# PROCEEDINGS OF THE ATLANTIC STATES MARINE FISHERIES COMMISSION ATLANTIC STURGEON MANAGEMENT BOARD

# March 9, 2004 Alexandria, Virginia

These minutes are draft and have not been approved by the Atlantic Sturgeon Management Board. The Board will review the minutes during its next meeting.

# **ATTENDANCE**

### **Board Members**

Lew Flagg, Maine DMR
John Nelson, New Hampshire F&G
Bill Alder, Massachusetts Gov. Apte.
Paul Diodati, Massachusetts DMF
Mark Gibson, Rhode Island DEM
Gil Pope, Rhode Island Gov. Apte.
Eric Smith, Connecticut DMR
Lance Stewart, Connecticut Gov. Apte.
Fred Frillici, proxy for Sen. Gunther (CT)
Gordon Colvin, New York DEC
Pat Augustine, New York Gov. Apte.
Bruce Freeman, Chair, New Jersey DFG&W
Ed Goldman, proxy for Asm. Smith (NJ)
Tom Fote, New Jersey Gov. Apte.
Dick Snyder, Pennsylvania FBC

Michael Doebley, proxy for Fred Rice (PA)
Roy Miller, Delaware DFW
Russel Dize, proxy for Sen. Colburn (MD)
Ira Palmer, District of Columbia DFW
A.C. Carpenter, Potomac River Fish. Comm.
Cathy Davenport, Virginia Gov. Apte.
Kelly Place, proxy for Sen. Chichester (VA)
Jack Travelstead, Virginia MRC
Pres Pate, North Carolina DMF
David Cupka, South Carolina Gov. Apte.
Spud Woodward, Georgia DNR
John Duren, proxy for Rep. Lane (GA)
Tom Meyer, NMFS
Bill Cole, US F&WS

# **Ex-Officio Members**

Andrew Kahnle, TC Chair

## **ASMFC Staff**

Toni Kerns Brad Spear Vince O'Shea Bob Beal

## Guests

Jed Brown, USFWS
Jon Siemien, DC DFW
Jim Cummins, ICPRB
Steve Minkkinen, USFWS
Mike Millard, USFWS
Dick St. Pierre, USFWS
Jed Brown, USFWS

Maury Osborn, ACCSP Steve Meyers, NMFS Sonja Fordham, The Ocean Conservancy Harry Mears, NMFS Matt Cieri, ME DMR Everett Petronio, Jr. Anne Lange, NMFS

There may have been others in attendance who did not sign the attendance sheet.

# TABLE OF CONTENTS

BOARD CONSENT	5
NOMINATION OF CHAIR/VICE CHAIR	5
PRT REPORTS	6
NY STOCKING PROPOSAL	8
STURGEON RESTORATION WHITE PAPER	13
WORKSHOP ON STOCK STATUS UPDATE	14
AFS SYMPOSIUM UPDATE	17

# **INDEX OF MOTIONS**

1. Move that the Board approve the proposal as presented by Andy [Kahnle] on behalf of New York state and the U. S. Fish and Wildlife Service. Motion by Mr. Colvin; second by Mr. Miller. Motion passes.

# ATLANTIC STATES MARINE FISHERIES COMMISSION

# ATLANTIC STURGEON MANAGEMENT BOARD

# Radisson Hotel Alexandria, Virginia

### March 9, 2004

- - -

The meeting of the Atlantic Sturgeon Management Board of the Atlantic States Marine Fisheries Commission convened in the Presidential Suite of the Radisson Hotel, Alexandria, Virginia, on Tuesday, March 9, 2004, and was called to order at 11:03 o'clock a.m. by Chairman Robert E. Beal.

# **BOARD CONSENT**

CHAIRMAN ROBERT E. BEAL: We'll go ahead and call the Sturgeon Board meeting to order. The Sturgeon Board currently does not have a chair or a vice chair, therefore, I'll go ahead and serve as the chair for this meeting.

As you will notice, one of the first agenda items on the agenda is to elect a chair and a vice chair, so that will be my favorite part of the meeting. The Sturgeon Board hasn't met for quite a while, so we're just going to get some updates on a series of activities that have occurred in the last year or so.

One of the underlying questions that isn't spelled out necessarily on the agenda is based on the recent meetings and workshops that have taken place, is there any change that's necessary for the Atlantic sturgeon management program that the commission has. So as we go along, if we want to have a discussion on that issue toward the end of the meeting, that would be appropriate.

With that, the agenda was included on the CD-Rom. Are there any changes or additions to the agenda that was included on the CD-Rom? Okay, seeing none, we'll proceed with that agenda.

The third item is the approval of the proceedings from February 19, 2002, so it has been a while since this board has met. Are there any changes or modifications to the minutes that were distributed?

Seeing none, those minutes are approved.

Now we're at the public comment period or point on the agenda. Is there anyone who would like to make a public comment on any issues involving the sturgeon restoration program? All right, I'm not seeing any. That brings us to the election of the board chair and vice chair. Are there any nominations for chair or vice chair? Mr. Cupka.

# NOMINATION OF CHAIR/VICE CHAIR

MR. DAVID CUPKA: Thank you, Mr. Chairman. I'd like to nominate Lew Flagg as chairman of the Sturgeon Board.

CHAIRMAN BEAL: Thank you, Mr. Cupka. We have a nomination for Lew Flagg as the chairman of the Atlantic Sturgeon Board. Any other nominations for chair? Mr. Augustine.

MR. PATRICK AUGUSTINE: Thank you, Mr. Chairman. Move to close nominations and cast one vote.

CHAIRMAN BEAL: All right, the nominations have been closed. Is there any objections to Lew Flagg becoming the chair of the Atlantic Sturgeon Board? Seeing none, congratulations, Lew.

The deal I made with Lew is that I would go ahead and chair this meeting, so we didn't spring it on him, so I'll go ahead and continue to do that, but if Lew can back me up, that would be great. Any nominations for a vice chair? Mr. Fote.

MR. THOMAS FOTE: I'd like to nominate Mike Doebley from Pennsylvania.

CHAIRMAN BEAL: We have a nomination for Michael Doebley. I'm hesitating a minute just — Michael, are you the permanent proxy or a meeting-specific proxy?

MR. MICHAEL DOEBLEY: Meeting-specific.

CHAIRMAN BEAL: Is that okay? Okay, Vince is saying that's okay. Michael, did Fred Rice send in a proxy form?

MR. DOEBLEY: Yes.

CHAIRMAN BEAL: He's indicating yes. Mr. Fote.

MR. FOTE: I thought Mike was permanent proxy for Fred.

