

**PROCEEDINGS OF THE**

**ATLANTIC STATES MARINE FISHERIES COMMISSION**

**HORSESHOE CRAB MANAGEMENT BOARD**

**Crowne Plaza Hotel Old Town  
Alexandria, Virginia  
August 21, 2008**

Approved October 21, 2008

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## INDEX OF MOTIONS

1. **Approval of Agenda, by Consent** (Page 1).
2. **Approval of Proceedings of May 7, 2008, by Consent** (Page 1).
3. **“Move to require in Addendum V a moratorium on the Horseshoe Crab Bait Fishery in New Jersey and Delaware until available data indicate that horseshoe crab and shorebird minimum biometric requirements currently being developed by the Horseshoe Crab Technical Committee and Shorebird Technical Committee, including horseshoe crab surface egg densities on Delaware Bay Beaches; sustainable population levels of migratory shorebirds, particularly the red knot; and an acceptable percentage of migratory shorebirds achieving adequate weight gain before departure to arctic breeding grounds have been attained, indicating a commercial harvest of horseshoe crabs in Delaware and New Jersey would not put any species, particularly the red knot, at risk of extinction.”** (Page 6). Motion by Peter Himchak; second by Rep. Abbott. Motion substituted.
4. **Move to accept substitute motion to adopt Option 2 in Draft Addendum V for New Jersey and Delaware** (Page 6). Motion by Jack Travelstead; second by Pat Augustine. Motion carries (Page 8)
5. **Move to accept Option 2 in Draft Addendum V for New Jersey and Delaware** (Page 8). Motion by Jack Travelstead; second by Pat Augustine. Motion carried (Page 8).
6. **Move to adopt Option 2 for Maryland in Draft Addendum V** (Page 9). Motion by Roy Miller; second by Pat Augustine; Motion carried (Page 9).
7. **Move to adopt Option 2 for Virginia in Draft Addendum V** (Page 9). Motion by Jack Travelstead; second by Bill Cole. Motion carried (Page 9)
8. **Move to extend Addendum V management measures by adopting Option 2, which is adaptive management through board vote, in which case the board may extend the management measures contained in this addendum for a period of up to one year through a board vote.** Motion by Pat Augustine; second by Bill Cole. Motion carried (Page 9).
9. **Move to accept the compliance dates as stated, September 1, 2008, states must submit state programs to implement Addendum V, including management and monitoring programs, for approval by the management board; and October 1, 2008, states with approved management and monitoring programs shall begin implementing Addendum V.** Motion by Pat Augustine; second by Bill Cole. Motion corrected (Page 9).
10. **Move to correct compliance date to November 1, 2008.** Motion by Pat Augustine; second by Bill Cole. Motion carried (Page 10).
11. **Move to accept Addendum V for implementation with options as amended** (Page 10). Motion by Pat Augustine; second by Jack Travelstead. Motion carries (Page 10).
12. **Move to approve the nomination of Mr. Allen Burgenson to the Horseshoe Crab Advisory Panel.** Motion by Mr. O’Connell; second by Mr. Geiger. Motion carried (Page 10).
13. **Motion to adjourn, by consent.** (Page 16).

## ATTENDANCE

### Board Members

Terry Stockwell, ME, proxy for G.Lapointe (AA)	Jack Travelstead, VA, proxy for Steve Bowman (AA)
Doug Grout, NH (AA)	Catherine Davenport, VA (GA)
Rep. Dennis Abbott, NH (LA)	William Cole, NC (GA)
Paul Diodati, MA (AA)	Jimmy Johnson, NC, proxy for Rep.Wainwright (LA)
David Simpson, CT(AA)	John Frampton, SC (AA)
James Gilmore, NY (AA)	Malcolm Rhodes, SC (GA)
Pat Augustine, NY (GA)	Robert Boyles, SC (LA)
Brian Culhane, NY, proxy for Sen. Johnson (LA)	John Duren, GA (GA)
Peter Himchak, NJ, proxy for D. Chanda (AA)	Bill Orndorf, FL (GA)
Roy Miller, DE, Chair, proxy for P. Emory (AA)	Bill Johnson, FL, proxy for Rep. Needelman (LA)
Bernard Pankowski,DE,proxy for Sen.Venables (LA)	Steve Meyers, NMFS
Tom O'Connell, MD (AA)	Jaime Geiger, USFWS

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

### Ex-Officio Members

Gregory Breese, Shorebird TC Chair, US FWS  
Larry DeLancey, HSC TC Chair, SC DNR

### ASMFC Staff

Bob Beal	Toni Kerns
Vince O'Shea	Brad Spear

### Guests

Dan McKiernan, MA	Ben Feritas, OCEANA
Mark Alexander, CT DEP	Stewart Michels, DE DFW
Amanda Dey, NJ DEP	Michael Luisi, MD DNR
Rick Robin, Chesapeake Bay Packing	Marek Topolski, MD DNR

The Horseshoe Crab Management Board of the Atlantic States Marine Fisheries Commission convened in the Presidential Ballroom of the Crowne Plaza Hotel Old Town, Alexandria, Virginia, August 21, 2008, and was called to order at 2:45 o'clock p.m. by Chairman Robert H. Boyles, Jr.

### **CALL TO ORDER**

CHAIRMAN ROBERT H. BOYLES, JR.: Good afternoon, everyone. My name is Robert Boyles. I'm chairman of the Horseshoe Crab Management Board. I'd like to call the meeting to order.

