

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

PROTECTED RESOURCES COMMITTEE

**Sheraton Atlantic Beach Oceanfront Hotel
Atlantic Beach, NC**

December 7, 2009

DRAFT MINUTES

Protected Resources Committee:

David Cupka, Chair
Rita Merritt

Dr. Wilson Laney, Vice-Chair
Mark Robson

Council Members:

Duane Harris
Dr. Brian Chevront
Mac Currin
Ben Hartig
Lt. Charlie Gris

Robert Boyles
Dr. Roy Crabtree
George Geiger
Charlie Phillips
Tom Swatzel

Council Staff:

Bob Mahood
Kim Iverson
Myra Brouwer

Mike Collins
Anna Martin
Roger Pugliese

Observers/Participants:

Monica Smit-Brunello
Rod Dalton
Tom McIlwain
Otha Easley

Jennifer Lee
Phil Steele
Dr. Jack McGovern
Anik Clemens

Additional Observers and Participants Attached

The Protected Resources Committee of the South Atlantic Fishery Management Council convened in the Atlantic Beach Sheraton Oceanfront Hotel, Atlantic Beach, North Carolina, December 7, 2009, and was called to order at 3:28 o'clock p.m. by Chairman David Cupka.

MR. CUPKA: We'll start our Protected Resources Committee Meeting. The first order of business is approval of the agenda. Any changes to the agenda? I think we will change the order somewhat on this, and we'll start with the presentations from the National Marine Fisheries Service; so with that one change our agenda is approved.

Approval of the March 2006 Protected Resources Committee Meeting Minutes; are there any corrections, additions or deletions to the minutes of the last meeting, which is over three years ago? Seeing none, then those are approved. Okay, we're going to skip over Item 3 and we'll go ahead down to a series of presentations on Item 4. Jennifer is here and she is going to do those. The first one is in regards to a petition to list Atlantic Sturgeon under Endangered Species Act. There is information for that behind Attachment 1.

MS. LEE: Let me just clarify that I actually set it up a little different. I had started with this presentation; I have a brief overview of sort of the species in the South Atlantic and particularly the protected resources issues just because you haven't had a committee meeting in I think three years, so just a little background, and then it goes through the various subjects that you asked for information on.

My name is Jennifer Lee. I work in the Protected Resource Division in the Southeast Region. I've been working there close to ten years and about six on fishery interactions with protected species. What I thought I would do today is since I looked back and it was in I think March 2006 was the last time this committee met, I wanted to just very briefly remind you of the diversity of protected species you have in your region; talk a little bit about the status and recovery updates.

Really, I want to tell you about loggerhead sea turtles and some recent information and reports related to them, and then just touch on MMPA in fisheries and ESA in fisheries, just kind of basic issues and how they relate; and then get at developing recent actions. These are some of the things that you asked for; Atlantic Sturgeon ESA listing petition; and a coral petition; some gill net issues with sea turtles going on in North Carolina and a related 60-day notice; and then reinitiation of the consultation on the shrimp fishery to address smalltooth sawfish.

There I will provide you – really, I just kind of wanted to remind you of where sawfish are and show you a little information that we have related to bycatch and get you to sort of think about what you know about your fishery and how it relates to smalltooth sawfish and to perhaps initiate some issues' options to look at ways to potentially reduce bycatch.

But, first, marine mammals, you're got six endangered species in your region. Northern right whales are obviously the most critically endangered. They have been hovering – I think we used to say about 350 animals and now I believe it's anywhere from 300 to 400, so we have had some encouraging information recently, but obviously it's still not very far along in recovery, obviously.

Bottlenose dolphin – obviously, there are a lot more marine mammals than I listed here – I only put bottlenose dolphins because generally when it comes to fisheries that's been more the species that we have most fishery interactions related to. Sea turtles; there you have your five sea turtle species in your region. They are all listed as endangered except for loggerheads, which are listed as threatened, and the green sea turtles, which are listed as threatened except for in Florida.

So in addition to sea turtles, we actually have quite a few other protected species under the ESA in your region. We have shortnose sturgeon. You really don't deal very much with that species because really it's not in the EEZ that you manage. Smalltooth sawfish; a lot of times folks think of them as only an inshore species, but that's not really true. Adults are definitely in your region.

We have our staghorn and elkhorn corals. Those were listed not too long ago. As also mentioned, Atlantic sturgeon here, which we'll talk about a petition, and there the candidates are not protected but we're looking into that. Then the stars; we have designated critical habitat that also occurs in your region.

I thought I wanted to talk a little bit about loggerheads, the status and recovery in particular, because I just wanted to bring to your attention that we've had a lot of major documents on Atlantic loggerheads. We have a new recovery plan which has all new recovery units. It establishes recovery units, which is new, and has different recovery goals for each recovery unit.

We have new Turtle Expert Working Group Report. That's kind of like our status or our stock assessment document. Then we also have – in response to a petition the agency did a status review, and in addition to that we have a recent Southeast Fishery Science Center population assessment, which was prompted originally by some issues going on in the Gulf of Mexico.

