

**PROCEEDINGS
of the
ATLANTIC STATES MARINE FISHERIES COMMISSION
HORSESHOE CRAB MANAGEMENT BOARD**

**April 24, 2001
Quality Hotel and Conference Center
Arlington, Virginia**

TABLE OF CONTENTS

<i>Report of the Biomedical AdHoc Workgroup</i>	<u>3</u>
<i>State Compliance Report</i>	<u>3</u>
<i>Addendum II</i>	<u>6</u>
<i>State Challenge Funds</i>	<u>10</u>
<i>Closed Area</i>	<u>11</u>
<i>Shorebird Committee</i>	<u>12</u>

**ATLANTIC STATES MARINE FISHERIES
COMMISSION**

HORSESHOE CRAB MANAGEMENT BOARD

**Quality Hotel and Conference Center
Arlington, VA**

April 24, 2001

The Horseshoe Crab Management Board of the Atlantic States Marine Fisheries Commission convened in the Presidential Room of the Quality Hotel and Conference Center, Arlington, Virginia, and was called to order at 4:10 p.m. by Chairman Charlie Lesser.

CHAIRMAN CHARLIE LESSER: Ladies and Gentlemen, please take your seats; we're already running behind time. I'd like to call the meeting of the Horseshoe Crab Management Board to order. We'll dispense with the roll call. There's a sheet being passed around.

Without objection, we'll follow the prescribed agenda with a few modifications, and we'll dispense with approval of the minutes, unless I hear otherwise. So ordered.

Are there any public comments at this time? If there are, please make them brief. Seeing none, we'll progress to the Report of the State Compliance Reports for 2000. I'm sorry, we're going to flip flop and we're going to go to Item 6, Report of the Biomedical Ad Hoc Workgroup first.

Report of the Biomedical AdHoc Workgroup

MR. THOMAS O'CONNELL: Thank you. There were a couple of meetings last week from the Biomedical Ad Hoc Workgroup and the Technical Committee and that's kind of the purpose of this handout, and to try to expedite this meeting so that everybody is working off of the same documents.

I'm going to be just briefly reviewing Page 22, which is a summary of the Biomedical Workgroup and the position recommendations from that workgroup that was consistent with the recommendations from the Technical Committee.

As you remember, the purpose of this workgroup was to bring together some of the industry folks and the state Technical Committee representatives to review some of the biomedical issues.

The concerns were trying to clarify the understanding of FDA requirements regarding the use of crabs for biomedical purposes and the expansion of the Horseshoe Crab Biomedical Fishery.

Although there has only been a slight increase in the number of crabs being bled, there's approximately a 10 percent increase in the number of crabs being collected and ultimately leading to a higher rejection rate. So, there's a lot of concern.

There's also concern with a company in Massachusetts that is reported to be expanded this year, which has led to crabs being collected from the Mid-Atlantic area and transported up to Massachusetts, and some concerns related to that.

Just really quickly, Dieter Busch was there, representatives from Massachusetts, New Jersey, Delaware, Maryland were present, and we were able to get four of the five companies present, as well as a member of the Food and Drug Administration.

It was a really good meeting, and it was very successful. First, I'd just like to clarify what the FDA regulations and restrictions are.

Back in 1972, FDA required that bled crabs be returned alive to the waters after being bled. At this time, there was no state interest in horseshoe crabs or very little. They went through with this without consulting with the states.

In 1996, they removed this requirement, but still through their licenses with the companies, required crabs be returned alive. Because it is a licensing provision now, companies are able to request through a letter to FDA that their crabs be returned back to the bait market.

The Associates of Cape Cod and Massachusetts asked for this exemption last year and was given it. So, therefore, Massachusetts could obtain crabs that were taken for bait purposes, bled and then go back into the bait market.

The FDA clarified that their main interest is restricting the use of crabs in the bleeding facility. The collection and the return of the crab is ultimately the state's and the National Marine Fisheries Service's authority.

That was very useful to hear that, and the state representatives requested that the FDA notify the companies of this clarity through a letter to the company to be very helpful. Mary Malarkey, who is President, is going to explore that.

The recommendation of this workgroup and the Technical Committee was more a clarification of the current FMP. The current FMP states that horseshoe crabs collected for biomedical purposes through a state permitting process be returned alive, back to the waters in which they were collected.

A lot of states have used scientific or research collection permits, and there have been some flaws associated with that. The recommendation is to establish a clearer biomedical collection permit for this practice.

Through this permit, horseshoe crabs shall be returned to the waters of collection after they are bled. These crabs are not counted against the state's landings quota, and crabs could continue to be collected through this permit once the state's bait landed quota is obtained or the fishery is closed.