### **APPROVAL OF AGENDA**

CHAIRMAN ROBERT H. BOYLES, JR.: The first couple of things that we need to take care of; I'd like a board consent on the agenda. I've had two suggestions for additions to the agenda. The first is Greg is going to give us a brief Shorebird Technical Committee Report. That will be after Agenda Item Number 4. Bernie has asked for a few moments under other business to give us a preview of what we'll see at the annual meeting. Any other additions to the agenda? Seeing none, the agenda will stand approved as amended.

### **APPROVAL OF PROCEEDINGS**

Secondly, you received the proceedings from the May 7, 2008, meeting of the Horseshoe Crab Management Board in the briefing book. Are there any additions, deletions or corrections to the minutes? Seeing none, those minutes will stand approved.

### **PUBLIC COMMENT**

The next item on the agenda is public comment. As you know, the management board is going to consider an addendum here, which we have received a lot of public comment on. There is always a spot on the agenda for public comment for those people who wish to address the management board about items that are not on the agenda. Right now I have just one person who has indicated a willingness to speak.

MR. RICK ROBINS: Thank you, Mr. Chairman and members; Rick Robins representing the Chesapeake Bay Packing. I'll be brief with my comments which are general and not specific to the addendum. The commission and this board in particular deserve credit for putting the horseshoe crab population on a solid path to recovery.

The recently updated meta-analysis that you have seen as well as the updated production surplus model shows the population abundance in the Delaware Bay quickly closing in on 1990 levels of abundance. Additionally, the Virginia Tech Trawl Survey shows an annual rate of growth from 2004 to 2007 of approximately 40 percent per annum in the growth rate of mature female horseshoe crabs.

Despite this clear evidence of recovery, we continue to see media reports in the regional and national media that this is a stock in decline, that the horseshoe crab population is being overfished actively. Earlier this year in 2008 we saw a report from PBS indicating that the horseshoe population is plummeting. This is clearly not the case.

The recovery of the horseshoe crab population is evolving as a tremendous management success story. This is your story to tell and I would encourage this commission to communicate to the public up-to-date information that tells this story, because right now the public has been widely misinformed as to the status based on media reports in the regional and national media.

This is evolving as a tremendous success story, and I think the board and the commission deserve credit. You've made a lot of hard decisions along the way. They were costly decisions. The results are in and they're very encouraging. I would commend the board for its past actions. Thank you.

### **HORSESHOE CRAB TECHNICAL COMMITTEE REPORT**

CHAIRMAN BOYLES: Thank you, Rick. Anyone else in the public who has a desire to speak to the management board at this time? Okay, seeing none, the next item on the agenda is Larry DeLancey is going to give us the Horseshoe Crab Technical Committee Report.

MR. LARRY DeLANCEY: Thank you, Robert. You all should have just gotten this circulated paper copy. I am going to go a little bit out of order with this report. The technical committee was tasked by the board to do two things recently; review the stock assessment update for the Delaware Bay population, which is essentially a trend analysis. It's something Jim Berkson had started in 2004 and Dave Smith and others have continued that recently. Also, review estimates of mortality from the biomedical bleeding process.

On the status of the Horseshoe Crab Stock Assessment, the recent data analysis indicates, as Rick has mentioned, the horseshoe crabs are

increasing in the Delaware Bay. Some of the folks on the committee, in other areas beside the Delaware Bay, we just wanted to emphasize we know a lot more about what is going on in the Delaware Bay populations than we do in other areas.

Some of those other areas have been hit pretty hard with bait harvest. Again, this was just horseshoe crabs and not shorebirds. The technical committee pretty much agrees with the conclusions of the stock assessment. The adult males and the juvenile crabs are increasing based on various surveys, and females are stable or increasing.

And, again, this is just a graphic of all the surveys. The surveys kind of averaged out and the trend is overall increasing. Michelle Davis and Jim Berkson had done the first surplus production model a few years back, and then Michelle and Dave Smith have been updating it. Again, this shows that the red line is the fishing mortality has gone down based on the decreased quotas in the Delaware Bay.

The numbers of horseshoe crabs have gone up and therefore the biomass is going up, so it certainly makes sense. If we move now to the bleeding mortality studies, we looked at all the published studies that have been done. Brad explained to us that he and the plan review team, in the review of the 2007 state reports, determined or at least estimated that the threshold for coast-wide mortality from bleeding had exceeded the level which is mentioned in the original plan in 1998. 57,500 horseshoe crabs are estimated to have died from bleeding, or more.

Their methods for doing that was they tallied all the reported dead crabs up until bleeding, which has been required since Addendum III in about 2005 or 2006, and then added 15 percent to the number bled to get at that number. Then we were just basically asked to review the 15 percent. This is just some of the results here in this table.

It is a pretty good spread on the studies. When the longest term studies – and there have been a lot of long-term studies, but a one- and two-year study in West Florida done by Ann Rudlow back in the early eighties, they found about 10 or 11 percent per year based on animals that were bled and then tagged and released; Thompson of South Carolina around 15 percent; and then a little bit less than that in another study.

Then one more interesting study, but, again, they didn't have a lot of crabs but they sonically tagged – Kurz and James-Pirri – sonically tagged about 20 of

them and followed them. One thing they noticed was that the animals that had been bled seemed to be a little sporadic in their movements so bleeding might be affecting behavior. It's something that could be looked at in greater depth by other studies.

Then Jim Berkson and several of his colleagues at Virginia Tech have done several studies, and probably the most germane is the bottom one here; kind of a maximum level of mortality that was seen after two weeks was females that were kind of like a maximum volume of blood was taken and then they were kind of held without air-conditioning, trying to simulate being caught on a boat, transported to a bleeding facility, like one day; held overnight and then taken back after bleeding.