CHAIRMAN BEAL: Okay, thank you. Well, we'll resolve that. Any other nominations for vice chair of the Sturgeon Board? Mr. Nelson.

MR. NELSON: Before we move on that, I think we do need to resolve whether or not we can move ahead with Mike because — I understood that you could do permanent proxy, and I need to just have that clear in my mind, so I guess you probably need to turn back to your Executive Director and have him research that for us quickly.

MR. LEWIS FLAGG: I would suggest perhaps we might be able to just dispense with this and take this up at our next meeting, to have that on the agenda to elect a vice chair, and then staff will have a chance to look into things and find out where we are.

CHAIRMAN BEAL: Sounds like a good plan. Anyone object to that course of action? All right, seeing none, we'll move forward. The next item on the agenda is the Plan Review Team report on state compliance. Brad Spear.

# PRT REPORTS

MR. BRADDOCK J. SPEAR: Thank you, Mr. Chair. As Bob pointed out earlier, the Sturgeon Board hasn't met for a little over two years now, so there was two years' worth of compliance reports to go over.

What I will be presenting today is just a summary of this past year's compliance reports. The year before, there were no issues, and any information will be compiled into this year's report.

Just going through the states, Maine and New Hampshire conduct an inshore trawl survey. In Maine waters, most of the sturgeon that are caught, which aren't that many, are caught outside the mouth of the Kennebec River.

For the board members, who don't have the compliance reports, there are copies in the back. If you don't have a copy, if you raise your hand, someone will hand out a copy to you. Also, there was supplemental meeting material sent out to the

board that wasn't on the briefing CD. Those are also on the back table if you need them.

One area of concern in the Maine sturgeon management program, Maine uses port sampling to monitor bycatch, and the Plan Review Team felt that was an ineffective method, so they asked that Maine do more bycatch monitoring.

I talked to Lew earlier, and it sounded like Maine will be doing this shortly. Another request that we had was that Maine provide all the information in the tables that they have in their compliance report. I talked to Lew about that, also, and he said Maine is also doing that. There were no compliance issues.

In New Hampshire, they monitor their bycatch through law enforcement observations, logbook reports and NMFS sea sampling. They saw no Atlantic sturgeon in 2002.

Massachusetts monitors bycatch through at-sea observations. No bycatch was seen. There were also no sturgeon seen at the Essex Dam spring lift. No compliance issues.

In Rhode Island, the state report made note that there was no bycatch monitoring in 2002, and that no sturgeon were seen in their state's spring and fall surveys in 2002.

The PRT would like to raise a concern that bycatch monitoring is required by Amendment 1, Section 3.4; therefore, the PRT requests that Rhode Island look into bycatch monitoring and recommends going through the NMFS at-sea observer data for Rhode Island waters as a way to do that.

Rhode Island reports that sturgeon, historically, were not likely in Rhode Island rivers and in state waters, but the PRT felt that there is the possibility that sturgeon are passing through Rhode Island waters out in Block Island Sound. The PRT didn't feel that this was a compliance issue, but just to make note to Rhode Island and see if we can get monitoring up for the next year.

In Connecticut they reported a sturgeon bycatch in the shad fishery of 55 in 2003, which is up from 15 in 2002, 30 in 2001 and 33 in 2000. But, it's unknown what percentage of those sturgeon were Atlantic and which were shortnose.

The PRT requested that Connecticut report information on sturgeon bycatch, for example, the immediate mortality rates; and if Connecticut does

collect this information, that it be reported in the compliance reports.

New York, in their anchor net fishery, reported one juvenile bycatch. The Hudson Valley Utility Company in New York is required to monitor for sturgeon. In the past few years, it is my understanding that they have not been forthcoming with any data of their monitoring.

I guess there has been some trouble between the state and the company, and they've made it very difficult for the state to obtain these data. Also, it is my understanding that the state is working to try and get this information so the PRT did not have to make a request, such that it was already being addressed. But it is unfortunate that this information hasn't been more readily available to the state.

In New Jersey, the shad fishery, there was a bycatch of 61 in 2002, which is down from 73 in 2001 and down from 188 in 2000. In 2002 New Jersey discontinued their tagging program for Atlantic sturgeon.

The PRT would like to see New Jersey start that program again. Tagging data is one of the few reliable sources of data that we have on Atlantic sturgeon; and for states to cooperate and continue the tagging will be useful to the PRT and the technical committee.

Also, the Plan Review Team asked that New Jersey provide details of its dredging protocols in its internal waters. Basically, we're just asking that New Jersey submit when they allow dredging and for what reason.

Pennsylvania's Atlantic sturgeon is listed on the Endangered Species list. There are a number of year classes of sturgeon that are being reared at the Fish and Wildlife Center at Lamar. The PRT just asks that Pennsylvania report information on the sturgeon that are being held, such as number and age.

Delaware, abundance appeared to remain unchanged from 2000-2002. The bycatch in the anchored gillnet fishery was 80 in the ocean and 57 in the Delaware Bay for 2002. As with New Jersey, we asked that Delaware report details of its dredging protocols in the Delaware River.

Maryland and Fish and Wildlife Service tagged over 3,000 fish in 1996. These were juveniles that had been raised in a hatchery. Since their release in 1996, as of June 2003, there were 463 recaptures with a

pretty high recapture rate of 14 percent. Those animals, again, are still being caught.

Potomac River Fisheries Commission, three sturgeon were reported as bycatch in the gillnet fishery in 2003. In D.C. there is no commercial fishery so there was no bycatch data, and no sturgeon were found in their surveys.

The bycatch for Atlantic sturgeon in the shad fishery in Virginia has consistently gone down since 1998 to one sturgeon in 2003. One thing the PRT noted, Virginia has a mandatory reporting system where fishermen are required to report all fish that are caught and landed.

As a result of that, sturgeon that are caught and not landed are not required to be reported. So the PRT asks that Virginia require reporting of sturgeon bycatch through their mandatory reporting system, even though the sturgeon are not kept, so putting in an exemption.

North Carolina, the state gillnet survey catches sturgeon. In 2002 there were 28 caught, down from 132, 110 and 55 from 2001 to 1999. There was no bycatch observed in 2002 in a number of the fisheries in North Carolina.

North Carolina tags sturgeon that they catch from their gillnet survey. It was unclear what tags were being used to catch the sturgeon. The PRT recommended that they use Fish and Wildlife Service tags, if they weren't. I was told today that they are. It is thought that they are using those Fish and Wildlife tags, and that it all goes into the same database.

South Carolina, there's a bycatch of 101 sturgeon and South Carolina tagged 53 sturgeon in 2002. Georgia monitors its bycatch through at-sea observations in its whelk and shrimp fishery. Zero sturgeon were found in 2002. It's believed that the BRDs and TEDs reduce the bycatch of sturgeon.

