

**PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
HORSESHOE CRAB MANAGEMENT BOARD**

**The Roosevelt Hotel
New York, New York
October 24, 2018**

Approved May 1, 2019

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ATTENDANCE

Board Members

Raymond Kane, MA (GA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Rep. Sarah Peake, MA (LA)	Roy Miller, DE (GA)
Dan McKiernan, MA, proxy for D. Pierce (AA)	Michael Luisi, MD, proxy for D. Blazer (AA)
Jay McNamee, RI (AA)	Russell Dize, MD (GA)
Bob Ballou, RI, Administrative proxy	Ed O'Brien, MD, proxy for Del. Stein (LA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Pat Geer, VA, proxy for S. Bowman (AA)
David Borden, RI (GA)	Bryan Plumlee, VA (GA)
Justin Davis, CT, proxy for P. Aarrestad (AA)	Sen. Monty Mason, VA (LA)
Sen. Craig Miner, CT (LA)	Chris Batsavage, NC, proxy for S. Murphey (AA)
Bill Hyatt, CT (GA)	Robert Boyles, Jr., SC (AA)
Michael Falk, NY, proxy for Sen. Boyle (LA)	Spud Woodward, GA (AA)
Emerson Hasbrouck, NY (GA)	Doug Haymans, GA (GA)
Maureen Davidson, NY, proxy for J. Gilmore (AA)	James Estes, FL, proxy for J. McCawley (AA)
Joe Cimino, NJ, proxy for L. Herrighty (AA)	Rep. Thad Altman, FL (LA)
Tom Fote, NJ (GA)	Sherry White, USFWS
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Chris Wright, NMFS
John Clark, DE, proxy for D. Saveikis (AA)	Martin Gary, PRFC

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

Ex-Officio Members

Doug Messeck, Law Enforcement Representative

Staff

Robert Beal	Mike Schmidtke
Toni Kerns	Kristen Anstead
Kirby Rootes-Murdy	

Guests

Rachel Baker, NOAA	Arnold Leo, E. Hampton, NY
Peter Burns, NOAA	Mike Millard, USFWS
Lewis Gillingham, VMRC	Julia Socrates, NYS DEC
Brett Hoffmeister, Assoc. of Cape Cod	Benjie Swan, Limuli Labs

The Horseshoe Crab Management Board of the
Atlantic States Marine Fisheries Commission

convened in the Terrace Ballroom of the Roosevelt Hotel, New York, New York; Monday, October 24, 2018, and was called to order at 11:15 o'clock a.m. by Chairman Toni Kerns.

CALL TO ORDER

CHAIRMAN TONI KERNS: Good morning everybody. Malcolm Rhodes is not able to join us today; and as you can see on the agenda we'll be electing a Vice-Chair, so I will be subbing in as your Chair Woman today.

APPROVAL OF AGENDA

CHAIRMAN KERNS: We have an agenda before us. Are there any changes to the agenda? Seeing none; we will approve the agenda as it is presented.

APPROVAL OF PROCEEDINGS

CHAIRMAN KERNS: The proceedings from the October, 2017 meeting was on the materials. Are there any changes to the proceedings? Seeing none; those proceedings are approved by the Board.

PUBLIC COMMENT

CHAIRMAN KERNS: I think there is some public comment from a member of the public on items that are not on the agenda; if so please come up to the public microphone. When you come up to the microphone please identify yourself. You could also just use the one right there if it's easier.

MR. BRETT HOFFMEISTER: Good morning, my name is Brett Hoffmeister; I'm the LAL Production Manager for Associates of Cape Cod in Falmouth, Massachusetts. I first want to thank you; for allowing me the opportunity to speak today. I had just two quick things I would like to cover; and I will make it brief.

One, just a few comments on the FMP, I just got the supplementary materials the other day; and something I review every year. I look hard at are the numbers and what not. I've got a little laundry list of things; suggested improvements I guess. I've already talked to Mike about that a little bit.