So, that's a high number of 29 percent; again, not a whole lot – I think there were less than 20 crabs in that particular experiment, but nonetheless it just shows you the range. You know, it can be bad if they're not taken care of. That same study in another test showed that actually just in the short term the bleeding had no mortality in a couple of weeks there on just animals that were just held in the air-conditioned facility. So, handling and shipping is very important on how you treat them.

Conclusions; there were differences and limiting of all the studies. We certainly could do some longer-term studies, possibly, would be a recommendation. And the 15 percent mortality estimate that the plan review team used, we certainly signed off and agree with that – the numbers of the technical committee.

Conclusions; we will probably come up with guidelines to make sure that all the players in the biomedical industry are aware of best-management practices. I think that is a phrase Greg Breese had used in the conference call, and it certainly makes sense. You would hope that all of them are aware of ways to minimize mortality and with shipping and handling, et cetera, but it won't hurt to remind them of that.

We're concerned about is this an increasing trend; are more horseshoe crabs being bled, which is the reason for the fairly high number in 2007. Is there more demand for the product? That may apparently be so. We'll see how that certainly works out this year. The warmer the temperature the more stress there is on the crabs. Then in a couple of weeks now, in Delaware, they're going to have – not necessarily concerning biomedical, but the Horseshoe Crab Technical and Shorebird Technical Committee folks are going to have a joint meeting.

A post doc has been hired to develop a model for the Adaptive Resource Management Program, and hopefully in the future that will be very useful in better understanding the relationships between the birds and the horseshoe crabs, horseshoe crab eggs and possibly give us some harvest levels in the future. That's all I have.

CHAIRMAN BOYLES: Larry, thank you for that excellent report. Any questions for Larry on the technical committee report? Pete.

MR. PETER HIMCHAK: Mr. Chairman, a question on a technical committee assignment that goes back two board meetings ago. I mean, I'm not suggesting any management actions on limiting the biomedical utilization of horseshoe crabs, but we had a rather lengthy discussion – I think it was in the February meeting of this year – and the issue was the investment of the biomedical industry in the horseshoe crab resource itself.

We asked the technical committee – at one time we required the biomedical companies to tag certain numbers of horseshoe crabs as an investment in the resource to help with the stock assessment. We did ask if the technical committee could get the tagging working group up and running again and give some guidance to the biomedical companies, if they can get useful information that way.

The biomedical industry that derives its megamillions on this creature, the majority of them just won't invest in the resource. I would just like to bring that issue back up again and see if the technical committee can come up with some ideas on how the collection and bleeding of these horseshoe crabs, whether they're all tagged when they're released, the ones that are culled at sea are tagged. They should have some obligation, I think.

MR. DeLANCEY: Yes, Pete, we will be discussing I think next – I mean, Sheila had removed all the tagging information in January for the technical committee, and then we have just really discussed this bleeding stuff in the last month. That will probably be the next thing we will be talking about, if there are some holes that can be filled in with some of those folks doing some tagging. I know a couple of companies have been doing quite a bit, but maybe we can refine something, certainly.

## **SHOREBIRD TECHNICAL COMMITTEE REPORT**

CHAIRMAN BOYLES: Any other questions for Larry? Larry, again, thank you for the good report.

Next is the insertion of Greg Breese and the Shorebird Technical Committee Report.

DR. GREGORY BREESE: Thank you. There is not a lot of new information about trends and changes in shorebirds, but the big news from this past season was the Nor'easter that ripped through Delaware Bay on May 11<sup>th</sup> and 12<sup>th</sup>. It certainly had a dramatic effect on both spawning egg supply and apparent weight gain, which we'll get into in a couple of minutes. It particularly hit the Delaware side of the bay hard, shifting sand off of the beach and eggs off the beach and cooling the water temperature and basically shutting spawning, it looked like, for a little over a week.

This gives you a quick idea of what the water temperature change occurred when that Nor'easter moved through and for the length effect of that change in water temperature. The rest of what I'm going to provide is basically from a report that New Jersey provided very promptly and quickly. I commend them for doing that, providing us with the information that is available based on this past season's monitoring effort.

I will talk a little bit more about the different pieces. They fit basically into those three highlighted shorebird indices that we've been bringing to the board periodically; the weight index, the egg abundance index and the aerial count or the peak count of birds. From the peak count or the aerial survey of shorebird use of Delaware Bay, you can see where it falls in, and there doesn't seem to be a clear trend in the last six years.

I will just point out again that it is a usage of the bay rather than a population estimate. This is a baywide survey that is flown up the New Jersey side and then down the Delaware side. Looking at more than just red knots, this is for six of the key species; again, not much of a trend seen in the last six years.

We don't have the baywide egg abundance survey data available, but what we do have is the New Jersey methodology that they had done starting in 2000, so this is a look at how 2008 compares with the previous years. You can see there is a reduction in egg abundance for 2008. If you break it apart by week, you can see the signature of the Nor'easter quite clearly with the May 20<sup>th</sup> and May 27<sup>th</sup> weeks.

I would just point out that as I presented to the board in May, there is a marked difference between the two sides of the bay in terms of egg abundance, and so it will be valuable to find out what the baywide index

shows, just to see how that may have differed or may be corroborating. The shorebird weight index – Mandy is here in the audience and she just informed me that it is for both sides of the bay catches of birds, so it is baywide.