In Florida, again, there was no bycatch in 2002 in a number of fisheries. Mike Howard reported or collected information from the Law Enforcement Committee and found that there were no significant enforcement issues for 2002, and that officers routinely monitor the dealers and fishermen in areas where sturgeon are found.

A couple general recommendations from the PRT. Annual reports are required to be submitted by October 1<sup>st</sup> of every year. It should be for the prior

year's -- reporting on the prior year's fishery. The PRT asks that states, if there are any significant findings in the previous year up to October, that it also be reported in the state compliance reports.

Also, the PRT asks that states put together tables in their compliance reports to give a better sense of a time series of any fishery-dependent or independent data that the state reports, because just having a snapshot of what happened in 2002 doesn't give us a good idea of any kind of progress that's being made.

The PRT recommends that sturgeon tagging continue and that the information feed into the Annapolis office of the Fish and Wildlife Service. They maintain a tagging database there. Another recommendation was in states where it's a problem, continue education of distinguishing between shortnose and Atlantic sturgeon, so we can have a better idea of what kind of bycatch we're seeing.

The last recommendation is to expand any state-initiated bycatch monitoring programs. It seems that bycatch is the Number 1 roadblock to recovery right now for the species, so any more information we can gain from monitoring, the PRT felt would be useful.

CHAIRMAN BEAL: Okay, thanks, Brad. Are there any questions or comments of the Plan Review Team report? Mr. Miller.

MR. ROY MILLER: Thank you, Bob. I'd just like to provide an update. The state of Delaware now recognizes the Atlantic sturgeon as a state-endangered species so you can add us to that list, if you would, please.

CHAIRMAN BEAL: I will do that. Thank you, Roy. Any other comments or questions on the Plan Review Team report? Okay, with that, any objections to approving the Plan Review Team's report? All right, seeing none, the Plan Review Team report is approved. The next item on the agenda is the New York stocking proposal. Is this going to be presented by Andy?

# NY STOCKING PROPOSAL

MR. ANDY KAHNLE: Yes. Thank you very much for the opportunity to come here and talk about our proposal for an experimental release of Atlantic sturgeon, of hatchery Atlantic sturgeon to the Hudson River Estuary.

There has been tremendous interest in the culture and stocking of Atlantic sturgeon during the last 10 or 15-

20 years. Stocks are way down or extinct on the Atlantic coast, and the stocks that we have show a very slow rate of increase and a low straying rate.

Stocking has been thought of as a way to speed up the process of recovery and also of recolonization. This slide summarizes ASMFC research recommendations for the culture and the stocking of Atlantic sturgeon.

Actually, this list has been around for quite a while and it's updated every year. Information needs for culture run the gamut from how to catch brood fish, what to do with them when we get them, how to hold them, spawning techniques, rearing techniques, feeding protocols and so on.

Information needs for stocking cover basically what size, what age fish to stock, when and where to achieve objectives. Usually, objectives in most of the stocking programs considered have been return to a river for spawning. We made quite a bit of progress since this list was put together.

We've done best with culture, with learning how to culture sturgeon. The U.S. Fish and Wildlife Service, Northeast Fisheries Service Center at Lamar, Pennsylvania, has been working on culture techniques since '91.

They captured brood fish from the Hudson and have been successful in producing young from '93 to '98. This work culminated recently last year in the production of a culture manual for Atlantic sturgeon that covers everything that we talked about in the previous slide: getting brood fish, maintenance, spawning, and rearing and feeding protocol.

We haven't come this far in learning a stocking protocol. We have made, so far, to date, two experimental releases of Atlantic sturgeon, and both of these releases were of Hudson River fish. The first was of about 5,000 age 0 fish released to the Hudson in the fall of '94. We made this stocking to develop a population estimate of the wild age 0 fish in the estuary.

The second stocking was about 3,000 age 1 Atlantic sturgeon to the Nanticoke River in the summer of '96. This Nanticoke stocking was to develop some information about behavior and diets of hatchery fish and also to learn something about habitat suitability in parts of Chesapeake Bay.

The two batches of fish were marked differently. The Hudson River fish had a coated wire tag under the first dorsal skewt and also a left pelvic clip. Nanticoke River fish have a CWT, coated wire tag, under the third dorsal skewt. Hudson fish have left the estuary and are now in the near-shore ocean, and many of the Chesapeake fish, the Nanticoke stockings are also in the near-shore ocean.

The question on the table with these fish is where will they return to spawn? They came from Hudson River parents. They were hatched in Central Pennsylvania in a tributary of the Susquehanna and were stocked in a couple of Atlantic coastal rivers.

We have a few things to learn about stocking protocol. We haven't tried fry stocking. We don't know the ultimate fate of the age 0 and the age 1 stocking. We have no idea what happens when older immature fish are released to the wild.

Our proposal, and I should say "our" is meaning New York state and U.S. Fish and Wildlife Service, our proposal focuses on the last item, what happens when older immature fish are released to the wild? We did this for a couple of reasons.

One, we have a nice selection of experimental fish that we can use at the Lamar facility; and, two, as you'll see in a couple of talks later on, there are culture programs, restoration programs that are being considered by states and states are developing capture brood fish, and so there will be older fish available in the future for release to the wild.

Our proposal is basically twofold. First, we would like permission to stock 350 immature Atlantic sturgeon of Hudson origin back into the Hudson. And, second, we would like to track the movement, habitat use of the older fish in the Hudson and both the older fish and the young age 0 and age 1 fish in the near-shore ocean. Ultimately, we would like to see where these fish return to spawn.

Objectives are we would like to determine habitat use, movement, behavior, emigration rate of the older fish from the estuary and habitat use, emigration rate, distribution and ultimate return to a spawning river of both the young stocking and the older immature stocking.

The stocking that we propose includes multiple-year classes, and I'll show you which ones. They're all F1 fish. This group of fish came from Hudson River wild brood fish. We propose two phases to our stocking, to our release.

The first one would be 25 sonic-tagged fish from a range of year classes and backed up with a small

tagging of about 10 wild fish. I should say that we're currently sampling for juvenile striped bass in the Hudson River estuary and will be sampling right through the spring.

We started yesterday. So we will be catching larger juveniles; and if we have the chance to release these fish, we will also be tagging wild fish and then we will follow both the wild and the hatchery fish until they leave the estuary.

In Stage 2 of our stocking proposal, we would like to release the rest of the fish, 325. All of the fish in both stages would be PIT tagged and would have an external tag. At this time, we plan on a Carlin dangler tag.