But one thing interesting to point out is out of that we do have – for the nesting loggerhead females we have a population estimate with all kinds of caveats, but about 30,000, so that was something new that came out of that; but a lot of information all really showing that loggerheads right now in terms of the trends and projections are not doing well.

This is from FWRI, but this is the loggerhead nesting index, beaches, graphs you can see. Last year at the time we did have a little ups, and people were wondering if maybe things were going to turn, but that was not the case in 2009. The numbers are back down again, so significant declining trend.

Just for contrast, this is a green turtle nest on Florida Index beaches. One thing that is a puzzling a lot of people in trying to figure out what is going on with loggerheads and green turtles, we're not seeing the declines in the nests even though a lot of times loggerheads and greens are nesting on the same beaches. Leatherbacks also, again, certainly the number of nests in the U.S. are much lower but definitely an increasing trend.

MMPA in fisheries, the primary issues are entanglement in nets and lines. Northern right whales, as I mentioned, the primary threats are entanglements and ship strikes, so definitely fisheries are a big issue. Dolphin depredation and predation, I wanted to bring this up. The

agency has been looking into this a lot over the last couple of years for a variety of reasons, but one thing I did want to point out is we are seeing that it really is linked to illegal feeding.

One particular thing, there are a lot of people we're finding that are illegal feeding. It's not just tourists or recreational people on boats. It's also commercial fishermen, and I'm not just talking about dolphins following behind boats and then feeding off that. That, of course, can't be helped but we're actually finding intentional feeding which is contributing to this problem, so that's been something that has been talked about lately a lot.

Take Reduction Plans, just to point out the Atlantic Large Whale Take Reduction Plan, you do have fisheries that fall subject to those regulations. Your black sea bass pot fishery and also the coastal migratory pelagic resource gill net fishery both have regulations managed – both those fisheries are managed through the TRT TFP.

Then we also have two other plans; we have a Bottlenose Dolphin Plan. It doesn't affect you as much because a lot of it has been more state fisheries. And then Atlantic HMS Pelagic Longline; again not something you manage but something to be aware. Now, when it comes to ESA, real brief, you always have the Section 7 thrown out, so I just wanted to remind you what we're talking about.

The slide is generic to all federal agencies and not fisheries, but this is the most – these are the sections that a lot of times you're dealing with, which is, one, this affirmative conservation mandate. That's all federal agencies shall use their authorities to carry out their programs for conservation of endangered and threatened species, so essentially you're not just managing to get by. We should actually be doing good things to try to move along in the direction of recovery.

Then duty to avoid jeopardy; this comes up in your Section 7 Consultations where each agency must ensure that any action they authorize to carry out is not likely to jeopardize, and another committee had a presentation related to that today. Basically, we have to do biological opinions to make sure that we're meeting that standard.

So, the South Atlantic Fisheries; a few reasons why I wanted to just list the biological opinions in your region. One, there are quite a few you can see, so varying degrees of a number of interactions. In importance, obviously, the shrimp fishery with sea turtles; everybody is aware of that issue. The snapper grouper fishery back in 2006; we did implement sea turtle release handling gear, as you know in your Amendment 16B.

Coastal pelagic resources, that's less interactions but, again, you do see them essentially, you know, hooking, entanglements, force of emergence, all those sort of affects the fisheries, but that impacts listed species. I have the website there. Basically, if you want more information on a particular fishery and how listed species are affected, you can to our website, and they have the full biological opinions there. A lot of these are new, as you can see, too.

Atlantic Sturgeon Listing Petition – now I'm moving on to you basically just wanted some information on a few different topics, and I'm just going to go one by one. First here is the Atlantic Sturgeon Listing Petition; the Natural Resource Defense Council petitioned us to list

Atlantic sturgeon as in danger – or list specified distinct population segments of threatened or endangered designated critical habitats. The claims in the petition are that the bycatch, waster pollution, dams, dredging, ship strikes, all those threaten Atlantic sturgeon survival.

If you're familiar with the petition process, the first stage is that NMFS must review the petition to find out whether – to decide whether it presents substantial information indicating that the petitioned action is warranted. We're not seeking comments on that. We're looking at the petition, the information that was presented and making our determination. In this case we have until January 4th to make that finding.

Then if it is warranted under the petition, we have a year to determine whether listing is warranted; so the first step is to just make sure that there is enough information to go on. Many of probably know that we did do a status review back in 2007, so we have been updating that information.

The Center For Biological Diversity's Coral Petitions; actually in this slide I only talk about one of them, so I guess I should mention we have another petition which was to extend our critical habitat designation a bit north of where it stopped, and so that is in your region and something that we'll also be coming out with a finding on.

The one I have here is a petition to list 83 coral species. We received that on October 20th. All of them are Class Anthozoa, so that is a class managed under the South Atlantic FMP for Corals. Eight occur in the Caribbean and Atlantic. The petitioner claims that corals are threatened by rising ocean temperatures and ocean acidification. The same process; this time our 90-day finding is due January 20, 2010; and if found warranted; again, we must determine whether listing is warranted for each of the coral species within one year.