It's strictly a state decision. And for these crabs that are being returned back to the waters of the collection, it was recommended that the companies implement more additional research and monitoring requirements to more accurately assess the impact of this industry.

Secondly is the horseshoe crabs collected for bait purposes, being able to use those crabs for bleeding purposes, and then go back into the bait market.

As the letter you all received from Paul Diodati in Massachusetts indicated, this is something that the state of Massachusetts was exploring and was getting a lot of support from other states along the Atlantic Coast.

This action is consistent with the plan because these crabs are collected for bait purposes, count against the state's quota from which they were landed, bled and then go back into the bait market. Another difference is that collection of crabs through this process would be

stopped once the state's quota was obtained, or the fishery is closed.

So, hopefully, that clarifies the plan, allows Massachusetts to go forth with their request, and we'd probably see something similar to that in some other states. It's a double use of the resource, and I think it will minimize the mortality associated with the biomedical industry. Thank you.

CHAIRMAN LESSER: Any comments to Tom? All right, now we'll go to the Report of the State Compliance. Jack.

MR. JACK TRAVELSTEAD: I had a question on the previous agenda item.

CHAIRMAN LESSER: Go ahead.

MR. TRAVELSTEAD: The issue that Massachusetts describes involves crabs being landed in their state for bleeding, and then ultimately used as bait in the same state. It seems to make sense to me.

However, there's a situation that I would want to avoid, and that is crabs being landed in one state for medical purposes where they would not count against that state's quota, then being shipped to another state where they're sold as bait. In that case, whose quota does it count against?

MR. O'CONNELL: If the crabs were collected under a biomedical collection permit, and then shipped to an out-of-state company bleeding facility, they must be returned back and released to the waters from which they were collected.

So the only way that could happen where they could enter the bait market is if they were bought from a commercial licensed fisherman with appropriate licenses and permits.

MR. TRAVELSTEAD: So the current plan precludes that scenario from happening?

MR. O'CONNELL: Yes.

CHAIRMAN LESSER: Any other comments? Seeing none, Tom, do you want to go to Item 5.

State Compliance Report

MR. O'CONNELL: Yes, just briefly, and then I'm going to let Stu Michels address some of the concerns. In regards to the Compliance Reports for 2000, as well the management proposals for 2001, first I'd like to recognize that states were very good this year in getting their reports in.

We only had one state that failed to submit their report in a timely manner. Secondly, things are progressing very nicely. States have been very successful in implementing the components of the plan.

Many states, those de minimis and some other states, have gone beyond their requirements, implementing additional measures to keep the fishery from expanding, as well as implementing spawning surveys, and they are doing excellent habitat delineation work. After that, I'll just kind of refer it to Stu.

MR. STEWART F. MICHELS: Thank you, Tom. Like Tom said, the Technical Committee was very pleased with the condition of the reports, a lot of states going above and beyond what was called for.

There were a few deficiencies to note, however. And they are that although New York exceeded its 2000 quota allocation, the Technical Committee representative reported that New York intends to subtract that overage from its 2001 allocation.

New York also contracted for horseshoe crabs to be included in port sampling in their characterization of the catch, but the contractor apparently failed to implement this task.

We have been assured that New York intends to ensure that this information will be collected in the year 2001. In terms of the monitoring component regarding delineation of nursery and spawning habitat, New York has not attempted to identify horseshoe crab nursery and spawning habitat.

They cite the unavailability of staff and funds. This requirement was not addressed in the 2001 Management Report for the state. Really, what the Technical Committee is asking for here is just that a state make some headway in starting to delineate some of their spawning in juvenile habitat.

Now that can be something as simple as looking at bay

charts and identifying sandy beach habitat; a literature review, looking at landings records to see where these horseshoe crabs are reported in the hand collection fishery.

Also, New York has not submitted their 1999 landings to the Atlantic States Marine Fisheries Commission yet. That's a brief summary of the Technical Committee comments.

CHAIRMAN LESSER: Bob Munson isn't here for the report for the Advisory Panel. Any comments? Seeing none, we'll go to Item 7. Bruce.

MR. BRUCE FREEMAN: Thank you, Mr. Chairman. I just would ask the representative from New York to indicate if, in fact, the issue of the '99 landings is something that's being completed at the present time, or is there a problem?

Do we have any information on that? That seems to be something that's missing that's needed, and I'm just curious as to what actions are being taken to obtain that information.

CHAIRMAN LESSER: Yes, I believe Gordon changed his mind. Two weeks ago I asked him if he wanted time on the agenda, and he said he wouldn't need it, but last week he said he would need some time. So, Gordon, you have it.

MR. GORDON C. COLVIN: Well, with respect to the '99 landings, Mr. Chairman, Bruce is right. That's an appropriate question to raise. In fact, it is something that's being worked on.