We have recoveries of those tags that are 25 or 30 years old from early tagging in the Hudson. Finally, there are three release sites for both releases that span spawning in the nursery area of Atlantic sturgeon in the estuary.

This slide summarizes the fish that we have available for release. It's five-year classes, '93 to '98. Most of them are the younger fish. They're, obviously, Age 5 through 10 at this point.

They come from a range of parents. The parents were used only once for spawning and then returned to the wild, generally. We've had the opportunity to have the genetics of these fish looked at.

The Fish and Wildlife Service Lab at Leetown, West Virginia, looked at this, they looked at fish being held in a hatchery and the wild Hudson River fish, and they concluded that they were very similar, as you would expect since the hatchery fish are the F1 progeny of the wild fish. And they are equally diverse, which is an important factor.

In the second phase of our proposal, we have, so far, put together an informal list of formal group of sample programs that are ongoing or planned along the Atlantic Coast. We've talked to all of the researchers in these sample programs.

They all catch Atlantic sturgeon, juvenile Atlantic and immature Atlantics, and they are all willing to scan for the coated wire tags, and in a couple of cases have the equipment or will have the equipment to listen for the sonic tags.

From north to south, the state of Connecticut runs an annual gillnet survey in the lower Connecticut River and a trawl survey on Long Island Sound.

They have proposed, and I'm not sure that they have funding yet, but if funding is approved, they will be sonic tagging their own fish and they will be actively listening for fish that are released to the Hudson.

In the Hudson estuary, we have three sample programs that focus on juvenile sturgeon, prior to emigration, pre-migrant fish. We have bycatch in the commercial shad gillnet fishery in the lower estuary.

There is a trawl survey that Brad alluded to a little while ago that the power companies conduct. Finally, we are now conducting a gillnet survey, spring and fall, to begin to track abundance of juveniles surveyed before they leave the estuaries.

In the ocean we just obtained a three-year SWIG Grant for a trawl survey, looking for concentration areas of juvenile sturgeon along the south shore of Long Island.

New Jersey currently conducts a trawl survey. Most of the sturgeon are caught towards the north, right around Sandy Hook. We're using these data as an index of Hudson River abundance, juvenile abundance.

The state of Delaware conducts a gillnet survey in the Upper Delaware Bay lower river. We know they catch Atlantic sturgeon from the Hudson estuary based on tagging. They, too, will be listening -- if we release our fish, they will be listening for our sonic tags.

In Upper Chesapeake Bay, the Maryland part of Chesapeake Bay reward program is ongoing. In the James River, there is a gillnet survey that is conducted for American shad, but these folks capture American sturgeon and will report them to us.

Finally, in the offshore trawl survey that is conducted each winter for striped bass, these folks also take Atlantic sturgeon and will be reporting them to us. Right now this is an informal group of folks who are willing to work with us. We will try to formalize this working relationship if we're given permission to release fish.

Finally, if we go ahead with this proposal, we will be reporting results each year with our compliance report. I think this information will be useful for future stocking proposals, should anyone choose to release extra brood fish or extra fish that were destined to be brood fish.

Finally, information on recapture rates along the coast I think will be helpful in the next changes to any interstate management plan. That's it for now. I'll take questions.

CHAIRMAN BEAL: Okay, thank you. Actually, before we have any questions, the Atlantic Sturgeon Culture and Stocking Committee reviewed the proposals from New York, and Brad Spear is going to present their results. Maybe that will answer some of the questions that we may have, so let's go ahead and have the report from the Stocking and Culture Committee, and then we'll move from there.

MR. SPEAR: Thank you, Mr. Chair. There is a review process that has been set up by the commission for stocking proposals. It was established through the breeding and stocking protocol for cultured Atlantic sturgeon, dated May 1996.

That was distributed to the board in the supplemental meeting materials. That wasn't on the briefing CD. That process is that the proposal should be reviewed by the Culture and Stocking Committee, which is made up of four members, federal and state scientists.

New York submitted the proposal initially to that committee. We had a conference call. There were some concerns with the proposal as written. Comments were sent back to New York and Fish and Wildlife Service, and they submitted another proposal.

That proposal was commented on in the report that was distributed to you in the supplemental materials. Unfortunately, we didn't have much time to review the proposal and get consensus before this meeting, so the report consists of a compilation of comments from the Culture and Stocking Committee.

If you look at the report from the committee, there is an appendix. It's only five pages, but the last two pages are an appendix of the comments from individual committee members. They're anonymous, but it will give you a flavor of what the concerns were of some of the committee members.

Recommendations that came from the committee. All four members supported the Stage 1 release of the New York proposal as written. One other recommendation from the entire committee was that they recommended that the project use tag frequency techniques and tag implementation techniques that have been used in the past in other tagging programs to keep that consistency and, therefore, keep the

exchange of information between the different tagging programs open.

There was a mixed bag of recommendations regarding Stage 2. Two of the committee members supported the Stage 2 release as proposed. There were two committee members that had concerns. One of those committee members suggested that if Stage 2's release was supported by the board, that this be stated that it's a one-time release for this purpose.

I think his concern was setting precedent where sturgeon were released. One committee member felt that she did not support the Stage 2 release, because it was not safe to release that number of cultured fish into the wild.

The concerns were because of genetics, genetic mixing of hatchery-raised fish and wild fish and possibly reducing the fitness of the wild stock by introducing the genetics of the cultured stock. Again, specific comments from those committee members are in the appendix of this report.

As the review process set up by that document referred to, this committee makes the recommendations to the board, and it's the board's final decision to approve or disapprove the proposal.

CHAIRMAN BEAL: Thank you, Brad. Are there any questions of either Andy or Brad on the presentation from New York or the report from the Culture and Stocking Committee? Bill Adler.

MR. WILLIAM A. ADLER: Thank you, I have a couple questions. First of all, with regard to all the release, the fish that you release, is it alarming that you're not catching them again, or is it too soon to catch them again from the ones that you released? That was one question, and I have a couple more if you wanted to answer that one first.

MR. KAHNLE: You're talking about the Age 0 and the Age 1 fish that have been released?

MR. ADLER: Yes, and all the ones that you

MR. KAHNLE: The Nanticoke and the Hudson. Yes, we're getting lots of recaptures.

MR. ADLER: Oh, you are?

MR. KAHNLE: Yes. When they were in the estuary, there were many recaptures in the

Hudson, hundreds of recaptures in the Chesapeake system, especially the Upper Bay. but both groups have now mostly emigrated to the near-shore ocean.

It's a little bit harder to get them, but we are still getting recaptures from those fish, and so they are just -- the Hudson fish should be soon, the males should be maturing, so in the next year or so we'll begin to see them back in some estuary for spawning, but right now they're in the near-shore ocean.