Another issue I was asked to speak on was what is going on in North Carolina. We received a 60-day notice from the Karen Beasley Sea Turtle Rescue and Rehabilitation Center Petition. The 60-day notice actually claims that the North Carolina Division of Marine Fisheries and North Carolina Marine Fisheries Commission have violated Section 9, which is the section that prohibits take by authorizing and issuing licenses allowing the use of gill nets, which have resulted in significant take of multiple species of endangered and threatened sea turtles and violating an incidental take permit issued to North Carolina DMF for its September-December southern flounder gill get fishery in the Pamlico Sound Restricted Gill Net Fishery.

So what is an incidental take permit? I might have mentioned in the presentation earlier is that Section 10 permits are states can apply for their fisheries that may have incidental interactions, so it is an incidental take permit. It's just a different part of the statute. North Carolina DMF does have one for a particular part of its southern flounder gill net fishery, but there was some observer work that was done, which was sporadic but high levels of bycatch, so that prompted in part this petition.

The last thing I wanted to talk about was the reinitiation of consultation on the shrimp fishery. I wanted to talk to you a little bit about this reinitiation of formal consultation is necessary. There

are four different reasons. In this particular case the amount of taking specified in the incidental take statement is exceeded. It wasn't a lot.

In the previous biological opinion that was done in 2005 only authorized one lethal take, so not a high level, but given that the new information was observer data and given how low coverage we have in the shrimp fishery, it definitely is at least something to look into further. Of course, this is why we're doing the consultation, but it is something to think about as well.

The Sustainable Fisheries Division formally requested reinitiation of the consultation. It was actually back May 9th. That was about the time we got the information on the new takes in the observer program. The formal consultation timeline, as you are aware, is 135 days once all of the necessary information is received.

It also includes a description of the proposed action. In some cases when we're doing consultations, it's just a status quo. We're taking whatever the management is and however the fishery is currently operating and working from there. In other cases we may also be looking in the future at how it would operate under some new action that you're proposing.

Our new opinion, of course, is to be based on the best available science, specific commercial information and, of course, we have to err on the side of conservation for the species. We're really just getting started with this one. We're still trying to get our information together, but this should be picking up.

I thought I would just show you a little information, because I'm not sure how familiar you are with smalltooth sawfish. When we first listed the species, I had similar slides to the ones I'm going to show you only a lot less points on them. There has been a lot of work since this species have listed to try to collect information.

There is something called the National Smalltooth Sawfish Encounter Data Base. It has captures and sightings, and that's where we get a lot of our information. The one on the left here, you can see the various points. It just gives you an idea of the concentration. Obviously, Southwest Florida is the primary area for smalltooth sawfish.

You can see a lot of them are very close to shore, but then you also have to remember a lot of this has to do with who is reporting them. The adults are both inshore and they also can go out as much as 70 meters. I think I've seen a different figure as well, but it's the juveniles that are only staying in inshore waters.

On the right, just to show you, here you can see I've got some shrimp trawl bycatch on here as well as the circles are actually commercial longline bycatch. I'm showing you this just so you can see the areas where we're having bycatch. Obviously, an animal with a saw – you've seen a sawfish. You can tell it's obviously easily entangled. It does bite hooks.

With the longlines, the interactions have been non-lethal. They're believed to be pretty hardy, but when it comes to interactions with nets, it's a lot more severe particularly if an animal ends up out of the water for any length of time you're looking at much more severe effects on the

animal. This is a blow-up, and you can see the orange line here is your state waters' line, so just to show you that we do have quite a few points.

Although they're not far off, we do have quite a few points that are actually in the EEZ. Then here is a blow-up of the smalltooth sawfish commercial bycatch. Again, you can just see the kind of area south of the Keys, all along there has been more of a hot spot for our adult smalltooth sawfish bycatch. Cut out of this one, but recent three shrimp trawl bycatch points that were in your region. There are the two triangles down at kind of the bottom left there. The third one was actually off the east coast, a little further off than that.

Usually I'd end the slides here, but I've had kind of a challenged day. That's all I have for the presentation, but really as we're looking at smalltooth sawfish, again it's probably to – you know, if you're used to dealing with sea turtles or other species, maybe this doesn't seem like, oh, big deal, they only caught three, but adult smalltooth sawfish, it's a much smaller population, so we really want to encourage the council to try to look at what they possibly could do to minimize bycatch issues.

Primarily, a lot times I think the pink shrimp fishery has been the one that folks most likely say is probably likely to have the most interactions. I don't how important that area is to the shrimp fishery below the Keys. I've also been told that the pink shrimp fishery is a little bit more important in the Gulf, but I just kind wanted to prod you to think about it a little in terms of how the fishery operates in those areas and what we might be able to do. That's it; thank you.

