS KUHN: Appreciate the opportunity to go through Pennsylvania's revisions to the implementation plan that was presented back in March. We submitted a revised implementation plan for consideration of the Board. Without going through all the details, the sticking point with the previous plan was the implementation timeline, where I was proposing to implement following the May 1st time period. We have since been able to comply with that.

A notice of the change has been posted in the Pennsylvania Bulletin on April 20th, I believe, and signs were physically posted in the vicinity of the area affected by the rule change yesterday and today, and that is the last piece of Pennsylvania's regulations to become compliant. As of today, we are compliant with the change, and the proposed slot limit that was enacted was a change to the spring slot fishery from the 21 to 24 inch 2-fish bag limit to the 22 to 26 inch 1-fish bag limit, which has an estimated reduction of 19.32 percent.

CONSIDER APPROVAL OF STATE IMPLEMENTATION PLANS

CHAIR WARE: We're now going to open it up for any Board questions and discussions on the three revised implementation plans, and after that we'll be looking for a motion. Any questions? Emerson Hasbrouck.

MR. EMERSON C. HASBROUCK: Should we direct our questions for you? How do you want to proceed here?

CHAIR WARE: Sure, I think you can ask the questions and I'll just look to the specific state to respond.

MR. HASBROUCK: My question for Maryland is, in the past have you been able to track how closely the data from the 33 check stations, how close they are

to what the final commercial landings are for the state, after everything is resolved?

MR. LUISI: Yes, thanks for the question, Emerson. Yes, we can. There are sometimes some discrepancies between what is reported by the fishermen when they send in their annual report, or their harvest report on their permit and what the check stations have reported. But those discrepancies are handled outside. They are dealt with and then we move on.

But the discrepancies, it's not a rampant practice. They occur, like anything when you're dealing with 1000 fishermen, 33 check stations, an open season that probably runs close to 250 days a year. We've got some comparisons, line by line comparisons that we have, but I would not say they are significant in any way.

CHAIR WARE: Do you have a follow up, Emerson? Yes.

MR. HASBROUCK: Thank you, Mike, for that explanation. I guess what I was really asking is, over the course of some number of years, has the data from those 33 check stations represented about 90 percent, 95 percent, 99 percent, 100 percent of what the final commercial landings are for the state? Is that clearer?

MR. LUISI: Yes, they represent 100 percent.

CHAIR WARE: Next, I have David Borden.

MR. DAVID V. BORDEN: Emerson just asked the first question, but Mike, is the information from the check stations going to be public information? Is it going to be on like a website, so the public could see what the catch is to date, like a running tally?

MR. LUISI: We don't currently have a system like that set up. But I mean we could consider putting something online similar to how their quotas are tracked, where the public could watch the quota as it is caught. It's public information. The summary of the collection of all 33 reports goes into a daily catch,

and that could be posted. We would have to consider.

MR. BORDEN: I just offer the opinion. I think it would be useful if you could do that.

CHAIR WARE: Any other questions? At this point we'll also take any comments folks have. Seeing none.

CHAIR WARE: I would be looking for a motion to approve the implementation plans. Mike Armstrong.

DR. MIKE ARMSTRONG: Since I made the motion to cause this action, I think it's appropriate, in the spirit of collegiality and interstate cooperation, as represented by this august body. I make a **motion to approve the revised Addendum II implementation plans for Pennsylvania and the Potomac River Fisheries Commission and Maryland.**

CHAIR WARE: Thank you, Mike, and I saw a lot of seconds. Mike Luisi, I think you had your hand up first. All right, so we have a motion on the board that is made by Mike Armstrong, seconded by Mike Luisi. Is there any discussion on the motion? Seeing no discussion, **is there any opposition to this motion? Seeing none; the motion passes by unanimous consent.**

PRESENTATION OF MASSACHUSETTS DIVISION OF MARINE FISHERIES RELEASE MORTALITY STUDY

CHAIR WARE: All right, so we're going to move on to our next agenda item, which is a presentation from Mike Armstrong on Fisheries Release Mortality study that Mass DMF is doing. As Mike walks up here, I think our plan for the rest of our agenda today is; Mike will give this presentation, we'll have opportunity for questions for Mike. But I would like to hold discussion on kind of the general topic of discard mortality or release mortality until after our next agenda item, which is talking about the work group.

DR. ARMSTRONG: I'm going to give a very brief, I'm just going to whip through in the interest of time. I

always say that, but give me the cut when I go too long. Some of the work we've been doing on catch and release mortality, I apologize, these slides are ugly, but they were very pretty, but I couldn't get them to e-mail to Emilie, so I had to make them ugly and cut out everything.

What we've been doing is really three different phases that I think you want to hear about. Phase 1 was looking at the efficacy of circle hooks, and this followed us. We put in a mandatory rule, but there wasn't a ton of empirical evidence that the circle hooks work. There was a couple of unpublished studies.

We undertook that, and I'll tell you about that. Then Phase 2, we took data from there, created a model, and put in a citizen science collection program that is just generating crazy data that is really good. Then I'll tell you about a survey we're going to do to try and ground truth some of these things.

I would be remiss, Micah Dean, Bill Hoffman, Ben Gahagan and others. You know I just fund the things and tell them to do it, and they just did unbelievable work in getting this all done. Anyway, the efficacy of circle hooks, so what is the conservation benefit? There were two studies, Caruso and Lukacovic that looked at this.

They were never published, they are deep in the grey literature, and they used cages. They found significant benefits to circle hooks, and I think that motivated this Board to move forward with that. There are lots of studies on other species, primarily billfishes that it works pretty well, and there is a huge amount of literature on it.

But there is also some where they didn't work that well, and it was primarily fish that don't attack the bait like a billfish. What was the objective to circle hooks, reduce release mortality? What would the factors be that caused this mortality that is being reduced by circle hooks? We undertook this study. We actually did one year of it.

We chose a circle hook, and we went to our bait and tackle shops and said, what is the most popular circle

hook that you use, because we wanted to simulate that. Then we said, what's the most popular bait. We wound up modeling what we did after the most popular fishing methods in Massachusetts, which is live mackerel and certain circle hooks. But at the end of year one, the results were perplexing, so I immediately said, let's do it again with more hooks, different hooks. We wound up using three different circle hooks versus one J-hook, and the results were interesting. Anyway, we recorded a bunch of data, typical length.