But I think some of the things you may consider that would be improved upon are some more consistent reporting. As a for instance, you know us being in the biomedical field, and particularly our plant using bay crabs as part of that biomedical collection. There are inconsistencies with the numbers that are reported.

I can understand why some of that is; but even in the year-to-year from 2017 to 2016, for instance, we've got a discrepancy of almost 35,000 crabs in the number of bait crabs used. Somewhat minor stuff, but I try to keep a spreadsheet of this stuff and keep track of it throughout my time, and we see a lot of changes like that.

Any sort of improvements we could make for the consistent reporting that would include the same timeline, again as a for instance, crabs reported for the biomedical company are reported on a five-year average against this year's harvest; whereas the bait it's reported against last year's harvest. Maybe if you want to pick a five-year timeline and report those numbers, the consistency would be there. I think overall your reporting would improve. Again, not a major issue, something I'll probably work with Mike on. I can contact him directly.

I do appreciate everybody's effort, so I realize how difficult that is managing all those numbers. But I did want to make those comments while I was here. More importantly, my second comment is something that I'm personally very, very excited to share with you; something I've been working on for quite some time, a team and I, and I have a prepared statement.

As you all know there is a lot of interest in the horseshoe crabs; it's a very complex fishery, and there is a passionate following of people interested in conservation efforts around the horseshoe crabs. I would like everybody here to know that Associates of Cape Cod has always and will always deeply care for the resource on which we depend on for the manufacture of our products.

I am pleased to inform you about our most recent project; which we call the Horseshoe Crab Sustainability Project. This project is aimed at

complementing our 45 year old history of crab conservation efforts; one of which is our rent-a-crab program, which we talked about earlier. In Massachusetts we used bait crabs prior to them being sold for bait.

The rent-a-crab program has been endorsed by the state since the year 2000; and allows us to take in some bait crabs and bleed them first. This gives us a unique opportunity to harvest gametes from those horseshoe crabs; both the eggs and the sperm, and fertilize them in vitro. Working with the state we've been issued a Class 1, Type 4 Aquaculture Permit by the state of Massachusetts Division of Marine Fisheries.

We've been working with our bait dealers, and we've come up with a process where we can easily collect these eggs and sperm from the crabs without harming the crabs. We have been very successful in not only raising larvae, but bringing them to the first and second instar juvenile molts.

The system that we have has a patent pending; and can literally produce tens of thousands or hundreds of thousands of juvenile crabs within a season. We began our research efforts back in 2017, really focused on getting the system in place and scaling up to a position that we could feel comfortable repeating large numbers of crabs.

I'm happy to say that to date we've released over 36,000 crabs to the waters of the state of Massachusetts, and lots more to come. ACC believes that this program will help ensure a stable population of horseshoe crabs; as well as help to ensure the genetic diversity for generations to come. This is something that we've just brought to the marketplace recently in the past month. It's my pleasure to share that with you today. That's all.

CHAIRMAN KERNS: Thank you, Brett, and that's very exciting news. We look forward to hearing more about that. We can work with you; Mike and I can work with you on the inconsistency in the numbers, just noted that we are completing a benchmark stock assessment; so the data does get reviewed quite thoroughly, and we have been making a lot of changes due to that scrutiny of the

data, so some updates this year are in light of the assessment and the extra scrutiny that we've been giving to the data.

MR. HOFFMEISTER: Fantastic! Thank you very much.

CHAIRMAN KERNS: I think that there is one other public comment; so please identify yourself and come to the microphone. Thank you.

MS. BENJIE L. SWAN: Hi, Benjie Swan from Limuli Labs in Cape May, New Jersey. Sorry if I sound out of breath; but the Lincoln Tunnel had a delay of like an hour and a half or something this morning, and the taxi ride over was very crowded as well. I am extraordinarily privileged to manufacture lysate and study horseshoe crabs for three decades.

I remain mindful of the immense importance of the horseshoe crab within the ecosystem. I've attended most Atlantic States Marine Fisheries Commission board meetings, and have commented chiefly on actions that affect our industry. For the last 40 years our industry has produced a quality product with a proven track record that saved and will continue to save billions of lives.