MR. CUPKA: Thank you, Jennifer. Most of that, obviously, was just for information purposes except for this issue about the shrimp fishery and the smalltooth sawfish. Jennifer, if you can, help me here with the process a little bit. The consultation has not been finished; is that correct?

MS. LEE: Yes, we're really just getting started on the consultation. We initiated it back in May, but really until we have a complete initiation package, it doesn't officially start our clock, and, of course, we can always extend that as well. We're really getting going, but we've been – there are two ways that a lot of times we can move forward, and that's whether we do a consultation just on the status quo fishery or on some new action. I guess we're coming to see whether the council would consider looking into this issue and whether or not they could do something to protect smalltooth sawfish. That we would then be analyzing as well.

MR. CUPKA: That was going to be my next question; will there be a formal letter after the consultation process to the council asking us to take action or consider taking action or saying we have to take action? I guess one of the requests we're getting now is that we consider perhaps some kind of scoping document, but that's assuming I guess we're going to take action, but it's pretty clear that something is going to have to be done; is that correct?

MS. LEE: Like I said, it is pretty early in our process in terms of where we are and figuring out the effects, and we haven't moved too forward in the consultation. I guess from our standpoint, at this point we are concerned because it is a much smaller population. I looked into the observer data and the last couple of years there has only been I think eight trips that were

observed down in – I think it's like Stat Zones 1, 2, 24 and 25 across the Keys area, so we basically have three takes in 16 trips, which is a considerable amount of bycatch.

I know there are a lot of factors. We have some information that in smalltooth sawfish there is some sight fidelity in the species, so I think we're hoping that we can – if the council were to pursue doing an issues options paper, that might help get better information that can be used as well and kind of get at these issues in terms of the interactions and the overlaps between the trawls and the sawfish.

DR. CRABTREE: On this issue of biological opinions and the council, we just went through a big issue with this in the Gulf of Mexico with the bottom longline fishery and turtle takes; the bottom longline grouper fishery. In that case the council took action in advance of the biological opinion. The risk you take if you wait until you have a biological opinion and if the biological opinion calls jeopardy, then it's too late for you to take an action.

At least in a situation like this, in all likelihood that portion of the fishery down there where we thought takes could occur would likely be closed until something was taken. If you get a biological opinion that calls no jeopardy, it still may have some recommendations and things. In the case at least with the Gulf Council, they weren't comfortable of waiting on the biological opinion and we encourage them not to wait on the biological opinion.

They took an action to reduce turtle takes in the bottom longline fishery; and so when the biological opinion was written, it based the consultation on that proposed action; and with that proposed action in place, is it or is it not jeopardy? In that case the opinion came out with the proposed action that it was not jeopardy.

I guess the question here is if the council wants to try and come in and do something to reduce sawfish takes down in this area. We would need to know about that and get some notion as to where it's going and we could try to look at that potentially depending on the timing of it. If you end up with a jeopardy call in a fishery, then things happen quickly because the fishery is no longer authorized to continue and there would have to be something done very quickly at that point.

MR. CUPKA: Thank you. Again, I wasn't advocating that this council consider waiting and not doing anything. I was just trying to see what the process involved. Obviously, this committee can't take action, but I think the way we should proceed with this is have a motion that this committee recommend to the Shrimp Committee, which is where it's going to have to be dealt with, that they move ahead and possibly start putting together a scoping paper to deal with this.

I think we need to refer it to the correct committee, and so that would be the way I would prefer to proceed with this particular issue. So, again, I would be willing to entertain a motion or recommendation that this issue be referred to the Shrimp Committee and that they move ahead on dealing with it. Wilson.

DR. LANEY: Mr. Chairman, I'll make the motion that we refer the issue to the Shrimp Committee.

MR. CUPKA: We have a second by Rita. Discussion on the motion? Is there any objection to the motion? Seeing none, then that motion is approved. I guess I kind of got ahead of myself a little bit here. I should see if there any questions for Jennifer on any of this material that she has presented Robert, we'll start with you.

MR. BOYLES: Mr. Chairman, I'm not on your committee. Jennifer, as you had encouraged us to look at this issue of smalltooth sawfish, I would encourage the Protected Resources to look at the work that has been done by South Carolina DNR on the in-water turtle abundance, which has some information that maybe paint not quite as bleak a picture as the nesting data does for the sea turtles. Thank you.

DR. LANEY: Thank you, Jennifer, for that very comprehensive presentation. Just to let everybody know, I think that Mike has already distributed this to everybody, but I just got today a new peer-reviewed article by Erika Zolick on the Bycatch of Protected Species and Other Species of Concern in U.S. East Coast Commercial Fisheries, which was just published last week. Hopefully, that will add to our information frame here.

I know generally speaking shortnose are not captured offshore, but I think there have been – and I'll defer to Robert on this – there have been a few captures of shortnose in shrimp trawls I guess off South Carolina, because I think Mark Collins documented those. I know we're going to hear about shortnose, an inshore fishery in Georgia, momentarily here, but I do know that you all have things going on with shortnose I guess in Santee-Cooper and in the Savannah and in Cape Fear. Do you know enough about what is going on there to just give us a quick one-or-two sentence briefing on what is going on in each of those systems with regard to shortnose?