MR. ADLER: Okay, and what is the predator? Is there a predator on the sturgeon, a known predator at all?

MR. KAHNLE: I'm sure there are, but we don't know what they are, human beings, I guess.

MR. ADLER: Well, it looks like we don't take any, but I didn't know if there were other fish that would gobble up some of these things, because I'm concerned that it seems like we're releasing an awful lot. Then the status of the stocks continues to be very, very low. My last thing had to do with is there anything being done on the shortnose sturgeon, or is this only on Atlantic?

MR. KAHNLE: I'd have to defer to other researchers about shortnose. Our proposal deals only with Atlantic sturgeon. The shortnose sturgeon in the Hudson River is at incredibly high levels. Most recent estimate puts the number of adults at over 60,000.

Right now we're looking at less than 2,000 Atlantic sturgeon adults and maybe 18,000 or 20,000 Atlantic sturgeon greater than Age 5, so our proposal focuses only on Atlantic sturgeon. The Hudson system is the species that's at especially low numbers.

CHAIRMAN BEAL: Other questions of either Andy or Brad? Yes, Eric.

MR. ERIC SMITH: Brad, when you summarized the PRT recommendations on this particular proposal, is that in the handout or on the CD somewhere? I'm looking to try and skim over those again and I'm not finding where they are.

MR. SPEAR: The PRT did not review the proposal. The body that was set up was the Culture and Stocking Committee. Is that what you're referring to?

MR. SMITH: Well, I have the general recommendations I'm looking at here, but when you

went through the list of the ideas specific to New York's proposal, I was looking to try and read along, and I couldn't find those.

MR. SPEAR: Okay, those were in a supplemental.

MR. SMITH: They're in here? Thank you.

CHAIRMAN BEAL: All right, any additional questions? Gil Pope.

MR. GIL POPE: Thank you, Mr. Chairman. So you were saying that one of the members thought that releases of 3,000 to 5,000 fish was dangerous to the genetics. Was that what I heard towards the end there? Thank you. It seems like a small number of releases, to me anyway.

MR. SPEAR: In fact, the number was more around 300. The Phase 2 of the release includes 300 or 325.

MR. KAHNLE: Three twenty-five.

MR. SPEAR: And there was still concern from the committee member.

CHAIRMAN BEAL: Okay, seeing no other questions, if we could put a motion on the table. Mr. Colvin.

MR. GORDON C. COLVIN: Thank you, Mr. Chairman. Just by way of introduction, let me say that I want to thank Andy for the presentation. This is a joint proposal that has been developed as a result of an ongoing collaboration and partnership between our staff and that of the U. S. Fish and Wildlife Service, which we very much appreciate and value.

Those of you who attended the annual meeting in New York may recall the presentations that were made on the estuary programs, including that of our staff for the Hudson River Estuary Program, and you may recall that the Atlantic sturgeon resource in the Hudson River Estuary is one that is of great concern and value to New York, such that it has become the logo symbol for the Hudson River Estuary Program and one that was distributed to you, and which I was gratified to see found its way onto the rear bumper of one of our commissioner's cars, which we observed last night, Dr. Stewart.

We are quite concerned and have invested substantial resources in trying to understand better and bring about over the long-term a restoration of the Atlantic sturgeon in the Hudson. We want to express appreciation to our partners in the Service and also the other folks, the other members of this board that Andy identified in his presentation as having agreed to assist us in this effort.

Many of the states have already kind of signed on to help us monitor for the presence of the fish down the road, and we want to express our appreciate to Connecticut, New Jersey and the other states that are a part of that effort. Thank you.

That said, Mr. Chairman, I would like to offer a motion that the board approve the proposal as presented by Andy on behalf of New York state and the U. S. Fish and Wildlife Service.

CHAIRMAN BEAL: Thank you, Mr. Colvin. Is there a second to that motion? Roy Miller, thank you. Just to be clear, Gordon, your motion includes Phase 1 and Phase 2 of the releases?

MR. COLVIN: Yes, it is for the proposal as presented.

CHAIRMAN BEAL: Thank you, Mr. Colvin. Any questions? David Cupka.

MR. CUPKA: And further, Gordon, is it the understanding that this would be a one-time thing? Is that part of your motion?

MR. COLVIN: Yes, this proposal is a proposal that was crafted around the availability of 350 juvenile fish at the Lamar facility, and we are not anticipating at this time the future availability. The fact of the matter is, as I understand it, that if we didn't go forward with this proposal, those fish would end up on a landfill.

We have an opportunity here to learn something meaningful, and to perhaps reinforce things that we've known or believe we've known in the past for some time, with a resource that has been made available to us within conditions that we think are appropriate and within sideboards of risk that we are entirely comfortable with.

I haven't said it, but I should also point out it's implicit, if you understood what Andy was saying, that this is part of a larger sturgeon initiative that we are operating, funded through our Hudson River Estuary Program, in part, and with supplemental funds that we're seeking from the state wildlife grant program, having incorporated Atlantic sturgeon into

that program in New York, again with the support of the U. S. Fish and Wildlife Service.

We are looking at substantially expanded monitoring for the juvenile sturgeon in the river in combination with this work and a substantial monitoring effort for looking for sturgeon in our coastal waters as well, using trawl survey, hopefully, with the state university of New York. So this all fits together as part of a bigger picture is I guess what I'm trying to say, David.

CHAIRMAN BEAL: Okay, thank you. Any other comments or questions on the motion? All right, seeing none, all those in favor of the motion raise your right hand — oh, I'm sorry, is there a need for a caucus? No, okay. Yes, the federal services are caucusing.

All set? Okay, all those in favor, raise your right hand, please; I've got 16 votes in favor; anyone opposed; abstentions, one abstention; any null votes? The motion carries. Anything else on the New York proposal?

Okay, seeing nothing, moving on down the agenda, the next item is the Sturgeon Restoration White Paper. This is a Potomac River Basin Project, I believe, and A.C. Carpenter can help us understand it better.

# STURGEON RESTORATION WHITE PAPER

MR. A.C. CARPENTER: Thank you, Mr. Chairman. The Potomac is blessed to have not only the Potomac River Fisheries Commission, we have the Interstate Commission on the Potomac River Basin, which helps deal with a lot of other issues beside fisheries but are instrumental in helping with the shad restoration program and now beginning to look at a sturgeon restoration program.

I'd like to introduce Dr. Jim Cummings from the Interstate Commission on the Potomac River Basin and ask him to go through the proposal. Just briefly, what we are trying to do is keep the Atlantic Sturgeon Board abreast of developments as they progress along these lines, so this is an information report.