We handle the horseshoe crabs in a manner that ensures their survival, and release them back into the water following a return-to-sea policy established at the onset of our industry. We report our fishing numbers to our state and the Atlantic States Marine Fisheries Commission; with a reported mortality rate around 1 percent, and participate in the horseshoe crab management plan.

However, the horseshoe crab management plan is no longer about managing horseshoe crabs based on science; and promoting a sustainable fishery, but more about creating more restrictions in the Delaware Bay. The already strict restrictions in the Delaware Bay, the site of the greatest population of horseshoe crabs numbering in the millions, have pushed the harvest of horseshoe crabs into smaller subpopulations where the impacts may be significant.

We've focused on gathering data from only the Delaware Bay Area; a detriment to the other populations of horseshoe crabs along the east coast. We are managing the horseshoe crab for the red knot; in spite of the entire horseshoe crab population. We're also managing the horseshoe crab for the red knot, even though we know that many other factors contribute and are involved in the natural history of the red knot.

Lately biomedical companies have been unjustly criticized and misrepresented; in order to make the case for limiting biomedical collection. Biomedical companies have adjusted their collection of horseshoe crabs; particularly in the Delaware Bay Region, and any further limits puts the essential manufacture of the product in jeopardy.

We carry a tremendous responsibility to people worldwide to make a quality product. To make that product, biomedical companies must have access to healthy, sustainable horseshoe crab populations up and down the east coast. I am dumbfounded by the lack of respect for our industry; and the backroom dealings that diminish the critical importance of our use. Thank you for listening to me.

SET 2019 HARVEST SPECIFICATIONS

CHAIRMAN KERNS: Thank you, Benjie. All right, we will move on to the next agenda item; looking at the setting of the 2019 Harvest Specifications. We will start with the review of the horseshoe crab and red knot indices of abundance for 2019 for the ARM model runs. I think Kristen will be going through that for us.

REVIEW HORSESHOE CRAB AND RED KNOT INDICES OF ABUNDANCE FOR 2018 ADAPTIVE RESOURCE MANAGEMENT (ARM) MODEL RUNS

DR. KRISTEN ANSTEAD: This morning I'm going to go through the population numbers for horseshoe crab and the red knots; and the annual running of the ARM model, and the recommendation it has for harvest in the Delaware Bay. Just as a reminder, the ARM model which operates in the Delaware Bay, this is its operating statement to manage the harvest of horseshoe crabs in the

Delaware Bay to maximize harvest, but also maintain ecosystem integrity and provide adequate stopover habitat for migrating shore birds.

Every year we put in the red knot and horseshoe crab population estimates; and we measure them against these thresholds; which I will go back over just as a reminder. Then there are five harvest packages that the model picks from and makes a recommendation based on that. The ARM model takes into consideration both the horseshoe crab population dynamics, as well as the red knots.

It goes through several iterations of this with considerations for the numbers coming out of the Virginia Tech Trawl Survey; as well as the stopover population in the Delaware Bay, and the annual bait harvest in the region to come up with the recommendation. These are the five harvest packages.

They range from full moratorium, which is Harvest Package 1 that is no male or female harvest in the Delaware Bay, and then 2 that have a male-only harvest of different levels, and then two packages that have some female allowance. There are two population thresholds in the ARM model; one is for the female horseshoe crabs, which are set at 80 percent carrying capacity so that's 11.2 million female horseshoe crabs, as well as a red knot population threshold, which are 81,900 birds.

There are a few things to consider when the ARM model runs; which is if you're not at either of those thresholds there is unlikely to be any female harvest recommended for the Delaware Bay. The thought is if the horseshoe crabs get up to this level there should be sufficient eggs for the birds to stopover; so that would be the reaching of one of the thresholds, as well as if the crabs hadn't come up to that population.