MS. LEE: It's been a while since I've worked on – I used to work on shortnose sturgeon, but I'm pretty rusty on it, and I didn't beef on that too much because I did figure you would care more about things that were in your region. For the Cape Fear, are you wanting to know – do you want me to talk a little bit just about the fact that they were supposed to put in fish passage and that never happened?

DR. LANEY: Well, yes, I guess the short version there is I know Roy has sent a couple of letters to the Corps of Engineers letting them know they're out of compliance with Section 7, and I was just wondering if there was any response back from the Corps. Has there been any movement on that front?

DR. CRABTREE: I'm not aware of any response back to that letter yet.

DR. LANEY: And then for the Savannah, I guess the big issue there is the harbor deepening and the potential move of the port from one side of the river to the other side of the river if South Carolina gets their way. Duane may want to say something about that. Then I guess on the Santee-Cooper the issue is flows. I just wanted to kind of know where things were on the Savannah and the Santee-Cooper there with regard to any sort of resolution. I guess in those two cases, are you working on biological opinions for both of those systems?

DR. CRABTREE: I think the answer to that is yes. Now, the Savannah River Project is huge and undergoing all kinds of negotiations and things. I don't have timelines unless Jennifer has some on those. The Savannah River timeline moves around some, but there are sturgeon issues on both rivers and both will require biological consultation.

DR. LANEY: Okay, and to follow up, Mr. Chairman, what is the present status of the shortnose sturgeon status review? I was on that team and the last I heard, after Dana left the northeast and Steph is still working on that one, so do we have a timeline for completion of that status review document?

DR. CRABTREE: I don't have it at my fingertips.

MS. LEE: I'll be happy to get that to you. I can send out an e-mail but offhand I don't know the answer.

DR. LANEY: Okay, and then one more followup – the last question, I promise – and I guess really to Roy or Jennifer, either one, so with regard to Atlantic sturgeon, I guess at some point – I presume in January – you will respond to the listing petition, so let's just hypothetically say if you recommended that it be listed as threatened or endangered, is there any advantage to the council making any proactive reactive recommendations with regard to Atlantic sturgeon; because if you look at the data on that one, it's encountered in a lot of fisheries along the east coast, both inshore and offshore fisheries. Would there be any advantage to the council considering some measures to reduce bycatch of that species in advance of any recommended measures coming forth from NMFS?

DR. CRABTREE: Well, in general I would say, yes, anything we can do to reduce bycatch of those species would be a good thing. Now, I don't know for sure what fisheries we're talking about of what type of measures it would be, but generally if we can reduce bycatch of any of these sturgeon species I would say that's a positive thing and we ought to do it.

MR. CURRIN: David, I'm not on your committee. Jennifer, three questions for; one, in view of the distribution of those smalltooth sawfish around the Keys and both east and west; are you seeing increases in interactions or mortalities in the Gulf region as well? That's the first question.

MS. LEE: It's hard to say in terms of – you know, anytime you're dealing with a survey it's hard to figure out whether it's because you're looking more and getting more information or whether you're actually seeing more interactions. I can tell you we don't have any information to suggest that they're doing worse than they've been doing. I'm not giving you a great answer. I could probably look up a couple of things and give you a better answer, but we don't have any great trend information is the bottom line.

MR. CURRIN: Okay, I was just wondering if you had relatively equal observer coverage in both regions.

MS. LEE: I'm sorry, I may have misunderstood. You're asking Gulf versus South Atlantic?

MR. CURRIN: Yes.

MS. LEE: They are more Gulf oriented. There are a lot less records in the Atlantic.

MR. CURRIN: And I assume you have some observer coverage in the Gulf?

MS. LEE: The shrimp fishery, my understanding is it has close 1 percent coverage. That's Gulf and South Atlantic?

DR. CRABTREE: Yes, there is something approaching 1 percent observer coverage in the shrimp fishery in the Gulf. I'm not sure what it is in the South Atlantic. We're trying to get in the neighborhood of 4 percent observer coverage in the grouper bottom longline fishery. There is observer coverage in the shark bottom longline fishery or there was until that fishery was largely closed down.

Then there is something on the order of 1 percent observer coverage in the vertical line fishery in the Gulf of Mexico; the bandit fishery for snapper and grouper. The observer coverage in the South Atlantic is less predictable and more sporadic based on a variety of funding sources. We're working to enhance all of that, but those are the main observer programs that we have in the Gulf right now outside of HMS fisheries.

MR. CURRIN: And then maybe to get to the answer to my question; I assume with that explanation you gave with 1 percent coverage in the Gulf, that would seem to be higher than it is in the South Atlantic, so I would presume, then, that there has been more than three interactions in the Gulf during the time period over which the interactions in the South Atlantic occurred. Is that safe to assume?