But things like the hook location, the fight time, the handling time, and the release condition, a whole bunch of things we recorded. One of the more important being the condition score. One being no visible injury except maybe a little hole in the lip and it swims off rapidly and strongly. Two and three are somewhere between uninjured, and four is near death or almost dead, incapable of swimming away. It's subjective, but it turns out it worked really well.

We attached accelerometer tags, so they are the standard pinging tags. We saw them on their back and deployed a whole bunch of receivers. Now the cool thing about these tags is, you know the same thing that is in your phone, so when you tip it, it changes the screen. It's an accelerometer, except this records tail beats, so you can actually tell if a fish is swimming, more or less, which we thought was a huge advantage over the way things have been done, throw them in a cage, and open it up three days later and see who is alive.

We released about 350 fish with tags on them over two years, and we put out an array. This is Salem Sound, the Cat Cove Lab that I oversee is in this picture. But the outer ones form a gate, so it is very difficult for a bass to leave that area without us seeing it. I think everyone is familiar, but these things are pinging. They are pinging an identifier, and then they are pinging all the accelerometer data.

They've got to be picked up, a very low probability of not being picked up in this array. The bass, once they are in Massachusetts they don't move that much out of where they set up for a while. That was the primary array and that is the summer foraging area

for our bass. Then of course, many of you have some in your state, and we are part of an east coast consortium, if you will, where we all share data that we pick up on our receivers, and it works tremendously, so a lot of our bass.

If for some reason they escaped our detections, they would not escape probably others that other states have put out. We did it, we put them out and what happened. Anyway, it turns out dead fish move, and they move quite a bit. We could not tell live from dead for almost two weeks, and we theorized that the dead body, if you will, is being pushed around by tide, currents and everything else.

You can see on the bottom graph there is quite a bit of activity from the accelerometer. We wound up auditing the data and not using anything before two weeks. That was an interesting finding. We think eventually that the local fauna takes care of it, and once the tag falls off the fish, because it is mostly eaten, then it becomes stationary, then we can say it is truly dead.

Most fish if they die, it became very clear. There were some that were ambiguous. But the results of it all, all these parameters we put in a big model, and this is some of the findings. Our condition factor made sense after we looked at the data. If it swam off and it was doing well and it was essentially uninjured, there was a 1 percent chance of it dying, essentially no chance of it dying. If it was a little bit hurt, 9 percent, and if it was fairly hurt but it swam off, maybe weakly, 44 percent died. Then of course if it looked dead, it was dead. That condition score became very valuable. It was the most significant factor in the model. In fact, you could predict just using condition.

This is it here, on the left. You see a J-hook is furthest on the left of the left graph. That is percent mortality. What you see is there is no statistical difference in the death rate for the three circle hooks we used. The other interesting part is the 9 percent we use in the assessment looks pretty damn good.

That was a good finding. The other piece, or the right graph is, and we could look at this in lots of different

ways. Here is unhooking time, so the longer it takes to unhook the higher mortality goes. That is kind of a no-brainer. But it is exacerbated when the fish are more injured, particularly if a fish is injured in the gill there is a very high probability it is going to die. The longer you keep it out of the water that probability goes up.

That was the finding of our study. Why was there no circle hook effect? We have a paper coming out, and this is the part where we wave our arms a little in the discussion. Other papers have seen it. Our goal was to use the most popular hooks that were being used, and live bait. It could very well be that those hooks aren't the best. They are just popular, and they don't work well. We're not sure.

The Caruso paper, you can see on the bottom, had a very small gap. It could be that these popular ones, they are actually octopus circle, have a larger gap. They're just not working as well as the ones that Caruso used. We're not prepared to sit here and say, circle hooks don't work. I think they do work under certain circumstances.

You have to figure, we were all, everyone who was fishing, we were paying attention. We are experienced anglers. If you put your rod in a rod holder and drink beer and let 200 yards of line run out, circle hooks probably work better. We did not test that scenario, and we couldn't. We could only test a very limited number of scenarios.

Our conclusion is, they didn't work. But there is probably a hook that does and it's probably beneficial under different circumstances. I don't think we should be in a rush to take that rule back, because they work so well for so many things. But, it's real data and under these circumstances they didn't work right.

This might be one, there should be some follow up studies looking at that gap and working with manufacturers, to maybe do a hook that works better. But that will take some work. Let me move on. All that data allowed us to build this model with a predictability of, is it going to die? But we didn't

have the capability of looking at lures, all the treble hooks, single hooks, combination and all of that.

We came up with the idea of using citizen science, having citizens collect, as simple as we can, the parameters that we looked at. We're calling the comparison release injury or mortality from various terminal tackle using citizen science from this predictive mortality model. We put out a call for our anglers to help us out, and they responded pretty well. We got 689 signed up, but a quarter of those actually submitted data. But I will show you, this is data on 3,000 fish, so it's a lot. As much as my staff would love to spend the rest of their career striped bass fishing, this is probably a more effective way to do it.

I have actually approached a lot of your states to try and get more data from other states. I'll show you some of the reasons we would like to see other types of gear, particularly other water temperatures. But you can see it's mostly from Massachusetts, and they are mostly experienced anglers, and they fished a lot. That can buy us results too, so we have to watch out for that.

It's all reported through a website, and the data is updated constantly. I should have put the website in so you guys, you can go right now, and you can watch all the graphs, and they change daily when the season gets going. About 882 trips we sampled and 3,500 fish reported on condition, fight time, et cetera.

What did we find so far? Let me stop there. We did it the first year. We did some of our own sampling, and we had all those anglers. But we decided we needed a lot more data, so we've approached some of you states to help us out, and we'll be doing it again. We hope to have, you know if we got 3,000 fish we're hoping maybe 10,000 fish.

That will be a lot of data and that will be very telling, and I'll show you some of the stuff that we're getting out of it now. Anyway, the bait or lure choices, as reported, and this isn't stratified or anything. This is just raw; this is what they reported. You can see mid-

water lures were the most popular, bait was also popular.

But those are the big categories, surface, mid-water bottom, fly and bait. Most of the bait up our way was mackerel, and it was live mackerel. Here is some of the data. I'm just going to whip through it, the size varies according to gear. That is kind of a no brainer. You fly guys catch little dinky fish, and a lot of them.

Larger lures catch larger fish, imagine that. The graphs on the left are pretty cool. Bigger fish take longer time to handle, and that is significant, because you know, big fish don't do well out of the water and being handled roughly. But the data on the right are the, sorry this is fight-time, and it's done by how well it swam off, so it swam off either strong, which is the white part of the bar, weak, or it didn't swim off.