But the birds have rebounded to their threshold; there is the potential for female harvest. There is also another constraint on female harvest in the Bay and that is the sex ratio of two males to one female for the spawning beach. That is just a reminder of how this works; and how you get female harvest or male-only harvest in the Bay.

REVIEW RESULTS OF 2018 ARM MODEL RUNS

DR. ANSTEAD: These are the red knot population numbers for the last few years. This year was very similar to last year; it's been pretty stable the last few years, and you can see the confidence intervals around it, and the red line is that population threshold. You can see that we're still under the population threshold for red knots. The stopover duration was also similar to last year; and overall it's kind of tracking pretty similarly to previous years. The horseshoe crab abundance is mainly determined by the Virginia Tech Trawl Survey. I have included the orange dots; which is the composite index, which was developed for the years that the Virginia Tech Survey did not run. There were several years there where it wasn't funded; and so the Committee pulled from three other surveys that operate in that region, the Delaware 30 Foot Trawl, the New Jersey Delaware Bay Trawl, and the New Jersey Ocean Trawl, and came up with a composite index to kind of gap fill those years, because the ARM model has to have something to run off of.

You can see that it looks, based on the years that the Virginia Tech Trawl is run that they track pretty well; but those are the orange dots. Those are the years where the Virginia Tech Trawl was not operating. For this year we have 8.4 million female horseshoe crabs coming out of this ARM model as a population estimate. That is still under the threshold, but it is an increase over the last few years. The males have ticked down a little bit.

I'm not sure if that's a product of sampling, or if that's a product of the male-only harvest. I think we'll need a couple more years to really determine if that's a real tick down, or if that's just an anomaly for the year. They are still quite high; and the sex ratio is fine. Just to recap. There is a slight delay here; so we take the horseshoe crabs from 2017 fall, because the Virginia Tech Trawl operates in the fall.

Then the third estimate from the spring; and those go into the ARM model. We have 8.4 million female horseshoe crabs; which are below threshold, and then 45,000 red knots, which is also below their threshold. The harvest package

recommendation this year is Harvest Package 3 again; which is the 500,000 male-only harvests for the Delaware Bay states.

Then finally, you may recall that a couple years ago you all tasked us with doing a review of the ARM model; I think we did that in 2016, and it wasn't the full double loop review. We just kind of did what we could to look at some redundancies in the model; and we corrected those. We were also tasked with considering the incorporation of biomedical harvest into the ARM model the same way that bait is.

What are the amount of females being harvested in both of those, and put those into the ARM model; and we came back to you with two suggestions of how we could incorporate biomedical into the ARM model. I think we delayed that or you delayed that until we get the results of the benchmark stock assessment.

Once that stock assessment comes out, we're looking forward to getting back into some of this ARM review; and just making the model more applicable to all the data sources we have for the Bay. That's it and I'm happy to take any questions about the output of the ARM model this year.

CHAIRMAN KERNS: Are there any questions for Kristen? Bob Ballou.

MR. ROBERT BALLOU: Thank you, Kristen, great presentation. Is the recommendation essentially a status quo recommendation? I think it is, yes. Thank you.

DR. ANSTEAD: Yes.

CHAIRMAN KERNS: We'll get into that in a minute. David Borden.

MR. DAVID V. BORDEN: Do we have any sense for what the demand is; in terms of market demand for horseshoe crabs? I mean does it far exceed? I have no idea; I'm asking a question that I don't know the answer to.

DR. ANSTEAD: I believe, because we're going through the benchmark right now so I've made some figures about where harvest is in the

Delaware Bay and how that's been tracking. I know previous years it had tracked down below quota; because I had heard that it is likely because of the market demand. I can't speak to the market; because we don't deal with that as far as the stock assessment, but I will say the landings have come back up closer to their quota in the last couple years, compared to those first years of male-only harvest.

CHAIRMAN KERNS: Mike.

DR. MIKE SCHMIDTKE: Just to add to that conversation with TC members. Sometimes for the bait use of horseshoe crabs, the crabs will be taken in one year and if they're not used in that year for the eel or the whelk fishery, sometimes they're frozen and kept for future years. That can affect the market price with the availability of frozen crabs from previous years.