DR. CRABTREE: Well, I don't think we have observed – when was the last observed interaction in the shrimp fishery in the Gulf; Jennifer, do you recall?

MS. LEE: I can check. We might have one, but I know that we're not over our – I think both sides, the South Atlantic and Gulf, essentially have an incidental take of one, and we haven't met that in the one annually. We haven't met that in the Gulf. I'll be happy to double-check on that for you.

DR. CRABTREE: Well, I think you would be guessing to make that statement, Mac.

MR. CURRIN: Okay, I think you answered my question. The question is besides the longline fisheries – and you mentioned the bandit fishery in the Gulf as well and the shrimp fishery – are there other sources of interactions – are there interactions with other fisheries besides those three, I guess, the shrimp fishery, longline and –

MS. LEE: Well, most of our interactions are actually coming from recreational hook and line; so the smalltooth sawfish encounter data base, the majority of the records would be from those encounters. That's where I was pointing out the reason why we're particularly concerned about nets and shrimp trawls versus hook and line is based on at least our knowledge and what we have

for data we have found that smalltooth sawfish are surviving those hook-and-line encounters. They are relatively hardy based on the information, so we're not authorizing lethal interactions in those fisheries. It's just non-lethal.

MR. CURRIN: And then my last question is just purely informational; could you explain to me what the recovery units are that you mentioned regarding loggerheads?

MS. LEE: It's just a way of when you set up your recovery goals of whether you're looking at – I don't have the definition off the top of my head, but whether you're looking at the species as a whole and just saying, okay, this is what we need for the entire population; or when you establish recovery units, you're saying a lot of times it can be similar to think population segments where you're saying, okay, well, these are the recovery units, these are the particular sub-populations that we think are essential for recovery, so not only do you have to have perhaps these goals for the species as a whole, but for each of these recovery units we need a certain size and various requirements.

MR. CURRIN: And then as a matter of further explanation, those are basically spatial units, then?

MS. LEE: Yes, or it can be related to genetics and things like that.

MR. ROBSON: I just wanted to ask on the timing of the consultation and a potential biological opinion; if we wanted to be proactive in looking at those for the shrimp fisheries prior to the biological opinion, is this going to give us the time to do that? I may have missed what the timing was on getting an actual biological opinion out.

MS. LEE: It can be accommodating in the sense that – I mean, we have to push forward and continue to get that information together to work on the consultation, but a big part of the consultation is your proposed action, what you're actually looking at, so I guess I wouldn't want – I think we would be moving along as the council worked on it. At least in the Gulf we were able to bring those together.

MR. CUPKA: Obviously, we couldn't start on anything until our March meeting, so I don't know how soon they'll be moving along, but hopefully they'll give us an opportunity to work with them and move along together. Wilson.

DR. LANEY: Well, just basically a followup to Mac's question, Jennifer. Most of the observed interactions it looks like have been way down in South Florida on both the Atlantic side and the Gulf side. If I recall correctly, the historical distribution of this species ranged well up the east coast, I think. At least there used to be a whole lot of saws hanging around the Beaufort Lab that came from interactions with probably fishery-independent sampling gear.

When the council starts looking at this, I presume that whatever measures might be put into effect, it should be given consideration of putting those into effect throughout the historic range, maybe, and not so much focusing on areas where interactions may be presently occurring but where they could occur if the species recovers to the full extent of its historic range.

MS. LEE: Well, I think that largely depends on what you're looking at in terms of what you think you can do. I mean in the South Atlantic it's primarily from – at least the current population, we have more records from, say, the Keys area to Ft. Pierce, and then it really thins out a lot. I think one of the other bycatch records, as a matter of fact, was off that Ft. Pierce area.

I guess those are the things that would be at your discretion on how you would want to handle it. I think from our perspective we just at least know that it seems that – you know, those areas where we at least know that sawfish are more common, it would be very important, we think, to protect those areas in particular.

DR. LANEY: I haven't looked at the recovery plan lately, but does it have a lot of information on the historic distribution and catch rates and that sort of thing?

MS. LEE: Yes, the smalltooth sawfish, the decline was so long ago, that there is very little information. It's been really actually fascinating to watch in recent years how our knowledge has grown by just leaps and bounds compared to what we used to know. But the original status review goes through it and the recovery plan does as well talk about the historic range.

The smalltooth sawfish did go as far as North Carolina. In that area there is some indication that perhaps that was more of a seasonal movement going that far, but certainly all through Florida and Southern Georgia. I mean that was more common in their historic range. A lot of the more northern reports I think were more in the summertime and it was believed to be possibly a migration of some of the larger adults.

MR. CUPKA: Okay, thank you, Jennifer. Are there any questions for Jennifer? If not, we're going to move on. All right, if there are no other questions, then we'll go back to Item 3 on our agenda, which is bycatch of shortnose sturgeon in the Altamaha Shad Gill Net Fishery. Doug Peterson is here to make a presentation.

MR. PETERSON: Bob Baun is going to make the presentation.