You can see how they were all ranked, and the bottom was handling time. As handling time or fight time goes up, you have more fish that are incapacitated in some way, not surprising, but we can look at it more. The one on the left is by gear type, and where it was hooked, so white was in the mouth. Then you can see body is the pinkish one, so surface lures catch the body or the face or something, and it's generally two treble hooks.

They are the worst, about 20 percent of all fish are foul hooked, if you will, on surface lures, and I'll show you the data that shows that it is mostly double treble hooks. Then you look on the bottom at bait, and you see the other problem, and that is the darker red is esophagus. It is survivable, but it is injured at that point. These graphs are all automatically made on the website, which is pretty cool. Here we are looking at the hook combination, so a single, single hook, a single treble, two single hooks, two treble hooks, et cetera, et cetera. You can see that the treble and treble sticks out, way out. Black is in the gill, and what we found is, if a fish is caught in the gill and it's bleeding, it is almost surely going to die.

If you had to point to a combination, it would be a surface lure with two treble hooks is the most problematic, in terms of injuring fish that you are trying to put back in the water. The one on the right,

and this is just the way we can parse things out. This is how much blood there is, so the treble-treble caused the most bleeding. You know that goes for the left graph too.

Then there is ancillary data we're collecting for temperature, air and water we ask people to take. You can see one of the problems, you look at our water temperature, and it barely touches 70 at the peak of the summer. That is why we are looking to you folks to help us out with some more data. Because if you look at the graph on the right, water temperature is on the Y axis, and did it swim off strongly/weakly or it didn't swim off at all.

You can see that it's almost a threshold effect, we think, that once you get over about 75, that is when you start seeing the injury or the ability to swim off really goes downhill. We don't have a ton of data. You can see the sample size next to them. We simply didn't have water greater than 75 very much, so it will be really interesting to get some from your states.

But that is interesting that there seems to be a threshold effect. Overall, if we look at the mortality rate, keeping in mind we used nine. Forget the stuff on the left. The ones on the right, let's look at by lure type, so fly is, boy, I can't even read it. Fly is 3 percent and bait is almost 7 percent.

There is considerable reduction by eliminating certain things like bait, but you know I am just giving our next conversation. I think there is a lot of data here that will be useful for that conversation. Then by hook type, you can see the treble-treble is above 8 percent, far to the right. That is the highest mortality right there.

Again, we have data to look at in a million different ways. When we conclude, it's an efficient and effective method of collecting these data, and we incentivized it with supplying a lot of sampling kits with stop watches and measuring tapes, and we do a raffle, I think every week. You know, we spent probably \$25,000.00 on that.

We're expanding our outreach to get to other states. Overall, lures have a much lower mortality rate than bait. That was our conclusion thus far. Just very briefly, so what good are those data? They are not that good unless you know how much people are using each gear. Then the stock assessment people can then parse out mortality like that.

We're about to start a survey through a company that is very experienced at trying to get these kinds of data. It's expensive, we'll probably spend \$80,000.00 to get this survey done. But it will absolutely be useable by this Board, should we go down the route to try to do something about the terminal tackle and things like that. That's it.

CHAIR WARE: Thank you very much, Mike. We're going to go out to the Board. There was a ton of information in that presentation. Focus on questions, and then we're going to save kind of the broader release mortality discussion for our next agenda item. Any questions for Mike? Yes, we'll start with Dennis Abbott.

MR. DENNIS ABBOTT: Mike, I noticed on the last page it says, randomly select X number of e-mail addresses from license frame. Does this mean you're going to restrict this to Massachusetts residents? I've already had a reply from a former Commissioner interested in participating from New Hampshire.

DR. ARMSTRONG: Yes, I mean the citizen science will be for everyone. Our intent is that this will be a coastwide survey, so that it will be useable by this Board should we decide to parse things out. I mean the end result is, we can say 25 percent were caught by bait, you know et cetera, et cetera. Then we can assign individual mortality rates. It's a big lift and I hope it all works. But we're going to do it.

CHAIR WARE: I have Steve Train and then Mike Luisi.

MR. STEPHEN TRAIN: Mike, first of all, thank you for the presentation, and thank you for telling me that the way I go fishing, by just letting a couple hundred yards of line go and sitting back and drinking a beer would work with those hooks. That's important to me.

DR. ARMSTRONG: Are you drinking beer, even better.

MR. TRAIN: Secondly, I misunderstood something at the bottom, I think. At the end you said that lures with treble hooks, two treble hooks, were the most deadly or dangerous risk of mortality. But the final thing you said was bait was more likely to cause mortality than lures. Is it just that individual lure that was the problem, and the rest are okay? I'm not sure.

DR. ARMSTRONG: Well, yes. It is in a comparison of lures versus bait, bait has a higher probability of causing mortality. But then if you just look at lures, it is the surface lures with two treble hooks that are much worse. But it's comparable to bait individually, if that makes sense. Again, we're still trying to digest all this stuff. But there is a lot of data here.

CHAIR WARE: Mike Luisi and then Roy Miller.

MR. LUISI: Yes, Mike, this is a lot of really good information, and one thing that, as you went through the slides, it showed a graph of handling time, and as handling time increases, mortality increases with it. Did you do any type of comparison between being able to release that hook, whether it's a J-hook or a circle hook?

We get a lot of folks complaining that circle hooks are just harder to get out of the fish, because of the way that they are designed, they come out more difficultly. I don't know if you took a look at that. But it might be interesting to see whether or not using the circle hooks when bait is being used actually does help, just the mechanism itself is increasing that handling time. Something to think about.

DR. ARMSTRONG: We have, the data is in there. We haven't analyzed any of the citizen science stuff, because we know we're going to continue. There is no analysis, but the data is buried in there. We could easily do that.

MR. LUISI: Just a quick follow up, Madam Chair. Another thing, Mike, you mentioned at the end that you were trying to get to some information regarding

the terminal gear that is being used. At the risk of saying, I believe that we in Maryland did a slight two or three question add-ons to our APAIS program for a number of years, to try to get to that, to try to figure out what type of tackle anglers were using. It may be another course for you, instead of spending the money to do a full-blown survey, you might be able to get it right through the program that you are already working through.

DR. ARMSTRONG: That's curious, because we tried to do that and MRIP yelled at us.