CHAIRMAN KERNS: Craig.

MR. CRAIG D. PUGH: In our area, the Delaware Bay area, we find that what is harvested is consumed. If it is frozen it's generally frozen from the springtime and reused in the fall. But most of it is consumed on a year-to-year basis. There is very little holdover; and the marketability could always allow more in our situation.

CHAIRMAN KERNS: Tom Fote.

MR. THOMAS P. FOTE: The reason we're all under quota in the Delaware Bay is New Jersey has a moratorium that's been in effect by legislation all these years. There are no crabs and there is a market for them in New Jersey but there is no crabs being harvested.

SET 2019 HARVEST SPECIFICATIONS

CHAIRMAN KERNS: Any additional questions for Kristen? **We are looking now for a motion to set the 2019 harvest specifications. We had a recommendation for a status quo harvest package of 500,000 male-only crabs; it's Package 3. David Borden, is there a second? Roy Miller.** I will read that motion into the record.

Move to select Harvest Package 3; 500,000 male-only crabs for the 2019 horseshoe crab bait harvest in the Delaware Bay. Motion by Mr. Borden, seconded by Mr. Miller, David do you want to speak to your motion? No, all right. Are there any comments on this motion? Emerson Hasbrouck.

MR. EMERSON C. HASBROUCK: I think the question was asked earlier; but I didn't completely hear the response, I just want to verify. This is status quo, essentially. It's just a continuation of what the quota has been; is that right?

CHAIRMAN KERNS: That is correct.

MR. HASBROUCK: Thank you.

CHAIRMAN KERNS: Any comments or questions on this motion? Are there any members of the public that would like to comment on this motion? **Seeing none; since this is a specification it is a final action. Is there any objection to this motion? Are there any abstentions? All right, seeing none; motion approved unanimously.**

UPDATE ON THE HORSESHOE CRAB BENCHMARK STOCK ASSESSMENT

CHAIRMAN KERNS: We will move on to an update on the Horseshoe Crab Benchmark Stock Assessment. Kristen.

DR. ANSTEAD: I'll be brief here. We're on track to hit our revised deadline for turning in the stock assessment and getting it to you all. We hope that the TC will review it in February; and we'll address any comments at that time and take it to Peer Review in March. That means we will be presenting the benchmark stock assessment to the Board in the May meeting.

Again, just as a reminder, for the regions outside of Delaware Bay, we mainly have trend analysis. Inside the Delaware Bay we will have a catch-survey analysis. We've developed some reference points and the model is fully functioning; and we're excited about it. The only reason we can do this in the Delaware Bay is because of the Virginia Tech Trawl Survey; because they stage the crabs.

I just want to stress how critical this survey is to being able to assess the population in the Delaware Bay. With the catch survey model in the Delaware Bay, we will have bycatch estimates from the NEFOP dataset. We will have the biomedical numbers and we will have the bait numbers. We hope that it is more developed than the last time we had this in our benchmark stock assessment.

Finally, just as a reminder that the stock assessment is looking at the biomedical numbers on a regional level; so it's a confidential process, and the peer review will also be confidential. But what we will present to you is the same things we will present to the public; which will have some redacted parts, and we'll still have to find a way to work around that.

But we will be running that catch survey model with biomedical, without biomedical, and we will be talking about the differences and any changes in a stock status that we see by including it, or not including it. It will be a challenge; but that's just a reminder that it's an unusual stock assessment process and we kind of have to figure it out as we go. I'm happy to take any questions about that.

CHAIRMAN KERNS: Are there any questions for Kristen? Mike Millard.

DR. MIKE MILLARD: Thank you, Madam Chair. Kristen, Service staff has informed me there was a fair amount of discussion about the geographic and demographic resolution of the assessment that is underway; how to divide up what units to actually assess. Can you either one, confirm that or give us some sort of look ahead on what sort of the results are going to look like from this assessment, in terms of management as a coastwide, and in Delaware Bay. What is this assessment going to look like?