CHAIRMAN BEAL: Thank you, A.C. Mr. Cummings, please.

DR. JIM CUMMINGS: I'm very pleased to be here. This is an information item. Starting about two months ago, the Interstate Commission on the

Potomac convened a coalition of biologists and fisheries managers in the Chesapeake Bay and Potomac region to put together preliminary plans for how we might conduct the restoration of the Atlantic sturgeon in the Chesapeake Bay.

A number of those people that helped prepare this white paper are here today: A. C. Carpenter; from Ira Palmer's staff, John Seaman; and Steve Minkkinen from the U. S. Fish and Wildlife Service Maryland offices. We also have U. S. Fish and Wildlife Service Virginia fisheries coordinators and the Virginia and Maryland natural resource managers assist with this as well.

We are at this time seeking some funding support for the steps that we wish to take. Primarily, the steps have precipitated in our review of the status of the stocks in the Chesapeake Bay. As was expressed throughout this meeting, we're all concerned at the low numbers of Atlantic sturgeon that are being found.

We collectively don't think that just a moratorium on the fishery is enough. We want to be a little proactive. We envision instituting a stock enhancement program at some point in the future. These are really the first steps.

We have put together a sort of five-step process. We're looking for funds this year to convene a workshop so that with the multi-jurisdictional aspect of the Chesapeake Bay and the Potomac River, all the jurisdictions will be working off the same page and getting new techniques, new information on both propagation and some of the monitoring that might be necessary.

We want to do that in advance of our convening a series of meetings to develop a restoration plan for your eventual approval. We also wish to expand the reward program that has been very successful for Maryland, to include other jurisdictions, Virginia, the District of Columbia, and Delaware, potentially.

I don't want to speak in advance of the plan, but we do think that the plan will outline a lot of what we have here in draft form on Number 4 of expanding and managing our captive brood stock population, which right now is principally or entirely Maryland Department of Natural Resources and the Mirant Power Company's stocks.

We also wanted to incorporate an outreach program while we're doing that. We're, again, at the very initial stages. This is informational. We wanted to let you know what we're doing. We're hoping to get

assistance from staff and others as we develop this. I'm now open for questions.

CHAIRMAN BEAL: Thank you. Are there any questions for Mr. Cummings or A.C. Carpenter? All right, A.C.

MR. CARPENTER: As this progresses, we'll keep the board updated on issues as this task force works, and we'll keep you advised.

CHAIRMAN BEAL: Thank you, A.C., and the new chairman, to my left, is nodding his head that he would like to hear that. Moving down the agenda, the next item is an update on the technical workshop that was held a while back to review the stock status of Atlantic sturgeon. That's going to be presented by Andy Kahnle. Thank you, Andy.

### WORKSHOP ON STOCK STATUS UPDATE

MR. KAHNLE: Thank you. I'll be brief with this presentation. We held a workshop, actually a combined workshop and technical committee last fall in November in Raleigh, North Carolina.

This workshop meeting was more or less a five-year checkup, an update on what we've learned in the last five years since the fishery was closed coastwide and how well the stocks are doing, sort of a status of the stocks.

It was a nicely attended workshop. Over 30 folks attended. It was a nice mix of folks doing work and folks that were interested in what we've learned. I'll just briefly go through these topics.

We heard from federal agencies. We heard from almost every state on stock status. We talked about bycatch problems, current habitat issues, current tagging efforts and, finally, aquaculture programs.

I won't speak for the federal agencies present today. I will say that at the workshop last fall they indicated -- both U. S. Fish and Wildlife Service and NOAA were involved in a decision in '98 not to list the Atlantic sturgeon. They may reconsider that, but at the time of the workshop they weren't sure. I think they were waiting for the results of the workshop to decide whether to move forward or not.

Stock status, I should couch this with a general statement that Atlantic sturgeon stocks are historical low levels coastwide, and so the ups and downs that each state saw in the last five years have to be viewed in the context of the fact that we're at probably the

lowest levels in the last 100 years in most stocks.

That said, it was a mixed review. The Kennebec River in Maine has seen a tremendous increase in juveniles in their fishery-independent sampling. The Hudson stock declined precipitously during the recent fishery, stayed at low levels; and just within the last year or two, we've seen a slight upturn in production of young from the system.

In the Delaware, in the Upper Bay-Lower River, there has been a dramatic decline in the catches in the fishery-independent gillnet survey there. Most of those fish were apparently Hudson River fish that had emigrated based on tag returns and also on the presence of strong year classes.

They're scarce in Chesapeake Bay. We've seen an increase in sampling in Albemarle Sound in North Carolina in the last few years, and they remain at low levels or unknown levels in southeastern rivers.

But I should say that in the south, anecdotal evidence from fishermen, comments from fishermen suggests that sturgeon are beginning to rebound in that region. We talked about bycatch and bycatch is reported every year in the state reports, at least in the nearshore waters.

At the workshop last fall, we looked at a summary of bycatch data from the NOAA observer program in the offshore fisheries. This is data from, I think, '89 to 2000 and mostly from Maine to North Carolina. They found an average of 14,000 dead animals in that fishery during that time period.

The worst fisheries were the monkfish and the dogfish fisheries. But you should note that the data goes through 2000, and we've made many restrictions on effort in those two fisheries in the last few years, so there may have been an improvement. At the workshop, we all agreed we need to look at the bycatch. We should update the NOAA data through the present, and we also need a coast-wide look at the bycatch data that the states are producing.

Habitat, in general, is improving in the northern estuaries. Chesapeake, I think, is a bit confusing. The theoretical data that was produced during the workshop suggests that there is a DO squeeze there, the fish are having problems in the tributaries that are too warm in the summer, and the main bay has DO problems, or that was the suggestion at the workshop.

Contrast that with the success of the stocking in the Nanticoke and I think it may be premature. Finally, in southern estuaries, they're being affected more and more. As we northerners flock south and increase the population, that's affecting the water quality in the estuaries.

There has been a lot of tagging, a lot more than we realized until we got together at this workshop. Almost everyone that I mentioned in the previous presentation has been tagging sturgeon one way or another.

Many of those tagged and recaptured, many of the data go to the Fish and Wildlife Service Tag Database, Tag Release Recapture Database in Annapolis. They've had over 5,000 releases and 700 returns, most of those from the Chesapeake, but they cover the coast.

At the workshop, we agreed that we need to standardize methodology, tagging methodology, placement, type of tags, coordination of reporting, coordination of recovery and so on. U.S. Fish and Wildlife Service Maryland Fisheries Office agreed to take the lead on that effort.