The difficulty is that the records that all of the crab fishermen, including the horseshoe crab fishermen, submit and submitted through the year 2000 were year-end records. And they're all submitted along with and to the same staff and the same process as the lobster landings.

If you'll recall, we've had just a little bit of a distraction with respect to the lobster landings and the staff working them up. So, they put all the crab stuff aside because of the complications surrounding the Long Island Sound lobster die-off.

They have gotten to them now, and they are working them up. I think from what I last heard, there's an

expectation that that final report will be in within the month. Bruce, does that get at your question?

MR. FREEMAN: That's fine, thank you.

MR. COLVIN: Now, as I indicated, through 2000, those were annual recall landings, and beginning this year, they're required to report monthly and even weekly during the peak of the season.

Those reporting requirements are delineated in the state's compliance report. They're there for everybody to read. So, the expectation is that so long as the fishermen timely and accurately report, we won't encounter this situation we encountered last year with a very surprising report of much larger landings than we had had in other years.

Some people have noted that some of those landings occurred earlier in the year, and they wondered why action wasn't taken. The fact is that the landings may have occurred in April, May and June, but they weren't reported to us until December, January and February. So, we didn't know about them until way after the fact. That won't happen under the new reporting system. I do want to indicate something to the Board, though, if our experience can be helpful. I think it ought to be at least instructive.

The question has been asked why did New York's landings go up last year to something over 150,000 crabs more than it had been in preceding years. The answer to that question is still as of this time, we don't know. I suspect it's more than one thing.

One of the things that we have been told -- and we've been told by enough people in the industry that it's hard to not believe it -- is that some fishermen, based on their observations of what took place with the history based lobster trap tag program in certain areas, including Long Island Sound and probably the offshore of the EEZ waters, as well, had concluded that there was a possibility that the future may bring individual quotas in the Horseshoe Crab Fishery and had consequently inflated their landings on that basis.

There's a belief in the industry that that took place. I don't know if it did or not. There's also some evidence that there was a substantially increased level of effort by a small number of individuals that was not immediately discernable, who caught large volumes of crabs with

modified dredge gear in the ocean, and that they were exported from New York.

That came at us out of nowhere, and we didn't learn about it until the winter. But we're hoping to prevent that situation from getting out of control with the trip limits that we'll be using this year.

If anybody wants it, I do have a copy of the documents that we've already submitted to the industry that lay out the overall program for the quota management for the year, and they're on a 30 crab limit for now until we're confident that they're reporting as they should, timely.

Once they are, then we'll bump that up for their spring fishery, which needs to happen soon. But they've got to be reporting. Now, the take-home message in all of this to me is that we don't have a very good reporting system for horseshoe crabs as compared to our other quota-managed fisheries.

Our other quota-managed fisheries we manage on an ongoing, day-to-day basis. Our trip limits and our seasonal closures are not based on fishermen's catch reports. They're based on dealer reports. We all know that; flute, scup, sea bass, blue fish, and squid.

The fishermen's reports are separately submitted, independent and ultimately can be used as a separate check once against each other. That's the whole model that the ACCSP Trip Reporting System is based on; independently reported dealer and fishermen data that can be used to cross check each other.

We don't have that with horseshoe crabs. Now, I'll tell you that I'll be amazed if New York exceeds its reduced quota this year based on fishermen's trip reports.

With a larger number of permit holders and no independent way of verifying those trip reports, it's not an easy thing to enforce, as you can all well imagine. You're all involved in the fishery management and you know how difficult that is.

So I think, Mr. Chairman, we need to have some discussion of this problem, because the fact is that I have to ask the question; are any of us really sure that our fishermen's trip reports are 100 percent accurate, or are the fishermen perfectly capable of watching that needle over the course of the year? I'd like that question to get some discussion.

CHAIRMAN LESSER: Comments?
Anybody else in the same predicament as New York?
Jack.

MR. TRAVELSTEAD: We're not in the same predicament, by any means. I think it is possible to enforce the quotas, but you have to go to great lengths to do that. I suspect most of the states have not.

When we suffered the reality of the quota we now have, we recognized a lot of the same problems that Gordon has delineated, and we have since put in place a rather intricate system for monitoring the quota, because it's so small.

We have limited the number of boats that can land against the quota to an extremely small number. Right now, I think there are only four vessels that can land the higher trip limit in the state of Virginia. So, that makes it that much more easy to monitor.

We also have established an interactive voice reporting system, and a call-in process where vessels must call in before they offload any catch so that we can place a marine patrol officer on that dock to monitor the offloading.

But that's literally what it's going to take to make sure that these quotas are not exceeded. It's a very expensive and very effort-intense program.

CHAIRMAN LESSER: Further comment?
Gordon, you didn't generate much discussion.