MR. LUISI: Yes, you can't change the form. We had a separate form, and after the conclusion of the interview we would ask if they would be willing to spend another minute answering some direct questions from the state of Maryland. We were able to accomplish that with the same staff that we already had in the field.

DR. ARMSTRONG: And MRIP knew that?

MR. LUISI: Yes, they knew it.

DR. ARMSTRONG: How about that.

MR. LUISI: If they didn't know it, I'm sure I'll be caught in the hallway in a few minutes.

CHAIR WARE: Roy Miller and then Emerson Hasbrouck.

MR. ROY W. MILLER: Thanks for this very interesting study report, Mike. I may have missed this, but the hooks that were used in the Phase 2 study, were all of the bait hooks circle hooks, or were they any type of hook?

DR. ARMSTRONG: For the citizen science part?

MR. MILLER: Yes.

DR. ARMSTRONG: It is whatever people are using they report on.

MR. MILLER: All right, so there was no requirement to use circle hooks for that bait study.

DR. ARMSTRONG: No, we do request them to take a picture and measure the hook, if they can, and some people do, so we have information on the hook type.

MR. MILLER: Okay, that is what I wanted to know, thanks.

CHAIR WARE: Emerson Hasbrouck.

MR. HASBROUCK: Mike, thank you for that presentation. Really great study. Just a comment. I did a discard mortality study about ten years ago on summer flounder in the trawl fishery. I find some very similar results here with your study with striped bass. You said that condition and time out of the water was significant factors, and then also that longer fight time and handle time resulted in worse condition.

That correlates really well with what I found with summer flounder discard mortality in the trawl survey. The worst, because we had a condition index as well. The worse the condition was of the fish, the less likely it was to survive. Then also, with time out of the water. You know we did different times on deck.

You know the longer you left that fish on deck to be exposed to the sun and try to breathe air, the worse the survival was as well. Then also tow time, we did variable tow times, which kind of correlates to your longer fight time. Just wanted to highlight the similar results between my study with summer flounder discard mortality and what you're seeing with striped bass. But thanks for the great study, Mike.

DR. ARMSTRONG: Yes, none of this is like groundbreaking like, oh my God, except for the part that circle hooks didn't seem to work that well under those conditions. But we need empirical data, we need real data if we're going to move ahead with specifying gear types and things like that. That's good.

CHAIR WARE: Next, I have Jason McNamee.

DR. JASON McNAMEE: Mike, really nice work, which isn't surprising. You had a pretty good team on

there, so nice work. Appreciate you showing us as well. I was wondering, you know fantastic descriptive statistics for the citizen science stuff. Is the plan to kind of let it roll for another year and then begin to kind of look at it statistically?

You know it looked like there were a couple of cases where there are differences, but you know you want to verify that statistically. Is the plan to do that? Then just to add on, do you intend on publishing any of that? Because I can see this information being really valuable to a stock assessment.

DR. ARMSTRONG: Yes, our intent is one, to work really closely with this Board and the Technical Committee, and get stuff to you all if you need it. But no, we want to finish another year and then start doing the analyses, pick whatever parameters we think, and do some statistics on it, and publish it.

But that will take a while. But we would like the data to be available before then. I mean that is the next conversation. The citizen science, it will probably be three years before it comes out published, you know just the way it works. But we can get the data to you guys before then.

CHAIR WARE: Next, I have John Clark and then Marty Gary.

MR. JOHN CLARK: That was an amazing presentation, Mike, really interesting stuff. Just wanted to clarify a couple things. When you said the current circle hooks are not the same as the ones that were used 20 years ago, are these ones that qualify as non-offset circle hooks, but they are just different gapped than the old one?

DR. ARMSTRONG: Exactly, yes. They are non-offset and they are popular. I believe these are all called octopus. I don't use them. I used the one that worked last study, they are more robust. They are kind of a commercial hook. But I think yes, the only difference was the gap was bigger.

MR. CLARK: Then with the bait, was it live bait and chunk bait combined, or was there a difference between live bait and non-live bait?

DR. ARMSTRONG: There was, we did mostly live, you know if we couldn't get it, we would use chunk. But chunk had higher mortality, and you know that is just because they could swallow a chunk better than a whole mackerel. But to go back to, there is no standard for circle hooks, so every manufacturer makes them different. The ultimate goal is to identify what is the factor, and maybe you've got to close the gap up. You might lose some fish that way, but you're almost guaranteed to catch it in the lip if it is constructed right, we think.

MR. CLARK: Our definition that we put out there about the non-offset circle hook is not prescriptive enough to get to the type of hook we need.

DR. ARMSTRONG: That is what the paper will say. I do believe you have to qualify it with, under the circumstances, we tested it and that is all we could do. They didn't work.

CHAIR WARE: It's Marty Gary and then Dave Sikorski online.

MR. MARTIN GARY: Thanks, Mike and all the folks at Mass DMF for a great study, great work. One of the studies you cited was Lukacovic, Maryland. I kept thinking back to that study, which I participated in, and some of the formidable environmental conditions with high water temperature and low salinity, related to handling time. I was just thinking, did you and your colleagues have any preliminary thoughts on in-water release related to mitigating the handling time? Maybe it's too preliminary for that kind of discussion.

DR. ARMSTRONG: I think you're asking, like don't take the fish out of the water. Clearly, that would be better if the handling time out of the water is zero. The other thing is, we haven't even looked, but the data there is air temperature. I'm sure that is a co-factor that we could look at too.

CHAIR WARE: Dave Sikorski.

MR. DAVID SIKORSKI: I was going to ask a similar question to what Marty asked, but I'll make it more specific. Did you use any sort of commonly used

grippers or things that hold fish out of the water like a Boga grip or a lip grip type of thing? If not, is there a way we can incorporate that type of question into something as we broaden this effort up and down the coast, because I would like to definitely be involved in expanding the word in Maryland. I was happy to see that we ticked up a little bit above some of those other states. I know we have some folks that are really interested in this topic.

I know there is also somebody in the meeting today in the room who is leading some work similar here in Maryland that CCA is involved in too, Dr. Nelson. Anyway, very interested, I'm wondering if the handling piece and the commonly used beer component is considered or should be considered.

DR. ARMSTRONG: Now that you mention it, I think it should be considered. I don't think that was recorded. My staff is probably listening, going out of their minds right now. But I do not believe we recorded that, but it sounds like something we should add in.

CHAIR WARE: Pat Geer is the last hand I saw, and then we're going to move on to our next agenda item.