DR. ANSTEAD: You know that's a good question. Determining that population structure was one of our TORs and that is a challenge; because with horseshoe crab it does seem like there is really embayment specific populations that we don't have the data to support assessment at that level.

We have maintained the same regions as the previous assessment; because kind of the broader tagging study seems to indicate that they move within these kinds of more general areas. We will have the individual fishery independent survey trends for each of those regions; so one could look at it on that very specific, you know the Connecticut Long Island Trawl Survey as an index.

Then we will have also combined that with all the other indices for that New York region. Because it is trend analysis, I mean it is what it is for those regions; and we will say we think that in general for the New England region the stock is doing this or the southeast region seems to be increasing like it was for the previous assessment, based on trend analysis.

The Delaware Bay is the only one where we're going to get more substantial information out of. Yes we are developing the reference points for that region and a model; but really how that's used will be up to the Board, because we have the fully functioning ARM model, which has similar inputs and I think ultimately similar population estimates now. But I hesitate to say too much before we go through a peer review.

2018 FISHERY MANAGEMENT PLAN REVIEW AND STATE COMPLIANCE REPORTS

CHAIRMAN KERNS: Any additional questions? Seeing none; thank you Kristen and we will move on to the 2018 Fishery Management Plan Review and State Compliance Reports. Mike.

DR. SCHMIDTKE: Thank you Madam Chair. The Horseshoe Crab Plan Review Team got together on a conference call and conducted the 2018 FMP Review. Horseshoe crabs are currently managed under the original FMP; which was approved in 1998 along with associated addenda, the most recent of which was Addendum VII that established the ARM framework for the Delaware Bay.

Coastwide bait harvest declined shortly after establishment of the FMP; and has remained fairly consistent since about 2004. Similarly, coastwide biomedical-only collections and estimated mortalities for the biomedical use have been fairly

consistent since about 2010. Reported coastwide bait landings in 2017 remain well below the quota.

Bait landings increased 23 percent from the previous year due to increases in Massachusetts, Connecticut, New York, Delaware, Maryland, Virginia, and Florida. Delaware harvested 39,000 crabs over their quota in a fishing season lasting only two weeks. They have stated in their compliance report that a crab-for-crab reduction in quota will occur in 2019.

North Carolina harvested 1,100 crabs over their quota and received a 1,200 crab quota transfer from Georgia that was approved earlier this year. In 2017, 483,000 crabs were collected solely for biomedical use. This was a 4 percent increase from the 2012 through '16 average; 95,000 crabs harvested for bait were bled prior to entering the market. Mortality attributable to the biomedical bleeding of horseshoe crabs is currently estimated as the number of crabs observed dead during the process; plus 15 percent of the number of bled crabs. In 2017 this estimate was about 73,000 crabs; a 4 percent increase from the average of the previous five years. This accounts for 7 percent of the total removals from the population; while bait harvest accounts for the other 93 percent. *De minimis* can be requested by states who have a combined average for bait landings for the last two years of less than 1 percent of the coastwide bait landings for the same two year period.

De minimis has been requested this year by Potomac River Fisheries Commission, South Carolina, Georgia, and Florida; all of these jurisdictions qualify for *de minimis* status. New Jersey qualified as they are currently in a moratorium for their bait harvest; but they did not request *de minimis* status.

With all this information the Plan Review Team has formed these recommendations as well as others that are mentioned in the report. They recommend continued seeking out of long term funding for the Virginia Tech Trawl Survey. Kristen highlighted the real need for this survey to continue for stock assessment; as well as ARM model purposes.

The survey has been funded through 2019; but the Commission is still looking for a long term funding source for that survey. So 2018 was the first year that a new format was used in compliance reports for reporting biomedical information. For the states that entered their information in this format, it was very useful from a staff perspective of being able to clearly see what information belongs in which category.