MR. COLVIN: Well, I'll tell you right now, if you have four permit holders, you can do that. When you have many dozens of permit holders, many of whom are using the crabs themselves for bait, you can't do that.

It's not doable, and we all know it. So, we can discuss it, or we cannot discuss it, Mr. Chairman. But as I said, I'll be very surprised if New York goes over its quota this year.

CHAIRMAN LESSER: Gerry.

MR. GERALD W. WINEGRAD: I'm Gerald Winegrad representing the American Bird Conservancy. And on this issue it's kind of critical to

the whole management scheme that the Board and the Commission adopted back in the fall of 1998, and each state was supposed to set up a monthly system. That was critical.

There was no quota imposed at that first adoption of the plan.

It was because there wasn't sufficient data according to the Commission, and that was critical to gather this data and have very strict reporting requirements.

Now we're over two years and a half past that point, and we're hearing that there are very significant problems in collecting this data.

My question to New York, and to some of the other states, is that New York has very strict reporting requirements under law, under their regulations.

The regulations say that you report every month, within the fifth day of the following month, your monthly catches, whether you take crabs or not. Then in the months of May, June, and July, the high harvest periods because a lot still comes from hand harvest in New York, that you have to report every week by the fifth day following that week, the end of that week.

The penalty is a suspension of your license, or that you will not have your license renewed next year. My question is simply that if you don't get reports, you know who has licenses for the horseshoe crab harvest, you know that.

It's a matter of fact if it's computerized or not. If you don't get the reports by the fifth day, why isn't action taken to suspend or warn the license holders with automatic letters triggered to them, or even phone calls because you would have had this data by August 5th that you were over your landings for the year, if the law was complied with?

CHAIRMAN LESSER: Gordon, respond?

MR. COLVIN: As I said earlier, that rule wasn't in place last year, until late in the year. So last year's landings came at the end. This year, we will have to take action if people don't comply.

But that's not my concern. My concern is that they'll comply just fine, but they will report to us about a quarter of what they actually took. Because like I said,

they can count, too.

CHAIRMAN LESSER: We, too, in Delaware have suspicions that they're going to tell us what they want to tell us, and we don't have a verification system whereby we have dealer reports to back it up.

But, we do have enforcement staff in the field taking notes, who is collecting when, and we do cross reference those to their reports to make sure at least they're reporting the days they're out.

The other thing, we have the advantage of only having five dredge boats working; and, again, we're like Virginia, we have very few boats landing from dredging. So, we're pretty well on top of that. I sympathize with your problems, Gordon, but bear with it. Tom, do you want to go on to the state proposals for 2001? Perry, we've got to move here. We've got a half-hour. Can you hold it? All right, go ahead.

MR. PERRY PLUMART: Thank you, Mr. Chairman. I just wanted to echo Gerald's concerns that the state of New York, along with every other state, has been well aware of the Horseshoe Crab Fishery, the regulations that were coming down, the reporting requirements that were going to be required.

I've distributed and would like it to be included in the record, a letter from the Audubon Society to New York's Department of Environmental Conservation, which indicates that we're very concerned about this; that the Horseshoe Crab Management Measures that were put into place were the bare minimum, we believe, and the conservation community believes, that should be in place.

For the first year that the state of New York goes over by 45 percent is of great concern to us, and we believe has a potential of undermining the Horseshoe Crab Management Plan that this Board has adopted, and that the Atlantic States Marine Fisheries has adopted. I would encourage New York to better utilize the report on requirements. Thank you, Mr. Chairman.

CHAIRMAN LESSER: Thank you. Tom, do you want to go on with the 2001 state proposals?

MR. O'CONNELL: Just real quickly. There are no out-of-compliance issues for the 2001

Management Proposals. Just one thing I forgot to mention earlier, despite the overages in New York, if you look at Page 21, a summary of the 2000 landings, coast-wide we received a 40 percent reduction. So, it was very successful last year. Thank you.

CHAIRMAN LESSER: Okay, we'll move on to Addendum 2. Without opposition, is there any -- without opposition, we'll allow the 2001 State Proposals to stand approved. So moved; so ordered. Addendum 2, Tom, you want to give us a review of the comments you received?

Addendum II

MR. O'CONNELL: Yes. First of all, the addendum is included in your packet. If you need to refer to it, it's on Page 23. And the public comment summary, which I'll be reviewing, is on Page 30.

There were a series of public hearings: two in Massachusetts, one in New Jersey, Delaware, Maryland and Virginia. The attendance was very minimal. Massachusetts had a good turn out, but they were discussing several other issues.

There were very few comments related to horseshoe crabs. All the other locations had less than ten people. Written comments also were very limited, unlike previous public documents related to horseshoe crabs. We received less than, I guess, 30.