MR. PAT GEER: Mike, this is really great work. I just want to talk about the telemetry arrays and how important that they are. I just got a text from one of my staff. Three of your fish showed up our way at Chesapeake Bay Bridge Tummel, so three of your fish made it all the way down to Virginia. They made it through the gauntlet.

In addition to that, fish that we're tagging on the James River are going up and summering off of Long Island and Massachusetts, and making their way back the following winter and we're seeing them. This data, what you're doing is great, and the telemetry work that we're doing, we're seeing so much more coming out of that. We're really interested in this study. You did a really great job on this.

DR. ARMSTRONG: Thanks, I like the plug for, if any state is considering defunding deploying receivers, don't. They are tremendously useful.

CHAIR WARE: All right, thank you very much, Mike. Thank you for pulling that presentation together and thanks for everyone at Mass DMF that have been working on this. That was really great work.

DISCUSS RECREATIONAL RELEASE MORTALITY WORKGROUP TASK

CHAIR WARE: We're going to move on to our next agenda item, which is Discussing our Recreational Release Mortality Workgroup. Bringing us back to the January, 2024 Policy Board meeting.

It was agreed that a Board workgroup could be formed to discuss this issue. But before that workgroup proceeds, the Board needs to identify specific tasks that the workgroup would address.

OVERVIEW OF PAST BOARD DISCUSSION

CHAIR WARE: Emilie is going to give a brief presentation summarizing our past discussions on recreational release mortality, and then we'll open it up for Board discussion with our goal today on agreeing on a list of tasks for this workgroup.

MS. EMILIE FRANKE: To inform the Board's discussion of this release mortality topic, I put together a summary of recent Board consideration of release mortality, which was included in the meeting materials. I'll review some highlights from that summary and some potential tasking questions that the Chair has put forward for the Board's discussion. Again, we're all familiar with the background here. Since 1990, roughly 90 percent of all striped bass caught recreationally were released alive, and we apply that 9 percent release mortality rate to those live releases. Release mortality has been a large portion of the overall striped bass removals, in particular from 2017 to 2021.

That number of fish removed via release mortality was higher than the number of fish harvested. Recreational release mortality could be addressed through measures that would increase the chance of

survival after a striped bass is release, so for example particular gear restrictions, or through effort controls in the form of seasonal closures to reduce the number of trips interacting with striped bass, so to reduce the overall number of striped bass that are released alive.

The Board has sort of previously discussed these two different routes through Amendment 7. Starting with the gear restriction component gear. Back through Addendum VI. Addendum VI implemented the first requirement, specifically to address recreational release mortality, which is that requirement to use non-offset circle hooks when fishing for striped bass with bait.

This measure was later clarified, we added a definition of bait, and we also provided an exemption for artificial lures with bait attached. Then through Amendment 7 a couple of years later, the Board added another gear restriction, prohibiting the use of gaffs when fishing recreationally, and also requiring that any striped bass caught on an unapproved method of take must be released immediately.

Through the Amendment 7 development process, the Plan Development Team did put forward three additional potential gear restriction options that the Board ultimately chose to remove from consideration before the draft Amendment went out for public comment. Those options were to consider prohibiting treble hooks, consider requiring barbless hooks, and consider prohibiting trawling with wire for striped bass.

The Board did, as I mentioned, remove these from the document before it went out for public comment. The Board noted the complexities of managing specific gear requirements, considering the variation of striped bass fishing techniques along the coast. There were also some questions about the measurable benefit of potential gear restrictions.

The Board also noted that outreach and education would be an important alternative if gear restrictions were implemented, to promote best handling practices. Just sort of in general, the benefit of gear

restrictions, so trying to quantify how many fish would be saved by a potential gear restriction is really difficult to quantify.

We don't know how many anglers are already using certain gear types, or how many anglers were already using triple hooks before the requirement was put in. You know we don't know what the noncompliance rate is, and there are also enforcement challenges in general related to proving what species an angler was targeting.

Moving on to the Outreach and Education portion. Both Addendum VI and Amendment 7 encourage states to continue developing outreach and education campaigns, both on the benefit of circle hooks and sort of general striped bass best handling and release practices. The Board did have a discussion through the Amendment 7 process about whether to require outreach and education as part of the FMP, but the Board ultimately decided that it would be really difficult to define what a required outreach program would look like, so the FMP should encourage that outreach and education, and also that most states were already implementing various outreach and education campaigns.

The next sort of approach to potentially reducing release mortality is to reduce the number of live releases overall. That could be through seasonal closures. The Board has discussed several times sort of the two different types of seasonal closures. There is the no harvest closure, where catch and release fishing would still be allowed, but harvest would be prohibited, and then no targeting closures, so no person could take or attempt to take our target of striped bass.

There are a few points of consideration that have been discussed throughout the past Board discussions. First that for any type of closure, fishing trips that are targeting other species that incidentally release striped bass, those trips would still occur, so that would affect the potential reduction in live releases.

Then also, any seasonal closure might shift effort to other species or shift effort to other times of the

year. Sort of going back to Addendum VI, Addendum VI did not consider any seasonal closures as part of the management options, although two jurisdictions, Maryland and the Potomac River Fisheries Commission did implement no targeting closures for striped bass through their Addendum VI conservation equivalency programs.

Both of those jurisdictions implemented those no targeting closures in the summer when the release mortality rates are relatively higher, due to environmental conditions. Those no targeting closures are still in place now as part of Addendum II. Draft Amendment 7 did consider seasonal closures. Primarily it considered no targeting closures.

There were and there continue to be several concerns about the enforceability or unenforceability of no targeting closures. But at the time during Amendment 7, you know it was assumed that no targeting closures would have the maximum reduction of effort, and so therefore the maximum reduction in releases if that was what the Board was trying to achieve.

Most of the options in draft Amendment 7 were no targeting closures. Another concern with no targeting closures is there is currently not a standardized method for estimating the reduction for no targeting closures, that estimated reduction depends on different assumptions about angler behavior, which is really difficult to predict. In addition to the type of closure in Amendment 7, so no targeting or not harvest, the Board also considered the geographic scope of potential seasonal closures.

The draft Amendment 7 PDT did put forward options for coastwide closures, regional closures and state-by-state closures. Prior to the document going out for public comment, the Board did remove the coastwide and regional closure options. The Board noted that they would support states having the flexibility to choose their own closure dates, and there was particular concern about requiring sort of a blanket Wave 4 closure along the coast, and the differential impacts that would have. Then for

regional closures there was concern about how to define the different regions and avoid the issue of having different closure dates in shared water bodies. The draft Amendment 7 for public comment included options for state-specific no targeting closures. It also included some options for spawning closures.