I would ask that in the future that states would consider using this format in future compliance reports. It will be included in the template that is sent out every year. Finally, the Plan Review Team recommends that the Board approve the 2018 FMP Review, State Compliance reports, and *de minimis* status for Potomac River Fisheries Commission, South Carolina, Georgia, and Florida and I can take any questions.

CHAIRMAN KERNS: Are there any questions for Mike? Yes, Justin.

DR. JUSTIN DAVIS: Mike, could you just remind me where does the 15 percent mortality rate come from for biomedical bleeding?

DR. SCHMIDTKE: It's a midpoint of several studies. Several studies have been conducted on biomedical mortality; some of them more than others replicating the actual biomedical process. Sometimes it's not able to be fully replicated within a research lab, university type of setting. There are a bunch of different studies; and 15 percent is kind of a midpoint of those studies.

That number is actually under review as part of the stock assessment process that's underway right now. We've gotten contributions from biomedical representatives; Benjie, Dr. Jim Cooper has also sent their reviews of different studies that are out there. In addition we are going to be trying to look at some tagging information to see if that can lend any additional light to that biomedical mortality estimate. That number will be assessed within that stock assessment as well.

CHAIRMAN KERNS: Bob Ballou.

MR. BALLOU: Mike, could you just review again the Delaware overage issue. I think I heard you say that they had a very brief two week season, they went over and they plan to adjust for that next year. If so, I'm thinking that is going to be a really short season next year, so I'm just wondering if I understood that correctly.

CHAIRMAN KERNS: John Clark.

MR. JOHN CLARK: Yes, what happened this year, the crabs obviously are really thick on the beach. This is hand harvest. We have an IVR system so the catch is called in every day. I think what happened this year was that we saw we were getting to the point where we were going to go over on a Friday.

By the time we were able to put the notice out to close the fishery, we went quite a bit over as you saw, just because it was more of a logistics issue. I mean we are getting the updated information every day. But there are just so many out there; and as Craig said the market is strong, so it was a few days without being able to close it and that's how far over we would get.

CHAIRMAN KERNS: Robert Boyles.

MR. ROBERT H. BOYLES, JR.: **If you're ready for a motion I would move that the Board accept the 2018 FMP Review and State Compliance Reports and grant *de minimis* status to Potomac River Fisheries Commission, South Carolina, Georgia, and Florida.**

CHAIRMAN KERNS: Seconded by Pat Geer. Are there any questions or comments on this motion? **Seeing none; is there any opposition to this motion? Seeing none; the motion is approved by unanimous consent.**

ELECT VICE CHAIR

CHAIRMAN KERNS: Moving on, as I said earlier we do not have a Vice-Chair for this management board, so I open the floor to nominations. Bob Ballou.

MR. BALLOU: **I move to nominate the distinguished gentleman from New Jersey; Joe Cimino for Vice-Chair of the Horseshoe Management Board.**

CHAIRMAN KERNS: Thank you, Bob; John Clark seconded. Robert.

MR. BOYLES: **I would move that we close the floor to nominations and that by acclamation we would select Joe Cimino from the Garden State as Vice-Chair.**

CHAIRMAN KERNS: Thank you, Robert, welcome, Joe!

ADVISORY PANEL MEMBERSHIP

CHAIRMAN KERNS: Tina Berger has an Advisory Panel nomination for the Board's consideration.

MS. TINA BERGER: I offer for the Board's consideration and approval Lawrence Voss; a commercial pot fisherman from Delaware as an addition to the Horseshoe Crab AP.

CHAIRMAN KERNS: John Clark.

MR. CLARK: **I move that Lawrence Voss be added to the Horseshoe Crab Advisory Panel.**

CHAIRMAN KERNS: Is there a second? Robert. **Any questions or comments, is there any objection to this motion? Seeing no objection; the motion carries by unanimous consent.**

ADJOURNMENT

CHAIRMAN KERNS: That takes us to other business. Is there any other business that this Board wishes to address? Seeing none; I will entertain a motion to adjourn. Thank you, this Board is adjourned.

(Whereupon the meeting adjourned at 11:50 o'clock a.m. on October 24, 2018)