This shows the 2008 data compared with the previous years' data. This is the ratio of birds that on specific catches are above 180 grams versus below 180 grams. You can see that in 2008 the ratio was lower, although in 2007 you can see the ratio had been higher. It is fixed in a specific time period, and it was clear that the birds stayed a little bit later than normal.

The ARM Modeling Working Group, that Larry mentioned will be having a meeting with in September, is working on just how best to look at a weight threshold for that adaptive management modeling. Hopefully, we'll have a little more complex and perhaps more effective index in the future, but this is what this one shows that we have been working with.

In summary the Nor'easter did seem to throw a monkey wrench into the season, and as far as the birds are concerned did not help at all. It did seem to shut down spawning, egg densities, and eggs available to the birds didn't seem to be there for a little over a week. Weight gain was lower, but then the peak count didn't seem to show any change and actually was up a little bit.

As Larry mentioned, we're planning a meeting next month to hear from the modeling workgroup. They will be giving us what they have been doing so far, what decisions they have made, the discussions they have had and seeking some feedback in cases for certain things where they have a couple of paths that could follow, but they want some input on that. Then when the other indices are available, which I'm guessing we won't probably have available until winter/spring in 2009. We'll certainly bring them to the board and give you our insight. That is it unless there are questions.

CHAIRMAN BOYLES: Greg, thanks for that report. Questions for Greg? Tom.

MR. THOMAS O'CONNELL: Thanks, Mr. Chairman, more of a question. Is it possible to get a copy of the presentation? It is some good updated information and I'd like to see if I can get a copy of it following the meeting.

DR. BREESE: Yes, it is in Brad's hands right now and can be distributed. Brad should have the report that New Jersey provided as well to distribute.

DR. JAIME GEIGER: Thank you, Mr. Chairman. Greg, I noticed in one of Dr. Niles' publications – I believe it was a multi-authorized publication on the status of shorebirds – and I did notice some references in there that related to increased populations of red knots in North Carolina and South Carolina. Do we have any more information on these observations?

DR. BREESE: If I'm thinking of the passage and areas that you are referring to, it is talking about the variation that they see in North Carolina, and there just hasn't been enough surveying done to understand if that's a trend. It's unclear whether that is a shifting, but there has been some suggestions and some observations that suggest that the birds do shift their area in Florida, Georgia, Southeastern United States depending upon what food resources are available during the wintertime.

DR. GEIGER: Mr. Chairman, I would ask is the Shorebird Advisory Group going to do any followup work on that to try to sort of get better information on the various shifting of these populations.

DR. BREESE: There is work going on not by the Shorebird Technical Committee but by New Jersey and Delaware and others trying to get a handle on where the birds are moving through and what they're doing, but it is not easy.

## **ADVISORY PANEL REPORT**

CHAIRMAN BOYLES: Any other questions for Greg? Greg, seeing none, thank you, again, both you and Larry. We look forward to hearing the results of the joint meeting next month. Next, Brad is going to give us the AP Report.

MR. BRADDOCK SPEAR: Thank you, Mr. Chairman. The position of the advisory panel hasn't changed since the previous meeting. They support the continuation of Addendum IV provisions and stress that there should be time allowed for the management measures to have its effect.

## **UPDATE ON LEGAL CHALLENGE TO DELAWARE'S REGULATIONS**

CHAIRMAN BOYLES: Brad, thanks for that. Roy, are you ready to give us the update on the Delaware legal challenge?

MR. ROY MILLER: I can do that very briefly. A brief history first to set this up; as you will recall when Addendum IV went out for comment, the Delaware Department of Natural Resource Secretary elected to implement a harvest moratorium instead of the recommended option from Addendum IV.

That harvest moratorium was implemented over the winter in 2007, and it was challenged by a waterman and a conch processor. The decision to implement the moratorium was vacated by the superior court in Delaware. The department chose not to appeal that decision and instead took it upon itself to implement by emergency regulation the provisions of Addendum IV, specifically the 100,000 male harvest scenario, with no harvest between January 1 and June 7<sup>th</sup>, and no female harvest at any time.

Subsequently, that was implemented by the normal regulatory process, and that went into effect during the 2007 and 2008 harvesting season. Now, during that original trial at superior court a consortium of environmental groups petitioned the court to be recognized as an intervener in the case. That initial petition was denied.

Then they appealed that decision to the Delaware Supreme Court, and the most recent decision of the supreme court was the appeal was again denied. They were not granted intervener status. The court's decision stands at this point in time, and Delaware remains in compliance with Addendum IV. Thank you.

CHAIRMAN BOYLES: Roy, thanks for that update. Any questions for Roy? Okay, next let's move into the Draft Addendum V. Brad is going to summarize the public hearing comments.

#### **DRAFT ADDENDUM V**

MR. SPEAR: Thank you, Mr. Chairman. There were four hearings held on Addendum V, Virginia, New York, Delaware and Maryland. You will see from the chart on the screen that of the folks who commented on options in the addendum, these are the breakdowns. As you can see, everybody who spoke about the options supported Option 2 of the addendum, which is essentially continuation of Addendum IV provisions.

Of note, there were individuals in Delaware and Maryland that supported a moratorium and outnumbered the number of folks who supported the Number 1 Option in Addendum V. In addition, the

two attendees in Virginia preferred a full moratorium, but of the options supported Option 2.

We received in total about 4,500 comments through the mail or e-mail or through FAX. There were several different form letters or e-mails that we received. You can see that the numbers in the table are low considering we received so many comments. That's because a vast majority of the comments favored a full moratorium.