MR. BOND: Good afternoon, my name is Bob Bond; I'm a master's student at the University of Georgia and the Warnell School of Forestry Resources. I work under the direction of Dr. Douglas Peterson and Joe Fleming with the Department of Natural Resources, who also worked with us on this project.

We were invited here today to talk to you about sturgeon bycatch in the Altamaha River Anchored Gill Net Shad Fishery. In Georgia we have a shad fishery that operates from January to March of each year. The shad fishery, they target American shad and hickory shad. It has been a staple fishery in this nation since the Colonial Era.

These fishermen primarily use gill nets and rivers and estuaries to catch these fish. On the Altamaha River these two fisheries are actually the largest commercial operation, so you can see they use relatively small boats and a fairly primitive manner of doing this. We have two species of sturgeon that exist in the Altamaha River in Georgia, the shortnose sturgeon and the Atlantic sturgeon.

The focus of my talk today will be on the shortnose sturgeon for a couple of reasons. Their spawning migration occurs from December to February of each year, which coincides with the shad season. Also, they're a smaller fish. They get to a maximum size of about a meter in the Altamaha River so they're more susceptible to the gear that these fishermen are using. They generally fish with about a 4-1/2 inch mesh.

Atlantic sturgeon do occur in the river and they do occur sometimes as bycatch, but their spawning migration doesn't occur until after the shad season closes. Also, the larger fish can blow through these monofilament gill nets very easily. I believe this year we may have observed five Atlantic sturgeon throughout the whole season, and we're going to see a very different picture for shortnose sturgeon.

The focus of the talk today is shortnose sturgeon in anchored gill nets within this fishery. I'm not going to review the entire life history of shortnose sturgeon with you guys today, but there are a couple of points about it that make these bycatch interactions significant on the population. As you know, they're a long-lived and late-maturing fish. They reach reproductive maturity in southern populations. Females, it takes about four to six years; males take about two to three years.

They also exhibit a protracted spawning periodicity where females only spawn about every three to five years and males spawn one to two years. In the Altamaha River specifically we know the spawning migration occurs between December and February of each year. Our lab has radio-tagged fish and tracked them leaving the estuary in December and moving upriver.

This year in the areas that we have confirmed evidence of spawning from past studies, we've found ripe fish on that area. Past research out of our lab has also shown that the population is relatively healthy by southern standards; approximately 6,300 individuals, although new data that we're working on now shows that this number may have actually decreased over the last couple of years. Our catch curve analysis shows that approximately 33 percent are adults in the population.

The problem is that the commercial season for American shad overlaps both temporally and spatially with the spawning migration of this endangered fish. As I mentioned, shortnose sturgeon are highly vulnerable to the gear type that these fishermen are using. It's actually our preferred method for sampling for them when we're doing population dynamic studies.

Also, in Georgia soak time is not regulated on these gill nets. Most fishermen only fish them approximately 24 hours because they don't want their shad to be eaten by American eels or just to go bad in general, but fishermen do let them soak for – I've seen up to 48 hours before, sometimes longer than that.

The past study I'm going to cite, Collins et al in 1996 showed a 16 percent mortality rate in gill net fisheries for shad. The 16 percent mortality rate has been a pretty alarming number to many people for a long time and further studies were warranted because of that. Also, sublethal effects of bycatch are unclear for shortnose sturgeon.

A couple of different studies have shown tagged fish being released from gill nets after being incidentally captured and aborting their spawning migration. A master student at the University of Georgia also found a female who was aborting her eggs after being captured in an anchored gill net.

To sum all this up, we know bycatch is a problem for this federally listed endangered species, and that's why in the final recovery plan for the shortnose sturgeon it is listed as a research priority to quantify bycatch in rivers that contain both an endangered population and a gill net fishery for shad.

With that in mind, our research objective was simply to estimate the shortnose sturgeon bycatch in the anchored gillnet fishery in the Altamaha River from 2007 to 2009. Now that seems like an easy enough goal until you take into account the Altamaha River. It's a 214 kilometer long river that flows through some pretty remote areas of southeast Georgia. We have a map here showing our entire span of our research area.

The way we assessed this was using a stratified roving survey design, so essentially we're looking from here at the confluence of the Oconee and the Altamaha Rivers, 215 kilometers south to the coast. We stratified at that orange mark right there, which physically is Highway US 1. We did this based on a primary knowledge of confirmed spawning evidence near the confluence and suspecting a spawning area below that, also; rocky outcrops.

We've seen telemetered fish moving through this area during January and February, so we stratified ahead of time expecting that there was going to be higher bycatch in that area and then the lower 184 kilometers of river would be what we considered the lower strata. We generated independent estimates of both effort and catch, and I'll discuss that more here.

To generate this independent effort estimate, we conducted weekly roving counts of anchored gill nets. Essentially once a week on a randomized day we would drop a boat in at River Kilometer 215 and then I'd drive to the coast and I'd count every gill net along the way. When I saw buoys in the water, I would drive up to the buoy and use a gaff to lift the float line out of the water to ensure the net was actually actively being fished there and would record locations of those nets.