Just to summarize the comments by interest group: first, with the commercial fishing community -- and let me just mention that there's a sample letter; one from American Bird Conservancy, and one from the Chesapeake Bay Pack and the Conch Industry attached if you want to look at them more specifically.

They reflect their views from their industries. The commercial fishing community along the coast was rather mixed. Virginia fishermen strongly supported the Option D, which allowed state-to- state quota transfers under the criteria identified in the plan.

However, the fishermen in New Jersey, Delaware and Maryland strongly opposed quota transfers and supported Option A. The reasons for these positions were largely -- with Virginia fishermen, they mentioned that the quota transfer mechanism was essential for Virginia's compliance with Addendum 1, and Options A, B and C did not provide a reasonable probability that they would get quota transfers in the near future.

New Jersey, Delaware, Maryland fishermen were concerned about the lack of understanding about the stock structure along the Atlantic coast, and that any quota transfer may undermine the more conservative actions that their states have taken.

Further, New Jersey's fishermen requested that the FMP be amended so that any unused quota in one year could be used in the following year for that state, if needed.

The Biomedical Industry, we heard from two companies -- two of the five -- and both of them strongly supported Option A, no quota transfers.

Again, reasons were related to the discreet genetic populations that may be jeopardized, and I guess argued that rather than doing quota transfers, given the absence of information on the stock status, that states should try to implement monitoring programs to justify why their state landings quota should be increased.

The Shorebird Conservation Community also supported Option A, no quota transfers. The reasons were that the current landings quotas are based on history of landings as opposed to a determination of the appropriate take levels that would maintain sustainable horseshoe crab populations and meet the energy needs of migratory shorebirds.

Any landings below the annual quota should be viewed as additional savings to their resource, given the uncertainty and the status of the stock. Evidence suggests that discreet genetic populations could be jeopardized by allowing transfers.

Further, that quota transfers may undermine the conservative actions in some of the Mid-Atlantic states. If the addendum was approved that despite -- given a case where the Technical Committee strongly opposed the quota transfer because of lack of information to assess this impact, that political and economic pressure could overrule that recommendation and ultimately approve a quota transfer and go against the plan's goals.

Lastly, from the general public, they were very similar to those positions from the conservation community and would support Option A, no quota transfers, and reiterated the same reasons that I expressed for the shorebird community. If there are any questions, I'll try

to answer them.

CHAIRMAN LESSER: Seeing none, Stu, you want to give the Technical Committee's position on Addendum 2?

MR. MICHELS: Thank you, Mr. Chairman. Although the Technical Committee recognizes the potential importance of quota transfers as a management tool, the Technical Committee is currently unable to assess the impacts of quota transfers and recommends that the Management Board consider the following points in their review of Addendum 2 in the public comments.

The current state-by-state landings caps are based on the history of landings rather than biological reference points. There's no data to indicate sustainable harvest levels at this time.

Recent genetic information suggests a strong population structure in the horseshoe crabs with many sub-populations. Transferring harvest from a population where the quota has not been met to another population could have significant impacts on the population to which it is transferred.

The higher the magnitude of the quota transfer, the greater the risk to the target population. The Technical Committee cannot identify a threshold level below which quota transfers would be acceptable, given the current available information.

Information necessary to delineate stocks and determine biological reference points is critical and a precursor to assessing quota transfers. Stock delineation is currently being addressed, though additional funding may be needed.

Information to determine the appropriate biological reference points remains a long-term initiative. The Technical Committee continues to recommend that the collection of this information remains a high priority and requests the commitment of the management agencies to facilitate this effort.

CHAIRMAN LESSER: Jack, do you want to respond to no support? What happens in Virginia if Addendum 2 goes with no transfer?

MR. TRAVELSTEAD: Well, I have a

number of comments I want to make. If you're calling on me to proceed with that, I'll be glad to. Last October in Tampa, Virginia was in a position of being declared out of compliance with the Management Plan.

We came to the Management Board and offered an alternative that would allow quota transfers, and in doing so, would allow Virginia to comply legally with the Management Plan.

Option D on Page 27 of the handout is the only option that has been drafted that allows Virginia to continue to comply with the Management Plan.

In reality it is the only option that presents any reasonable probability that a quota transfer would, in fact, take place. The motion that Virginia made back last October was very specific, and it is mostly represented accurately by Option D. The nice thing about Option D is it's generic.

It does not preclude any of the concerns that are found in the other options from being considered. The important part of this amendment -- or actually the procedures that you find in 4.2 -- they very clearly delineate the decisions that would have to be made by both the Technical Committee and the Management Board before any transfer would go forward.

Approval of Option D -- I think the first thing you have to remember is that any transfer must be voluntarily done. So, both the giver and the taker must agree to do this first. If you fail that first test, then the transfer does not go forward.