Aquaculture, as I mentioned before, a culture manual has been developed for Atlantic sturgeon by U.S. Fish and Wildlife Service. Hudson River progeny are being held right now at Lamar in Pennsylvania and also at a hatchery facility in Maryland, and I believe that state is at least considering, and after hearing from A.C., I guess, hopefully, moving forward with a restoration program.

Finally, at the workshop we asked that the ASMFC Atlantic Sturgeon Aquaculture and Stock Enhancement Committee be reconstituted basically to evaluate the New York proposal and also to revise and update the ASMFC stocking and enhancement protocol.

We plan to produce a written summary of the workshop. I believe we're scheduled to do that in April, coming up. This probably will be used by folks that are considering the issue of listing again.

A couple of technical issues came out at the workshop. Number 1 was that we agreed we need to reconvene some sort of an assessment group or a technical group to reconsider biological reference points for sturgeon; and, 2, that we need to think about reopening criteria. Southern fisheries have been closed for a long time and the fishermen down there are beginning to ask what it would take to reopen the fishery. That's it.

CHAIRMAN BEAL: Thank you, Andy.

Any questions regarding the status of the stock workshop that was held last November? Lew Flagg.

MR. FLAGG: I was just wondering, Andy, in terms of the tagging, did you look at any data from Canada, from the St. John River? Was that included in your tagging summary as far as tags and recaptures?

MR. KAHNLE: No, it hasn't been. That's a good question. I haven't -- I don't know that they are tagging there. We will have to ask.

MR. FLAGG: I know they have in the past. I'm not sure whether they're doing it now, but I know they've done a fair amount in the past.

MR. KAHNLE: That's a very good question, actually. It looks like Cape Cod and Cape Hatteras form some sort of boundary for sturgeon, at least up this way. We have never seen your tags, and I don't think you've recaptured tags from the Mid-Atlantic states.

MR. FLAGG: No, we had one recapture from Rhode Island. That's the only one south of the Cape.

CHAIRMAN BEAL: Okay, thank you. I think there was another hand in the back. Bruce Freeman.

MR. BRUCE FREEMAN: Just for the record, Andy, you indicated that there were 14,000 sturgeon taken incidental in the dogfish and monkfish fishery, but indications on your slide was 1,400.

MR. KAHNLE: Oh, boy, thank you. Fourteen hundred was the proper number. Fourteen thousand would be bigger than the stock that we're taking them from.

MR. FREEMAN: I just mention that because ten years from now when we review this, the transcript will show 14,000 and we'll have made great progress because we only took 1,400.

CHAIRMAN BEAL: Thank you, Bruce. Any other comments? Gordon.

MR. COLVIN: I have a couple of questions for Andy, but just to stay on the issue of the bycatch for a second, Andy. You indicated that report was based on a paper that was prepared following a review of the National Marine Fisheries Service observer data?

MR. KAHNLE: That's right.

MR. COLVIN: I assume that they applied the observer data essentially as a sub-sample and expanded it based on what was known about fishing effort?

MR. KAHNLE: Yes, the data that they had, they reduced to catch per so much, catch of sturgeon per so much of targeted species, and then they expanded it based on known landings of the targeted species.

MR. COLVIN: Just kind of based on what some of us have come to observe with respect to the magnitude of the observer data on discards, I have to assume that there must be very wide error bounds around that bycatch estimate; is that right?

MR. KAHNLE: Yes, that's correct, there always are.

MR. COLVIN: I wonder if there was some follow-up discussion at the workshop or by the technical committee about the need to direct some specific observer effort on sturgeon where we might most likely see sturgeon bycatch? I know it's part of the plan, but I wondered if you guys had some follow-up discussions about it.

MR. KAHNLE: Not at the workshop for the observer data, but at the workshop we did spend quite a bit of time talking about the bycatch information we're getting from the states in the near-shore fisheries.

Hardly any of those come from observer data, and we generally concluded that they're kind of shaky data, and that the best solution would be to use observers, on-board observers in the near-shore fisheries as well as the offshore fisheries.

MR. COLVIN: Thank you. The other question I had, I'm not even sure if it's for you; it might be for the service members, but I was intrigued by your indication that there may be some consideration to undertaking a new review with the potential for listing. Can we be brought up to date on what might be going on there?

MR. KAHNLE: I defer to the federal agencies.

CHAIRMAN BEAL: Yes, are there comments from the Fish and Wildlife Service, Bill

Cole?

MR. BILL COLE: Wilson, help me out here, but my understanding was that when we approved the original plan, that there would be at five years another review. I'm not sure that has started yet. I think there have been some preliminary discussions on it, but I can't tell you any more than that. I don't know that we have made a determination of when, where and how, Gordon.

MR. COLVIN: May I just suggest that the board request the services to give us an update, to get back to us perhaps through the mail or whatever, through the commission staff, and let us know what their plans are in that regard. It's obviously of great importance to us.

MR. COLE: We will most definitely do that. One of the things I can say is that a lot of the participants that would be in this status review are still working on the written report for this, and I think that comes first, and then we will be able to further advise you.

CHAIRMAN BEAL: Okay, thank you. Actually, I should have said this up front, that this workshop that was held last November was actually funded by monies that came from the National Marine Fisheries Service, the Northeast Regional Office and their Protected Resources Office.

They forwarded that money to the commission to put together this workshop to initiate an update on the status of the stock, which would then feed into the five-year review that's included in the Fish and Wildlife Service. Bill.

MR. COLE: I've got money in it.

CHAIRMAN BEAL: Oh, that's right. The Fish and Wildlife Service did supply some additional funding, I apologize. Give credit where credit is due. Any other comments on this workshop or questions? Seeing none, we'll keep moving down the agenda. Oh, Vince had his hand up.

EXECUTIVE DIRECTOR O'SHEA: Thank you, Mr. Chairman. Andy, thanks for this overview. I had one question about the tagging results. It looked to me like there is about a 15 percent recovery, and I was wondering if there was any discussion -- first of all, that seems pretty high, and I'm wondering is that a reflection of the fact that the stock is so low and you have so many tags out there on the existing sturgeon, or is this maybe giving

us some information about the rate of interaction of these animals?

Does that give us any clues about bycatch, I guess, is what I'm saying? If you're getting 15 percent of the tags back, it seems to me that there is a lot of interaction with that species.

MR. KAHNLE: We definitely can use these data to decide what the rate of interaction is. We have to look at it. The reason for the high rate of return in the summary that I just gave you is that most of the returns and the tagged fish were the Nanticoke stocking in Chesapeake Bay.

So with the active reward program, just about every sturgeon that hit a net was reported, and people were able to report it as a recapture. Almost no wild fish were taken during that time period. So once we exclude the Nanticoke stocking from that dataset and the immediate returns, then we definitely can use this data as a recapture rate.