But ultimately, the Board decided not to include any closures in Amendment 7. Again, the Board brought up enforceability concerns with no targeting closures, and also noted that on the spawning closure front that the existing spawning closures were adequate. Most recently draft Addendum II, last year the Plan Development Team did put forward options that combined size limit changes and no harvest closures.

When the Board was reviewing that initial document there was a discussion, and the Board did vote to add an option that would allow those closures be designated as no targeting. But then following that Board discussion, the Board ultimately voted to remove all seasonal closure options from the draft Addendum. Draft Addendum II ultimately did not have any options for seasonal closures.

That wraps up my presentation. Again, as the Chair mentioned, the Board action for consideration today is to approve a task for a potential Board workgroup on release mortality. Up here on the screen in the meeting materials the Chair did put forward a couple of potential tasking questions to start the Board discussion on this workgroup. I'm happy to take any questions.

CHAIR WARE: We'll kind of combine here, both questions for Emilie and then I think also getting to the discussion, given the time.

CONSIDER TASKING FOR RECREATIONAL RELEASE MORTALITY WORKGROUP

CHAIR WARE: I'll just note, the workgroup ideas or tasks are just a conversation starter that says property of the Board, so if folks would like to suggest something new, different or eliminate something that is all within the purview of the

Board's discussion today. Any questions or comments as we work to identify a task list for the workgroup. Adam Nowalsky.

MR. ADAM NOWALSKY: I would just request that under reviewing the existing non-targeting closures for striped bass, that that specifically include consultation with our federal partners that have worked with states law enforcement as well for a long time, enforcing the non-targeting from 3 to 200 miles offshore.

I think they could provide a lot of information about the number of cases that they've already made, a number of interactions that they've had. I think that would be highly informative as to answering the question of, is this enforceable, and at what level it is enforceable.

CHAIR WARE: Any other comments? I'm not seeing any questions, any comments on the workgroup tasking? Emerson Hasbrouck.

MR. HASBROUCK: I'm looking at the third bullet that you have there, identify assessment sensitivity runs, et cetera. For instance, how low would you have to reduce the release mortality rate, in order to see a viable reduction in removals with the same level of effort. I think another thing that we need to look at, based somewhat on the presentation that we talked to Mike just a few minutes ago. That is still inconclusive, but what I'm seeing there is that the mortality rate doesn't change too much between J-hooks and circle hooks, even with bait. You know it is a little bit higher with bait and with double treble hooks, but the rate doesn't change all that much. I think the other thing we need to look at there is not only how much do we have to reduce the release mortality rate, but how much do we have to reduce releases?

CHAIR WARE: I was just saying, we're writing notes, so if there is a pause that is why. Any other comments on this? If there is not, oh Jay, go for it.

DR. McNAMEE: I think the last bullet here upon the slide is really interesting. I don't think it's trivial though. I mean I don't know that this is maybe a

super quick one to figure out, but it's really interesting. I think it would be really valuable to kind of go through that and kind of understand the sensitivity too.

There are two ways, I think. When I first read it, I was thinking sensitivity for this 9 percent assumption, and you can kind of bounce around and use different assumptions, apply it to the releases and kind of look at that. But on second read, I think it's more about kind of understanding how big a difference would it have to be, before you start seeing actual population level effects. Both would be interesting.

I don't think either of them are super simple analyses, so I don't know. It may be, I almost feel like it would be a good done for pushing out in like an RFP, like even a smallish one, but to have like a grad student work on for a semester, or something like that. But I just wanted to offer. It's a really good one, I think it would be super valuable.

DR. KATIE DREW: Yes, for sure. I think if you guys' recall, we actually did a series of sensitivity runs where we looked at using a different release mortality assumption rate for the assessment of doing, instead of the 9 percent what if we used a lower one, what if we used a higher one. What if we used a higher one in the Bay during the summer and the regular 9 percent the rest of the year.

Sort of back over the history of the assessment, and the results in that were sort of what you would expect, which is that I just scaled the population up and down, but the trends and the status were the same. In my mind, this one would be more about when we do the projections. You know we do the projections under, let's say we're going to assume a constant mortality rate or a constant level of removals, and that level of removals is based on maybe historical stuff, or whatever we think, you know how many are going to be released.

If we can reduce that sort of level of removals by a small amount, due to the reduction in release mortality, how does that affect your rebuilding timeline? How does that affect your population trajectory? I think for sure we could get really deep

in the weeds on this. But I think there are maybe some simpler approaches that we could consider just through the projection approach, which I think would get maybe at Emerson's question as well.

What is the tradeoff if we get the release down to 7 percent, is that better or more effective than let's say reducing trips by 10 percent, or reducing your total releases by X percent. You're like what is there? Can we see a tradeoff there? But I agree that this is probably used for work that could be done to really dig into that. But I think there is some stuff we can do in the short term that would still be valuable.

CHAIR WARE: I have Justin Davis and then Mike Luisi.

DR. JUSTIN DAVIS: Potential addition to the task list here might be to conduct some level of public scoping, about public attitudes about some of the potential options in here. I'm thinking ahead to where we might be going later this year. You know Addendum II, we voted up that option that gives the Board the ability to take Board action this fall, when we see the stock assessment if it's determined we need further reductions in F to meet our rebuilding goals.

I think it's possible the Board might want to take some things out of this list and adopt them this fall, because frankly we're sort of running out of room for things to do from a regulatory standpoint to reduce F. We're not going to be able to go through out standard Addendum process if we take Board action.

We're going to have to take quick action. There might be some opportunity to go out to our public and ask for opinions, but I think having some idea going into that of what the public thinks about some of these things, like non-targeting closures. Restrictions on terminal tackle might be helpful to us this fall. It seems like there are maybe some easy ways to get public input on some of these online surveys, that kind of thing. That is something to consider.

CHAIR WARE: Mike Luisi an then Emerson Hasbrouck.

MR. LUISI: Justin basically went over what it was I wanted to highlight. While you are side barring with Emilie, I just had a quick question for you. You or Emilie. I know you and I have spoken about the timeline that you envisioned for this working group to start meeting. Can you quickly go over that in anticipation for what might end up being a list of alternatives that would be considered for some future, maybe sooner than we like, but some future restriction on harvest?