If there's an agreement between the giver and the taker, then it must be reviewed by the Technical Committee and the Management Board, and they must take into consideration all of the things that you find in 4.2 of the addendum.

That could include, again, all of the genetic information, and all of the concerns that you find expressed in Options B and C. So, I would ask the Board's indulgence and ask them to approve Option D with those things in mind.

If it's appropriate that I make a motion at this point, then I will do so, Mr. Chairman. I would move the adoption of Addendum 2 with Option D, state-by-state quota transfers.

CHAIRMAN LESSER: Is there a second? Who seconded? North Carolina. Discussion? Paul Perra.

MR. PAUL PERRA: A question for the Technical Committee, because I think it'll help clarify this motion, because in your report you said we really don't have genetic information; yet, there are many sub-populations.

How did you determine that? Because, defining sub-populations will have an impact, I think -- the ability to define sub-population will have an impact on how you can determine the effects of a quota transfer either from one region or the other, or within regions.

MR. MICHELS: Yes, Paul, the Technical Committee benefited from some work done by Dr. Tim King from the U.S. Geological Survey. He has begun and done some preliminary analysis on the micro-satellite DNA work that you may recall we discussed at the last meeting.

He noted that there appears to be at least several populations along the Atlantic coast from his preliminary work, and that is also supported by a published study in estuaries, I believe it is, that recently became available.

The authors are Pierce and Gaffney. His research supported what Pierce and Gaffney found, and they found that there were -- well, there was a distinct difference in the populations of the Chesapeake, one population in the Chesapeake and the Delaware Bay. Dr. King's work also showed that the horseshoe crabs up in Maine are distinctly different from those in the Delaware Bay, and the Delaware Bay crabs are also distinct from those in the Chesapeake Bay.

There are some questions as to where crabs from South Carolina lie. So, I think, hopefully, very soon we'll even be able to get some better clarification on where the genetics lie.

CHAIRMAN LESSER: Daniel.

DR. LOUIS DANIEL: Thank you, Mr. Chairman. I think, clearly, Option D has the safeguards built into it to prevent any significant problem from occurring.

But I do caution the Board, as I would caution the Weakfish Board, about these genetic analyses that are going on and breaking these populations down into these small scale sub-populations.

As the technology advances considerably in genetic analysis, we get finer and finer scale resolution. We may be getting between Fourth Street and Tenth Street populations of horseshoe crabs ultimately. The finer scale that you break those populations down, the more difficult it's going to be to assess what's going on in those populations.

So, I don't know where it stops in terms of that fine-scale resolution, but I think we're heading down a slippery slope with some new technology that, really, what is the ultimate benefit going to be here? And I think we better careful.

CHAIRMAN LESSER: More discussion on the motion? Yes, sir.

MR. RICK ROBINS: Thank you, Mr. Chairman. As was already stated by Mr. Travelstead, Option D is really the only one of the four options that is materially consistent with the original motion that was made in the Clearwater meeting.

It's the only one of the four options that would allow some reasonable prospect to alleviate bait shortages within the industry.

As I look back on the Clearwater meeting, I think of that as a major step forward. I think it marked a new level of cooperation between Virginia. It allowed us to reconcile with this Board over this issue, which had been previously very contentious.

I'd certainly hate to see us turn the clock back on that. I think Addendum 2 is a very important component of the solution to this problem.

Obviously, bait bags and Virginia's bait bag policy and the development on that front has created and generated a lot of relief within this industry and has been a major solution to this problem. However, this remains an important component, I think, in the overall picture relative to this issue. I certainly would like to see us move forward with Option D and developing Addendum 2 in that fashion. Thank you.

CHAIRMAN LESSER: Susan Shipman.

MS. SUSAN SHIPMAN: Thank you, Mr. Chairman, a question for the maker of the motion. You incorporate in your motion -- or D, actually Option D incorporates Section 4.2.B, but I read 4.2 to be all inclusive of A through D. What is your intent there? Is it to incorporate by reference all of 4.2?

MR. TRAVELSTEAD: Yes, I think 4.2 stands alone. I mean, that's not -- regardless of what option you pick, I guess other than Option A, 4.2 would stand as part of the addendum.

So, my motion is to adopt Addendum 2 with Option D and all of the other elements that you find in the addendum for which only one option is presented.

MS. SHIPMAN: So, if I could clarify that, Jack, that first sentence of Option D, where it says "allow voluntary quota transfers between states", taking into consideration the criteria outlined in Section 4.2, I would suggest you strike the word "be" and make it all inclusive of everything that's in 4.2.

MR. TRAVELSTEAD: That's fine with me. That was my intent all along.