Of note, one organization that put together a form e-mail submitted a comment that indicated that over 14,000 individuals had gone to their website to submit the e-mail form letter and also submitted the names and information of those individuals. However, just going through our comments' inbox, we did not receive that many, but just of note through their website was 14,000 e-mails sent.

CHAIRMAN BOYLES: Brad, thank you. Any questions for Brad about the comments from public hearings or those received by the commission staff? Okay, seeing none, let's move into the options. This was included, of course, in your Briefing CD. What I'd like to do, if it is okay with the management board, is we've got a suite of decisions to make on the addendum – what I would like to do is deal with each one in turn; that is, deal first with the New Jersey and Delaware question; secondly, with the Maryland questions; thirdly, the Virginia question; and then lastly, the question of – I guess I call that adaptive management or the options to extend the management measures, if that pleases the board. Is that suitable with everyone?

All right, let's go with Draft Addendum V. We have Option 1, no action, which would, of course – just to remind everyone – would revert back to Addendum III upon the expiration of Addendum IV at the end of next month. Option 2 would be to extend the Addendum IV provisions, specifically a moratorium on directed harvest and landing of all horseshoe crabs in New Jersey and Delaware from January 1 through June 7 for one year; and, female horseshoe crabs in New Jersey and Delaware from June 8<sup>th</sup> through December 31<sup>st</sup> for one year. That option permits a delayed harvest in New Jersey and Delaware of up to 100,000 male crabs per state from June 8<sup>th</sup> through December 31<sup>st</sup>. Pete.

MR. HIMCHAK: Mr. Chairman, I beg the board's indulgence in allowing me to make a statement on behalf of the New Jersey Division of Fish and Wildlife. I'm feeling pretty lonely over here. It makes the caucusing very easy. But, nonetheless,

back in November of 2005, the New Jersey Division of Fish and Wildlife pressed for the development of Addendum IV. We thought it was rather urgent because weren't meeting – the horseshoe crab existing population was not meeting the needs of the shorebirds.

We argued strenuously for a moratorium under Addendum IV – and, boy, I don't want to go into those discussions again we had back in May of 2006. Despite the action taken by the board, we went ahead and we put our two-year moratorium in, and then it has been put in legislatively. So, the Division of Fish and Wildlife just wants to reaffirm its position on Addendum V, to let you know that we still believe that the most risk-averse management strategy of a harvest moratorium is necessary.

We do not see any improvement in meeting the needs of the shorebirds throughout the duration of Addendum IV. Following that line of reasoning, the Division of Fish and Wildlife can't support any of the options in Addendum V because even the status quo – the status quo is Addendum IV measures – they haven't been meeting the needs of the shorebirds. The other options are essentially a throwback of more liberalization to Addendum III.

We just want the board to realize that we pretty much have a legislative mandate under our Endangered and Non-Game Species Act to press forward with the need for a moratorium, and we ask for other states to support us on this. With that, I am prepared to offer a motion. Again, I don't plan to get into the argument over risk averse, 100,000 is the equivalent to a complete moratorium. We have to reaffirm our position, basically. Thank you.

CHAIRMAN BOYLES: Pete, did I hear you say you were making a motion?

MR. HIMCHAK: Yes, Mr. Chairman, and Brad has it. This is actually an alternative option for New Jersey and Delaware, and reads, **“Move to require in Addendum V a moratorium on the Horseshoe Crab Bait Fishery in New Jersey and Delaware until available data indicate that horseshoe crab and shorebird minimum biometric requirements currently being developed by the Horseshoe Crab Technical Committee and Shorebird Technical Committee, including horseshoe crab surface egg densities on Delaware Bay Beaches; sustainable population levels of migratory shorebirds, particularly the red knot; and an acceptable percentage of migratory shorebirds achieving adequate weight gain before departure to arctic**

**breeding grounds have been attained, indicating a commercial harvest of horseshoe crabs in Delaware and New Jersey would not put any species, particularly the red knot, at risk of extinction.”**

I should have prefaced in my position, we fully recognize the board's actions throughout the FMP and subsequent addenda. There is no doubt it has been very successful and having positive impacts on a number of life stages of horseshoe crabs, but we feel compelled to make this motion on behalf of not meeting the needs of the shorebirds. Thank you.

CHAIRMAN BOYLES: All right, we have a motion; is there a second? Seconded by Representative Abbott. Discussion. Mr. Travelstead.

MR. JACK TRAVELSTEAD: Thank you, Mr. Chairman. The state of New Jersey has in place a moratorium which they are certainly entitled to have. Under the provisions of the Compact, you know that any state can choose to be more conservative than any of the management plans that we adopt. The motion before us now I wouldn't say is out of order, but we certainly had discussions of a moratorium when this document was considered at our last meeting before it went out to public comment.

There was a considerable amount of debate on that issue. There was advice from the technical committee. There was advice from the advisory panel. Following all of that discussion, that option was eliminated from the addendum. I am not sure how making the motion to include it back in at this point, when it was not advertised to the public for comment, would work.

What I would see it doing is actually delaying the process for adoption of this addendum, forcing us to go back to public hearing to reconsider it, which I certainly would not favor. I think we need to move forward with this addendum as it is now, preferably with the options to keep us on track.