### CHAIRMAN BEAL: Lew Flagg.

MR. FLAGG: Yes, I was going to ask, also, Andy, would the return rates be high possibly because we have an animal that lives for such a long period of time, and you can catch them multiple years? I mean, they're out there for a long, long time. They're very long-lived and certainly would be accessible to gear types that are prosecuting in areas where they go.

MR. KAHNLE: Oh, there's no question, that's correct. Usually, when we look at recapture rates or fishing rates or bycatch rates, we confine the recapture to the first-time recapture.

CHAIRMAN BEAL: Okay, thank you. Any other questions on the workshop? Seeing none, moving down the agenda, the next item is the AFS Symposium update, and Brad Spear is going to present that information.

# AFS SYMPOSIUM UPDATE

MR. SPEAR: An update on this past year's American Fishery Society meeting in Quebec City, Quebec, initially, a couple of the Sturgeon Technical Committee members came up with the idea of putting together a small symposium to kind of kick off this stock status update by getting together a few of our technical committee members and presenting it at the conference.

We had about five or six presenters lined up and then got word that the Canadians were also working on a very similar sturgeon-focused symposium and linked up, decided to coordinate our symposia, and got, I think somewhere, 30-35 presenters from all over the United States, Canada, Germany and France, to talk about anadromous sturgeon, habitat, restoration, population status, bycatch.

And again with the money, as referred to earlier from the Northeast Region Protected Species, we were able to bring up five or six committee members, technical committee members and myself and had good interaction with other researchers in the sturgeon field around the world.

And being new to the sturgeon world myself, I was a little out of touch of the meaning of the workshop, but the reports I heard back from those involved said that it was an enormous success, that there were linkages made that were never thought possible.

And as a result, the American Fishery Society has agreed to produce the proceedings of the workshop so all the presenters will be putting together a paper. I believe they needed money for the publication of the proceedings. I believe New York state has kicked in money.

The commission had a little extra money from travel for this workshop. We haven't compiled the proceedings yet at this point but within the next, I'd say, year or so the proceedings from this symposium will be out and we'll make sure the board gets a copy.

CHAIRMAN BEAL: Okay, thank you. Any questions on the AFS Sturgeon Symposium? All right, seeing none that brings us to other business on the agenda. Is there any other business to come before the Sturgeon Board? Okay, Wilson and then Sonja.

MR. WILSON LANEY: Bob, just one clarification to a comment Andy made a few minutes ago. I was just talking to Steve Minkinin, but if you look on Page 7 of the Maryland, I guess it is, report, it has a graph that shows the hatchery recaptures, but it shows quite a few wild recaptures, but as Steve pointed out, I think what Andy meant to say was that in the year after the release of those hatchery fish, there were very few wild fish recaptured.

Thereafter, in 1998, as Steve indicated, there were quite a few wild recaptures of fish that appeared to maybe be from a 1996 year class. They don't know

where those came from, whether they were produced in the Bay or outside the Bay. I just thought I would clarify that for those of you who might, like me, have been puzzled by that graph that showed quite a few wild recaptures. Thanks.

CHAIRMAN BEAL: Thank you, Wilson. Sonja, did you have a comment?

MS. SONJA FORDHAM: Thank you, Mr. Chairman. Sonja Fordham, the Ocean Conservancy. I attended the Raleigh workshop and I just had a couple comments today. We find the level of depletion with this species obviously alarming, as we do the bycatch mortality.

And we share the concern that many of you have that some of these stocks are not increasing or even decreasing despite the moratorium, and that the observed upturns are really only slight.

I would add that while upcoming constraints on the dogfish fishery may reduce some bycatch, we may well see increased fishing pressure in the monkfish fishery, so I think it's still a serious concern. I feel that stock enhancement alone will not be enough to recover the population, and it really won't help in the long run if you don't address the core problems.

The reports and people have stated today that bycatch is the Number 1 stumbling block to recovering the population, so I'm a little concerned that there has been little discussion about beyond just monitoring bycatch, how we might go about actually reducing bycatch of sturgeon.

I had a couple of questions for Pennsylvania and Delaware, the designation for ESA status in your state, does that carry any additional provisions or requirements to look harder at the issue?

CHAIRMAN BEAL: Does anyone from Pennsylvania or Delaware want to comment on that question? Roy Miller.

MR. MILLER: In Delaware state-endangered status doesn't carry the same regulatory process that the federal listing does. Obviously, no sturgeon may be taken intentionally in the state of Delaware, and so I'd have to say that there probably is no additional requirements as a result of this particular listing, other than those who apply for scientific collecting permits would not be given express permission to retain the sturgeon unless they had a compelling reason to do so and applied for permission in advance.

CHAIRMAN BEAL: Thank you, Roy. Dick Snyder.

MR. DICK SNYDER: In Pennsylvania we have no fishery for sturgeon. We have no bycatch because we have no other commercial fisheries. The state listing does enter into some permit review processes where that species in itself, if we had a sighting or a verified collection of one sort or another, would put additional burden on a developer or an encroacher, but it's pretty much the same as Roy described.

MS. FORDHAM: Okay, thank you for that. I just wanted to also add that the conservation community would like to be kept abreast of the federal decisions on whether or not there is a status review or what is happening with potential ESA listing.

And then, finally, I just had a question of whether the ASMFC under their FMP has any plans to move forward on measures to reduce bycatch or to look at ways that we might reduce bycatch if there are any plans for that in the immediate future? Thank you.

CHAIRMAN BEAL: Thank you, Sonja. Bill Adler.

MR. ADLER: Yes, I'm just very concerned that it seems that since the fishing really isn't --doesn't seem to be I don't think the real problem. I think that there's something else. Now, the habitat issue that was up on the board there seems to be more or could be more of the problem, the various habitat issues and the construction, the dredging, the water quality, that type of stuff.

It just doesn't seem to be the case because all along the coast they're either declining or they're just staying there and you're dumping a bunch of fish into the system. There has been basically no fishing according to this for 40 years or something like that.

And still it declines. It's got to be something else that is stopping the recovery, and that's what concerns me is what is it? It's something else than what we normally look at. Thank you.

CHAIRMAN BEAL: Thank you, Bill. Any other comments for the Sturgeon Board?

Seeing no hands, we will schedule the next board meeting when we have an update from either the Potomac River Fisheries Commission/Potomac River

Basin Project and/or the National Marine Fisheries/Service Fish and Wildlife Service consideration of listing Atlantic sturgeon.

And if there is no other business to come before the management board, we stand adjourned.

(Whereupon, the meeting was adjourned at 12:25 o'clock p.m., March 9, 2004)

- - -