CHAIRMAN LESSER: Eric.

MR. ERIC SCHWAAB: Thank you, Mr. Chairman. In light of the Technical Committee Report specific to the ongoing needs relating to definitions of the population and genetic issues; and in light of the fact that quota transfers even under this motion will be relying on that information, I wonder if perhaps either Tom or Stu could offer some information as to the timing as to when we might have the information necessary to make these evaluations.

MR. MICHELS: The Technical Committee discussed with Dr. King what a time line would be and how we should approach sampling these populations.

It was agreed by the Technical Committee that each state should provide samples to Dr. King. He said once these samples are received, he could characterize those crabs from a state in -- I think he said about a state a week.

So, it would be relatively quick once the samples were obtained, and that should occur very soon. He prefers the samples to be collected from the spawning beaches, which means that by the end of June all the samples should be collected. So, it's expeditious.

MR. O'CONNELL: And just to add to that because I think there are two components, one is the genetic work, which seems to be more of a short-term accomplishment.

The second component is being able to identify how the transfer will impact the population. The Stock Assessment Committee person that was present at this meeting cautioned, or just reminded the Technical Committee that we're probably five-plus years away before we have enough information to assess these transfers on a biological basis with the horseshoe crab population.

CHAIRMAN LESSER: Pat.

MR. PAT AUGUSTINE: With all the debate around the table, Mr. Chairman, I think we've covered all the points. It was an excellent Technical Report, very clear, very definitive. I'd like to call the question.

CHAIRMAN LESSER: The motion reads: "Move to adopt Addendum 2 with Option D for state-to-state harvest quota transfers in accordance with the criteria outlined in Section 4.2."

Caucus? Comment? Perry? All right, we're all going to turn into pumpkins in seven minutes, so let's get going.

MR. PLUMART: Or a horseshoe crab. Thank you, Mr. Chairman. I think that the Technical Committee Report is very clear; that the results of the public hearing process is very clear, and that the results of the written comments are very clear; that this is really an unnecessary -- that Option D is unnecessary, that there should not be a transfer of quota.

I think we need to take an honest look at what we're doing here today. I think that if you're going to look at what's in the interest of the horseshoe crab and what's in the interest of the shorebirds, and look at the goals of the Horseshoe Crab Management Plan and assess what the stock is, what the genetic makeup of the populations are, then I think you're going to have to -- you need to

vote for Option A.

That's what the public is asking for, that's what the Technical Committee represents, and I think that there's really -- it's very clear, there's only one interest, which is the Conch Fishery in Virginia, represented at the table here today that is pushing for Option D.

So, I urge you to do what the Technical Committee says, what the public input has given and what's in the interest of the horseshoe crab and the goals of the Horseshoe Crab Management Plan. Thank you, Mr. Chairman.

CHAIRMAN LESSER: Thank you. 30-second caucus. All those in favor of the motion, raise their right hand; those opposed, same sign. Nine to four, the motion carries.

MR. PERRA: One abstention.

CHAIRMAN LESSER: I'm sorry, the National Marine Fisheries Service abstains. We have approximately five minutes to do an update on the state challenge funds for Maryland, Delaware and New Jersey for Horseshoe Crab Stock Assessments. Who is going to give that one? Stu.

State Challenge Funds

MR. MICHELS: The state challenge fund money, we've made a lot of progress in that regard. A portion of it at least has been matched at 50 percent level by the Fish and Wildlife Foundation.

Of the original \$125,000 that the states pledged, \$10,000 of it will be kept by the Atlantic States Marine Fisheries Commission. This will cover indirect costs. Dr. Burkson was at the Technical Committee meeting and he gave an overview of his proposed work.

He intends on doing the pilot trawl survey. He anticipates a one-to-two day trawl survey workshop in late June or early July. The results of this workshop will be used to design a pilot survey, and the surveying is expected to begin in August.

Dr. Burkson will also be working with Dr. Steve Smith from Virginia Tech Vet's School in developing methods to reliably and consistently identify new recruits into the horseshoe crab spawning population.

This was called for by the Stock Assessment

Subcommittee in their proposed framework for a future horseshoe crab stock assessment. Dr. Burkson will also be using aerial videography to see if it will enhance our current spawning surveys that are going on in the Delaware Bay area right now.

They will begin testing with some horseshoe crab-sized objects locally around the Virginia Tech area. With some success there, they hope to be using the night vision equipment to look at spawning in the Delaware Bay area this year, and then they'll try and calibrate that with what the Delaware Bay Spawning Survey picks up.

Dr. Tim King also presented the preliminary results of his micro-satellite DNA work, which I had already alluded to. If there are any questions, I'll be happy to answer them.

CHAIRMAN LESSER: Let's let the singing cowboy from the National Marine Fisheries Service bring us up to date. Paul.