Remember, this addendum was designed to be a one-year sort of stopgap measure until the technical folks were able to complete the ARM and come back to us with perhaps new management advice. I think it is very important that we proceed to adopt the addendum that is before us now rather than proceeding along these lines. **With that in mind, Mr. Chairman, I would offer a substitute motion to adopt Option 2 for New Jersey and Delaware.**

CHAIRMAN BOYLES: All right, motion by Mr. Travelstead; second by Mr. Augustine. Any discussion on the substitute motion? Mr. Geiger.

DR. GEIGER: Mr. Chairman, for the record can we read Option 2 into the record, please?

CHAIRMAN BOYLES: Sure, Option 2 is to extend Addendum IV provisions; to be a moratorium on the directed harvest and landing of all horseshoe crabs in New Jersey and Delaware from January 1 through June 7 for one year; and, female horseshoe crabs in New Jersey and Delaware from June 8<sup>th</sup> through December 31<sup>st</sup> for one year. This option permits the delayed harvest in New Jersey and Delaware of up to 100,000 male crabs per state from June 8<sup>th</sup> through December 31<sup>st</sup>. Pete.

MR. HIMCHAK: I'll make this very brief, Mr. Chairman. Again, we'll vote on the substitute, but I don't think it is procedurally out of order to offer an alternative management option. I mean, innumerable comments at the public hearings suggested this. Drawing back on my limited memory here on board proceedings, we adopted a maximum size limit on male lobsters that wasn't in the public hearing document. I lost on that one, too. So, I don't think it is out of order to make the motion that I made, but we'll just proceed, then, and deal with the substitute motion.

CHAIRMAN BOYLES: Pete, I don't think anybody is suggesting that the motion was out of order. I think I do have some concerns myself with the fact that this discussion about a full moratorium was discussed back in May and was eliminated from the public hearing document specifically. My sense of things is there is not really anything out of order here. Representative Abbott.

REPRESENTATIVE DENNIS ABBOTT: Thank you, a question I might have for Roy, as he told us about the court case in Delaware, does he have any inclination of ideas of what is happening? Also, is there any pending legislative action as was taken in New Jersey? What is the state of affairs moving forward?

MR. MILLER: Thank you, Mr. Chairman, I would be happy to address that. To my knowledge, Dennis, there is no legislation pending nor have I seen any draft legislation to implement the same or similar provisions that New Jersey has implemented. In terms of the department's position, we're committed to the Addendum IV provisions for the time being,

and there have no other directives conveyed to me to indicate anything to the contrary. Thank you.

CHAIRMAN BOYLES: George, did you have your hand up?

MR. GEORGE D. LAPOINTE: I did, Mr. Chairman, but it was on the original motion and not the substitute, so my comment is out of order unless this motion fails. Thanks.

DR. GEIGER: Mr. Chairman, I'd be interested to know if Delaware has any comment on the substitute motion.

MR. MILLER: You all are putting me on the spot here, but it is my intention, as you will see in a minute, to vote for the substitute motion.

CHAIRMAN BOYLES: The question has been called. We have a substitute which would move to adopt Option 2 for New Jersey and Delaware in Draft Addendum V. Okay, anybody in the public like to comment?

MS. AMANDA DEY: Chairman Boyles, I thank you for the opportunity to address the board. My name is Amanda Dey and I am a biologist with the New Jersey Department of Environmental Protection. I'm here on behalf of Jane Galetto, who is the chairperson of the New Jersey Endangered Species Advisory Committee. I would like to read a statement from that committee to the board.

"Chairman Boyles, I am writing on behalf of the New Jersey Division of Fish and Wildlife Endangered and Non-Game Species Advisory Committee, of which I am the chairperson. As you are probably aware, the advisory committee is the independent advisory group for the Endangered and Non-Game Species Program. It consists of biologists, academic representatives, resource managers, public health and veterinary medicine representatives, non-profit conservation organizations and the public-at-large.

"We review land-use and resource management issues that affect non-game threatened and endangered species in the state and, where appropriate, make recommendations to the division and to the commissioner of the New Jersey DEP. In light of the following findings, the New Jersey Endangered and Non-Game Species Advisory Committee joins with the Division of Fish and Wildlife and the Department of Environmental Protection of New Jersey in support of a moratorium

option on the harvest of Delaware Bay breeding crabs.

“Our committee asks that I relay to you that this recommendation had unanimous support of all members in attendance at our August 13 meeting. Conditions on the Delaware Bay for red knots and other shorebirds have not improved and worsened in 2008. Red knot weight gains achieved on horseshoe crab eggs in the Delaware Bay are critical for survival and successful reproduction.

“Without sufficient weight, red knots suffer reduced adult survival and do not reproduce. Despite recent increases in various horseshoe crab life states reported by Delaware and Atlantic Coast Trawl Surveys, horseshoe crab egg densities in 2008 in New Jersey were the lowest recorded in nine years of survey, and that was even after spawning resumed at the end of May and early June.

“Only 15 percent of the red knots that came to Delaware Bay gained sufficient weight, and this is a continuation of an eleven-year declining trend. From 2000 to 2008 we witnessed a 71 percent decline in the main red knot wintering population in Tierra del Fuego in Chile. This decline continues to track the predicted extinction curve.

“The current harvest levels of horseshoe crabs have not allowed the breeding population to recover, have not allowed horseshoe crab egg densities to increase, and red knots and other migrant shorebirds continue to decline. The most important step that can be taken to immediately increase horseshoe eggs and recover the red knot population is to cease harvest of Delaware Bay breeding horseshoe crabs throughout their range in New Jersey, Delaware, Maryland and Virginia.