CHAIR WARE: Yes, absolutely, Mike. After we approve, or assuming we approve the task list today for the workgroup, we'll send out an e-mail asking for those who are interested in participating in the workgroup, so we'll identify the workgroup. I'm hoping we can have at least one meeting before the August board meeting, and in terms of the draft task list so far.

I think those assessment sensitivity runs are the most time sensitive, because we would need to provide that to the TC by the August Board meeting. Then I believe that the workgroup would continue to work up until the annual meeting, which is when we would get the stock assessment. My hope is that the workgroup's tasks will be completed by the annual meeting, Mike.

MR. LUISI: Thank you for that, it puts it into perspective. Just to add on one small comment to what Justin was getting to with the public scoping of these ideas. I think if we are to go to the public and ask for some thought back from the public regarding reducing discard mortality. I really like the idea of this tradeoff that Dr. Drew was just discussing about, where is the line on the tradeoff? I feel like if you go out to the public with a blanket statement, what would you rather give up, the harvested fish or the catch and released fish? You are going to get a very split opinion. However, if there was a tradeoff between the two, you might find some common ground that we could use as a Board at the next phase of any type of management action we need to take.

CHAIR WARE: Emerson.

MR. HASBROUCK: Just building a little bit on Justin's suggestion about scoping and stakeholder input. Would it be possible to have AP representation on a working group? Is that within the scope of what we can do, have the AP appoint somebody to participate?

CHAIR WARE: Toni, go for it.

MS. TONI KERNS: The guidelines for a work group state that work groups are supposed to be composed of Board members. It is up to the Chair to appoint the work group members, and that we sometimes bring in outside Board members to provide information to work groups. But typically, that is not what Board work groups do, have participation for non-Board members on them.

CHAIR WARE: My intent is to likely keep the work group to Board members. But I do think it may be helpful for some of our discussions to have an enforcement representative join the meeting, or another idea is we could have an AP meeting prior to the annual meeting, if we're looking for scoping or AP involvement in the process leading up to the assessment. Max Appelman.

MR. MAX APPELMAN: I'm thinking about the non-targeting closures, and I know working with the Technical Committee, one of the struggles that they had is how to account for how anglers are responding to a closure like that. I'm wondering if there is a space within this workgroup, or if it is even the right place to do that, to try to shed some light on angler response and sort of help the TC better understand angler response to those calculations, and give us a more accurate way of calculating what reduction we might realize from a no targeting provision.

MS. FRANKE: I think that could potentially fall under this first task, and sort of asking Maryland and the Potomac River for any information or data they have, based on their current no targeting closures, and how that may have shifted effort or changed angler behavior. As far as asking anglers how they might change their behavior. I think maybe we could consider that as part of if there is some sort of public

survey that the workgroup ends up pursuing. But I think that would be harder. It would be, I think difficult in sort of a hypothetical.

MR. APPELMAN: I don't know what the makeup of this work group is or what it might be, but even just bringing the knowledge of those work group members, you know bringing that to the table to sort of inform, you know how do anglers respond? How would you think they would respond? If there is anything to pull out from that to help inform this discussion and advance the tools that we might have available to us in the future.

CHAIR WARE: Adam Nowalsky.

MR. NOWALSKY: Building on Max's comment, I would offer that the work group could seek to pursue a literature review of any interaction between seasonal closures. Their result in angler behavior of pursuing non-targeting, and what that non-targeting has resulted in, in terms of discouraging effort entirely or shifting of effort.

I don't know what else might be out there, but I think some literature review for other species or other areas might be beneficial. On this idea of some type of survey, if the work group is uncomfortable making those assertions about what they think would happen themselves. I think laying out some groundwork of what that survey could look like, and how it would be administered would be helpful to come back to us, so we can think about how we can potentially implement getting that information.

CHAIR WARE: All right, I'm not seeing any other hands. I think we've had a good discussion here, certainly added to the list. I think we would be looking for a motion to approve the work group task list as we discussed today, and I would just maybe ask for the Board's flexibility. Some of these ideas may be a lot of work.

Just trying to match the time we have with what the Board can accomplish. Hearing definitely some interest in scoping, but maybe one of the tasks of the workgroup could be starting that discussion, and we'll come back in August with similar ideas of how

that could be carried out. If the Board is comfortable with that. Emilie is going to review verbally what she thinks we said.

MS. FRANKE: Just to make sure I'm clear on the task list. Starting with the first one on the screen. Review existing no targeting closures, including any information on impacts to striped bass catch and effort, as well as their enforceability. As sort of sub bullets to that first bullet we have the request to work with our federal partners, to get information on sort of federal enforcement of no targeting.

Also as was just brought up, for the work group to think about what does the work group think, or is there any literature out there on what angler response or change in behavior would be with no targeting closures? That is sort of the first bullet with some specifics added on. We have the second bullet, review the DMF discard mortality study which we just heard about, and other relevant reports to evaluate the efficacy of potential gear modifications.

Then we have the third bullet to identify assessment sensitivity runs, which may inform the Board discussion around release mortality. As Emerson and Dr. Drew brought up, sort of the tradeoff of release mortality rate versus reducing the number of releases. Then there is a fourth bullet that was added, which is considering public scoping on these topics.

I think realistically, I think the work can maybe talk about what that may look like, maybe in the form of a survey, and come back. We could also talk with Tina and the communication staff will come back in August to check back in on that topic. I have sort of these three bullets on the screen, plus that additional public outreach bullet. Do folks feel that that has captured the discussion? Okay, great.

CHAIR WARE: At this point we would be looking for a motion to approve the work group task list as discussed today. Emerson, are you making that motion? Thank you. Mike Luisi, a second.

MR. HASBROUCK: Do you want me to read it into the record?

CHAIR WARE: Yes, please, Emerson, thank you.

MR. HASBROUCK: **Move to approve the tasks for the Board Work Group on recreational release mortality as discussed today.**

CHAIR WARE: I think we've had a robust discussion here. Is there any burning comments folks need to make on this motion? Seeing none; **is there any opposition to this motion? Seeing none; it is approved by unanimous consent.** Thank you very much, everyone.

REVIEW AND POPULATE ADVISORY PANEL MEMBERSHIP

CHAIR WARE: Our next agenda item is to Review and Populate the Advisory Panel Membership, and I'll look to Tina.

MS. TINA L. BERGER: I offer for your consideration approval of the nomination of Peter Jenkins a recreational angler from Rhode Island to the Striped Bass Advisory Panel.