Closed Area

MR. PERRA: Basically, the closed area has been put in, and that's what we've done. It went into effect on March 7th.

CHAIRMAN LESSER: Continue on then, right, with your second one.

MR. PERRA: What's the second one?

CHAIRMAN LESSER: Transfer at sea.

MR. PERRA: We haven't done that yet.

CHAIRMAN LESSER: Did you want to make a comment on the closed area?

MR. PERRA: Yes. There is one issue with the closed area that I need some feedback on, and I know the Commission had recommended that up to 10,000 crabs be harvested or allowed to be harvested out of that area for biomedical purposes.

We do have a request now from Linlei Laboratories for such harvest as an exempted fishery. Before we consider that, I wanted one more time to get some feedback from the Board because fisheries management is a dynamic process.

Sometimes one week what the policy is, the next week it isn't. What I need from you now is just a nod that, yes, you haven't changed your mind about allowing the biomedical harvest of up to 10,000 crabs out of that area.

The request from the laboratory, I believe, says they will put them back, release them alive. So, it's really not like the other biomedical issue that we have to deal with, with the crabs being harvested for biomedical and then being sold as bait. That is not the case in this request.

CHAIRMAN LESSER: I believe it was the sentiment of this Board before to allow that, but withdrew that support in favor of you moving the original through the pipeline. Bill, do you want to comment?

MR. WILLIAM A. ADLER: Yes. Is the Ms. Swan proposal --

MR. PERRA: Yes.

MR. ADLER: -- which I'm sure that Jack sent the letter in at the last meeting. The ASFMC was going to send some letter asking you to move ahead with this. Is that the proposal that you've got before you?

MR. PERRA: It's not the ASFMC letter. It's a request from Ms. Swan.

MR. ADLER: Ms. Swan, right. I know that we were trying to get this to go through your process, and you are doing that, right?

MR. PERRA: We just received the request the other day, so we're getting ready to submit it through the process. That's why we brought it up today, though, to find out if there's any change of minds.

MR. ADLER: Well, the last I have in this minutes here was that there was going to be a letter, I think, in support of that.

CHAIRMAN LESSER: Bruce Freeman.

MR. FREEMAN: In order to move this, is there need for a motion, Paul, or you just want to --

MR. PERRA: No, I just need to know if there

will be any objections to our moving forward on that.

MR. FREEMAN: Well, I would simply say that we had spent time several meetings ago -- we had a motion to not exceed 10,000 crabs. Benji Swan has been extremely helpful in conserving the crabs, doing everything possible to get counts, very conscientious about returning crabs to the location in which they were taken.

We have given her, or are in the process of giving her a permit to work in state waters. We would, also, in order to move this along, indicate that both the crabs taken in state and federal waters not exceed the 10,000.

The idea is being to spread the catch out over a larger area, which probably would have less biological impact. So, I would certainly keep with our findings originally and ask you to move forward with processing that request.

CHAIRMAN LESSER: Anyone opposed to that direction? So moved. Update on the formation of the infamous Shorebird Committee.

Shorebird Committee

DR. JAIME GEIGER: Thank you, Mr. Chairman. We have appointed a national shorebird coordinator with the Fish and Wildlife Service, and we have received additional clarification of the expectations and charges that this committee would undergo.

This individual would be charged with putting together the Shorebird Technical Committee under the auspices of the Atlantic States Marine Fisheries Commission to address the issue of horseshoe crab harvest in shorebird populations.

This individual is working now on the outline of a general review following the recommendations of the Atlantic States Marine Fisheries Commission to put together a panel to review estimation of population sizes and trends of key shorebird species; look at the energetic needs of key species and temporal trends of energetic needs; spacial patterns of an abundance of crabs and shorebirds; and relationship between shorebirds and other horseshoe crab egg predators.

We anticipate the role of the Fish and Wildlife Service to make this happen. It would be to facilitate formation of the committees, fund the synthesis or peer report, prepare sections of the report and compile all the

information, act as quality control manager for the entire process and coordinate with the Atlantic States Marine Fisheries Commission and the Horseshoe Crab Management Board on the results of this peer review.

So, in short, Mr. Chairman, the process is moving forward, and I thank ASMFC with their letters to initiate our leadership to get off top dead center on this process.

CHAIRMAN LESSER: Thank you. Dieter.

MR. DIETER BUSCH: I think a slight correction is important for the record; that this committee would not be under the Commission, but really under the Tech Committee of this Board. Thank you.

CHAIRMAN LESSER: Gentlemen, you've just sat through the perfect board meeting. We made it in one hour. Any other business before the Board? We're adjourned.

(Whereupon, the meeting adjourned at 5:05 p.m., April 24, 2001.)