“We have asked that staff biologist Amanda Dey deliver these findings and our recommendation in writing to your council and thank you in advance for any consideration that you can give to our recommendation. Sincerely, Jane Morton Galetto, Chairperson.” Thank you very much your time.

CHAIRMAN BOYLES: Thank you, Ms. Dey, I appreciate your being here. Mr. Robins, did you wish to make a comment?

MR. ROBINS: Thank you, Mr. Chairman, Rick Robins on behalf of the Chesapeake Bay Packing. I am pleased to speak in support of the substitute motion. The original motion, Mr. Chairman, seems to me is not covered by the range of options that were

publicly scoped. That is an obvious concern. The constituents did not have an opportunity to address with detailed comments the implications of a moratorium, and so that was not included in the scoping.

More specifically, though, the moratorium option that was originally out there assumes that males are limiting somehow in the population; and that by saving 100,000 males from harvest in Delaware that we would be benefiting migratory shorebirds. I think that is not supported by science. In fact, the evidence I think overwhelmingly tells us that there is no evidence of sperm limitation. We know that females contribute uniquely to bioturbation of eggs. Male activity is primarily surface activity.

The females are the ecological currency here that are fully preserved under the substitute motion, and I will continue to support that. It has been vetted through the technical committees. It has been subjected to extensive judicial review at this point, and it has help up. I think it represents a very sound platform for management. As I said at the outset, you’re seeing outstanding recovery rates and a very positive trajectory in the population. I think you’re on the right track and would encourage you to stay on it. Thank you.

CHAIRMAN BOYLES: Thank you, Mr. Robins. Anyone else from the public wish to comment? Seeing none, the question has been called. **All those in favor of the substitute motion, raise your right hand, please; opposed, same sign; null votes; abstentions. The motion carries; 12 in favor, 1 opposed.**

**The substitute motion becomes the main motion. All those in favor of Option 2 for Delaware and New Jersey; raise your right hand; opposed, same sign; null votes; abstentions. The motion carries 12 to 1 with 2 abstentions.**

Next, let’s move on to the Maryland option. Again, Option 1, no action would revert to Addendum III. Addendum IV provisions would expire September 30, 2008; thereafter, Maryland is required to comply with the provisions of Addendum III and Addendum I, respectively. No harvest and landings of horseshoe crabs for bait from May 1 through June 7, inclusive, and harvest restricted to no more than 170,653 horseshoe crabs each year.

Option 2 is the delayed harvest; prohibit harvest and landing of horseshoe crabs in Maryland from January 1 through June 7 for one year. Harvest restricted to

no more than 170,653 horseshoe crabs each year. Any discussion? Does someone want to make a motion? Mr. Miller.

**MR. MILLER: I move to adopt Option 2.**

CHAIRMAN BOYLES: Motion by Mr. Miller; second by Mr. Augustine. Any discussion? Mr. O'Connell.

MR. O'CONNELL: Thank you, Mr. Chairman. I just want to advise the board that the Maryland Administration is interested in looking at additional risk-averse opportunities to further protect the female horseshoe crabs. We have initiated some public scoping meetings on those options, and we will be continuing to evaluate those options through this summer and early fall. We will keep the board posted.

CHAIRMAN BOYLES: Thanks, Tom. Any other discussion? All right, the motion is move to adopt Option 2 for Maryland in Draft Addendum V. **All those in favor, raise your hand; opposed, same sign; null votes; abstentions. The motion carries 12 for, 1 against, with 1 abstention.**

We will move to Virginia. Again, Option 1 is status quo, no action; indefinitely prohibit the landing of horseshoe crabs in Virginia from federal waters from January 1 through June 7 in any year and divide Virginia's quota such that no more than 40 percent may be harvested east of the COLREGS Line in ocean waters. Horseshoe crabs harvested east of the COLREGS Line and landed in Virginia must be comprised of a minimum male-to-female ratio of two to one.

Option 2 is a multiple-measure approach for one year and prohibit the landing of horseshoe crabs in Virginia from federal waters from January 1 through June 7 in any year and divide Virginia's quota such that not more than 40 percent may be harvested east of the COLREGS Line in ocean waters. Horseshoe crabs harvested east of the COLREGS Line and landed in Virginia must be comprised of a minimum male-to-female ratio of two to one. Those are the options before you. Mr. Travelstead.

**MR. TRAVELSTEAD: Move adoption of Option 2 for Virginia.**

CHAIRMAN BOYLES: **Motion to adopt Option 2 by Mr. Travelstead; seconded by Mr. Cole. Any discussion. Seeing none, all those in favor of the motion, raise your hand; opposed, same sign; null**

**votes; abstentions. The motion carries 12 for, 1 against with 1 abstention.**

Finally, we have an option here to extend Addendum V management measures. Option 1 would be status quo in that changes to the management measures contained in this addendum must be made through the ASMFC addendum process. Option 2 is adaptive management through board vote, in which case the board may extend the management measures contained in this addendum for a period of up to one year through a board vote. The board is permitted to extend the provisions of Addendum V through board vote only once. Mr. Augustine.

**MR. PATRICK AUGUSTINE: Thank you, Mr. Chairman. I move Option 2, adaptive management through board vote.**

CHAIRMAN BOYLES: Motion by Mr. Augustine; seconded by Mr. Cole. Any discussion? **All those in favor, signify by raising your right hand; opposed, same sign; null votes; abstentions. The motion carries 14 for; no opposition; unanimous.**

Next we have to deal lastly with the implementation schedule, which Brad will project on the board. September 1, 2008, submit implementation programs; October 1, 2008, states with approved plans begin implementing the addendum. Can I get a motion? Mr. Augustine.