CHAIR WARE: Thank you, Tina. Is anyone willing to make a motion for Peter Jenkins? Jason McNamee.

DR. McNAMEE: Move to approve Peter Jenkins of Rhode Island to the Atlantic Striped Bass Advisory Panel. I'll talk a little more about Peter really quickly if I get a second.

CHAIR WARE: You got a second from Justin Davis, so go for it, Jason.

DR. McNAMEE: Yes, so Peter is a great guy, I've known him for a while. He is active, participates, he's engaged, and he'll be a really good addition to the Advisory Panel, so yes, hopefully folks will agree.

CHAIR WARE: Is there any discussion on this motion? Seeing none; **is there any objection to this motion? Seeing none; all right, welcome, Peter.**

ELECT VICE-CHAIR

CHAIR WARE: Next is to elect a Vice-Chair. Do I have any nomination for the Vice-Chair slot? Marty Gary.

MR. GARY: It would be my honor to nominate as the next Vice-Chair for the Atlantic Striped Bass Management Board, Mr. Chris Batsavage from the state of North Carolina.

CHAIR WARE: Thank you, and you have a second from Pat Geer. Any discussion on this motion? **Any objection to the motion: All right, welcome, Chris, to the Vice-Chair slot.**

OTHER BUSINESS

CHAIR WARE: We're on to Other Business. A few things here. I think Emilie is just going to give some reminders for how we're going to proceed with the work group.

MS. FRANKE: We will send out an e-mail asking for Board member volunteers to be part of the work group. I believe in the Work Group Guidelines, ultimately it is up to the Board Chair if we have a much larger group of individuals who express interest than would be manageable for a work group, so we will keep everyone updated on the work group membership. Then as Chair mentioned, I think the goal would be for the work group to sort of get started on these tasks and come back to the Board in August with an update. If there are any sort of initial recommendations from the work group, or the work group needs further clarification, we can do that in August. We will reach out following this meeting.

MYCOBACTERIOSIS IN DELAWARE

CHAIR WARE: Next, John Clark, I believe you had an item under Other Business.

MR. CLARK: Yes, just briefly some bad news, actually. We're seeing mycobacteriosis in our spring gillnet catch. Craig just had some experience with this, and I've heard from my colleagues in Maryland that you're seeing it in the Ocean City catch, and their fish pathologist has pretty much confirmed that it is Myco. Craig, what would you say the percentage was of that you were seeing?

MR. CRAIG PUGH: According to whether you want to call it, bad enough to throw back where it is not marketable. But there is a more marketable stuff

that you could recognize it in under the scales that have not been lost yet, somewhere between 5 to 10 percent. I generally fish from the first week of April to the last week of April, so we just did finish up this, I can say catch somewhere between five or six hundred fish, and at least 5 to 10 percent were showing signs of this, or too, there were at least 10 fish, I believe, that were not marketable.

Where the lesions were certainly bad enough that we couldn't sell them. We tried to target a fish primarily between 26 and 38 inches, mainly because the New York market is our most lucrative market. That is the size fish that I can say that we sampled primarily. Those fish weigh somewhere between 10 to 20 pounds on average, 17, 15, 17 is a pretty close average in that fish.

It's recognized, it's not the first time. It's nothing new. I have fished for striped bass over a 40-year period of my life, maybe longer. That was pre moratorium, through moratorium, and post moratorium. I recognize this, at least four, maybe five different times in the fishery over a number of years.

To us as fishermen, it is recognized as an over population of the species. The only time that it seems to resolve itself is when there is a reduction in the population. Then it seems to clear back up again. I know it's been blamed on a lot of things; at one time they blamed it on a chicken farmer. I don't really think it had much to do with the chicken farmers, but at any rate it has come, it has gone. This year it did show a significant increase over the last five, eight years. It may or may not show back up next year. We'll see.

Fish were plentiful, easy to catch. We fish with less gear, for less time each and every year in the last ten years. That kind of flies in the face of what this Commission has put out there, but those are the facts that as I see them. I know it is often described as anecdotal information. But it is real information, and it is not necessarily the peaks and valleys from an MRIP study, but these are as factual as I can get.

Now we've discussed hooks a lot, I can also say I had two incidences with hooked fish this year. One was a circle hook that was snagged by the sinker. The sinker was the type that you put in the seine with the wires. I don't recall the name of that. But that was a circle hook that was retrieved off it. The only reason why a fish was caught, was because of the sinker. The fish had moved through release and tangled up. The second was a 6-inch minnow, surface minnow with two treble hooks, in the mouth. Both were in the mouth. Both fish were alive and well, and the only reason they were caught in the gillnet was because they were a pretty good size hook.

It looked as though both of those instances were because of weak fluorocarbon or monofilament use at the other end. It had parted and failed on both of those instances. It's not unusual for me to catch anywhere from 2 to 6 hooked fish every year. We have a collection. We collect them, 40, 50, sometimes some guys have up to 100 different hooks that we find out of these fish. I'm willing to answer any questions or observations that you may have. Thank you.

MR. CLARK: We wanted to warn people that it is out there and also remind everybody that Myco is transmittable to humans, that is fish handlers' disease, and it can cause some really nasty infection, so just be on the lookout.

CHAIR WARE: Last thing I have under Other Business today is just to acknowledge that it is Mike Armstrong's last Striped Bass Board meeting, so I want to thank Mike for all of your immense contributions to this Board, as was very evident by your presentation today. We really appreciate your enthusiasm for this species, and your commitment to the Science, and you will be missed, so thank you very much.

DR. ARMSTRONG: A wise old man once told me, don't every bypass a hot microphone. I'm overwhelmed, like last night. It's been my honor. This Board, it's incredible what we do. We take a lot of flak. But the work gets immensely hard, and we don't all agree. But at the end we get good results.

I'm looking forward to retirement, but this will be what I miss most in my career, is sitting on this Board. I wish you luck. There are huge challenges. This is actually a really great time to get the hell of this Board. Good luck, Nick. Thank you. Thank you for any recognition and all the help you've given me. I've learned a lot just sitting, but it's been my honor. Thank you.

CHAIR WARE: Thank you, Mike, we've certainly learned a lot from you as well.

ADJOURNMENT

CHAIR WARE: I think that is it today, is there a motion to adjourn?

COUNCIL MEMBER: So, moved.

CHAIR WARE: Thank you.

(Whereupon the meeting adjourned at 2:45 p.m. on Wednesday, May 1, 2024)