**MR. AUGUSTINE: Thank you, Mr. Chairman. Move to accept the compliance dates as stated, September 1, 2008, states must submit state programs to implement Addendum V, including management and monitoring programs, for approval by the management board; and October 1, 2008, states with approved management and monitoring programs shall begin implementing Addendum V.**

CHAIRMAN BOYLES: Motion by Mr. Augustine; second by Mr. Cole. Any discussion? New Jersey, Delaware, Maryland and Virginia, that should be okay with you? Bob.

MR. ROBERT E. BEAL: Thank you, Mr. Chairman. Just thinking of the timing here, if the states submit proposals September 1<sup>st</sup>, the board is not going to meet until the annual meeting, so in order for the proposals to be approved, you may want to shift that implementation date possibly to November 1<sup>st</sup>, sometime after the board has met to approve the proposals.

CHAIRMAN BOYLES: Did I hear you say you wanted to correct that motion?

**MR. AUGUSTINE: Yes, please change it according to November 1<sup>st</sup> if that's a more appropriate date.**

**CHAIRMAN BOYLES: Mr. Cole, is that acceptable as the seconder? States, any issues with that; does that seem reasonable? All those in favor of the motion, say aye; opposed, same sign. The motion carries. Thank you for Addendum V. Now we need to move the entire addendum.**

**MR. AUGUSTINE: Move to accept Addendum V for implementation with options as amended.**

CHAIRMAN BOYLES: Is there a second? Roy.

MR. MILLER: Excuse me, Mr. Chairman. What amendments did we make; I didn't remember any?

CHAIRMAN BOYLES: How about with options as selected? Is there a second? Seconded by Mr. Travelstead. Any discussion on the motion? **All in favor, raise your right hand; opposed, same sign; null votes; abstentions. The motion carries 14 for, 1 opposed.** The last two items on the agenda, we've got an advisory panel nomination from Maryland. Tom.

#### **ADVISORY PANEL NOMINATION**

MR. O'CONNELL: Thank you. **I would like to make a motion to approve the nomination of Mr. Allen Burgenson to the Horseshoe Crab Advisory Panel.** Mr. Burgenson is the regulatory affairs manager for LonzaWalkersville, a biomedical company that is located in Maryland.

CHAIRMAN BOYLES: Motion by Mr. O'Connell; is there a second. Seconded by Dr. Geiger. Any discussion? Any opposition to the motion? **Seeing none, the motion carries, and we will congratulate and welcome Mr. Burgenson to the AP.** Lastly, I think we've got one piece of other business. Bernie.

MR. BERNARD PANKOWSKI: I have some non-partisan information and publications for everybody. If you'll bear with me for a minute, I want to just read a little of the statement about what is going on. As you know, the annual meeting will be held in Delaware this fall, so Roy and I thought it might be appropriate to help everyone better understand the natural resources of the Delaware Estuary.

The publications we're providing to all the commissions consists of articles written for laymen and summarize some of the questions you may about our neck of the woods. For example, in you travel to Delaware in October you'll find that the Delaware Estuary is one of the four most important shorebird migratory sites in the world.

The Delaware Estuary supports the world's largest freshwater shipping port and 70 percent of the oil shipped to the east coast of the United States passes through the Estuary. The Delaware River Basin supplies 650 million gallons of freshwater to New York City per day, meeting the demands of almost half of the city of New York's drinking water; all of this while also supporting a major fish-spawning area, world class recreational angling and a very productive blue crab and commercial fishing fleet.

Plus, the bald eagle population is in good condition and on the rise. In fact, in 2007, amid all the hustle and bustle, a pair of bald eagles established a nest near the confluence of the Schuylkill and the Delaware River in South Philly, where some of you will be landing when you come to Delaware. This pair may be the first nesting pair of bald eagles within the city limits since colonial times.

These are just some of the facts and information you'll find in this newly published 2008 State of Delaware Estuary. Lastly, we all know that the Delaware Bay has one of the largest population of horseshoe crabs in the world. We have also provided a poignant and recently written article entitled *Jurassic Beach* from the Nature Conservancy Magazine.

What I'd like to do is just read just a little bit of a teaser. Brozack was participating in the Crab Council for the past two years, while he quickly points out that he is tree hugger, he and his co-workers were happy to help out this bottom-dwelling underdog. Brozack says the whales and seals get all the glory, in the past decade this creature, which vaguely an old Buick, has become a sort of mascot for the Mid-Atlantic Seaboard. Delaware even voted to make the horseshoe crab the state's official marine animal.

Then at your leisure, in the article, you'll continue and you'll read story about the surf-dragging 200 million year old holdout. All of you, as commissioners, will find yourself in the story as it talks about upper management and the part we play as the ultimate fisheries managers to restore and

fairly regulate the humble horseshoe crab and manage its populations.

Roy and I and all the people of Delaware hope you enjoy these publications, find it helpful as managers. In closing, we would like to thank the gracious people at the Delaware Chapter of the Nature Conservancy and the helpful folks at the Partnership for the Delaware Estuary for making these first-class publications available for all Atlantic States Marine Fisheries managers. Thank you and we look forward to everyone's visit to Delaware.

### **ADJOURN**

CHAIRMAN BOYLES: All right, Bernie, thank you, we are certainly looking forward to Delaware in October. Any other business to come before the Horseshoe Crab Board? We are adjourned.

(Whereupon, the meeting was adjourned at 3:50 o'clock p.m., August 21, 2008.)