For mathematical calculations we assumed all nets were fished continuously. We used 12 hours on opening and closing days and we used 24 hours for all other days. We could make that assumption based on two different observations we made during the study. One was this is how all the fishermen we observed operated. They all fished their nets continuously in this manner.

Also, if we would go back and check our effort data, we would see the same nets being fished time and time again in the same locations. So if you calculate the total monthly effort, we multiplied the mean number of nets each month per river section times the total amount of hours that the season was open to generate an effort estimate.

To estimate catch we calculated a monthly CPUE figure for each river stratum. We did this by random observations of five to seven commercial fishermen each week who agreed to participate

in this study and were paid \$500 per fishing season to participate. For that \$500 they agreed to allow me to come observe them at randomized times that fit their schedule.

Most of these fishermen, this is a second job to them or sometimes they're just trying to put dinner on the table. Some guys I would see ten times in one week; some guys I'd only see them once a week. They also were required to keep logbooks. That was part of the deal, so they kept daily logs of their effort and catch.

At the end of each season we verified the accuracy of their logbooks by comparing the logbook data with our observational of them using a one-sample match per T-test, and off a level of 0.05, and then we estimated monthly bycatch in each strata by multiplying the effort figure we previously calculated by the monthly CPUE.

All right, so what did we find out? Well, this took a lot of work. Through the three years of the study, you can see a list of how many net counts we performed. There is essentially 12 weeks in a shad fishing season, so you can see we got better as we figured out the logical design of our study. Observations; that can vary from year to year based on water levels. If one fisherman may fish seven, that's one week; he may fish two nets one week, it all depends on what the water levels in river were.

We're confident in the accuracy of our results because based on log and observational data, we did observe between 48 and 66 percent of the entire fishery each years, so that gives us a pretty good idea of what is going on the fishery. We found no significant difference between the observational and logbook data, so we were able to supplement the logbook data on days where observers were not present into our data to give us a more full data set.

All the results I'm about to present to you are based on the combination of this logbook and observational data. The next four slides are going to be a series of graphs that are all laid out in the same manner. On the X-axis we'll have the years 2007, 2008 and 2009 and then subdivided by month. In the upper portion of each graph will be that upper river stratum from River Kilometer 184 up to 215, and in the lower portion of each graph will be data from that lower river stratum.

On this particular graph, on the Y-axis we have the mean number of nets observed in the river with a 95 percent confidence interval placed on them. In the lower river we see the fishing pressure kind of being variable. There is no real trend to it, but at any given day in the river, in the lower portion there is between 15 and 30 nets being fished. In the upper river we do see sort of a trend. Each year there is usually between about one and five nets in the river at any given time.

That makes sense because it's a lot smaller stretch of river and not as much place to fish, and we estimate that only one to three fishermen are operating at any given time in that portion of the river. On this graph, the X-axis stays the same again with year subdivided by month. On the Y-axis this time we have the actual shortnose sturgeon raw catch, what was actually logged or what we actually observed.

During the first two years of the study, in the lower river we see some bycatch occurring, less than 50 fish in both years. February is the peak in both years in the lower portion of the river. Then in 2009 we see this great increase in bycatch, still less than a hundred fish being captured, but definitely a big increase in February.

In the upper portion of the river we see a completely different story, though. In 2007 we had not yet found a fisherman to work with us in the upper portion of the river, so that data point is missing, but we do see some bycatch occurring in that upper portion of the river in 2007. There was no bycatch logged or observed in 2008. In 2009 we see a big spike here in January, or in about 1-1/2 week period we witnessed 33 fish being captured as bycatch and then also some fish being present there in February, also.

Despite the fact that on the last slide you saw there being some bycatch in the lower portion of the river, you can see the rate at which they're being captured is extremely low. There are actually data points across the bottom here. The number is so miniscule that it's not actually showing up on the scale of the graph.

Whereas, if we look in the upper river we see a massive catch per unit effort of 0.5, and that's based on net days, 24 hours and that's with nets. There is a large quantity of fish being captured and at a very high rate in the upper river. When we combine the effort data with the catch-per-unit effort data, we get this expanded catch where, as we said, there is less than 100 fish being captured in 2008 and 2008 in the lower portion of the river.

We do see an increase in 2009, but again recall that is at a much lower rate. The thing that really sticks out that is troubling on this graph is this data point in January when we know they're making their spawning migration and we're estimating 300 fish possibly being incidentally captured on the spawning grounds, and there is still several fish being captured in February, also.

All right, this final graph, I have taken the 2009 data and broken it out, so now this is all 2009 data with January, February and March across the X-axis and on the Y-axis it's the expanded catch you saw on the last slide. We began to look at some of the biological measures' data, so this is just fish where we observed milk present when they were captured in the net.

So in February of 2009 in the lower river at least 65 percent of the fish that were captured as bycatch were in increased spawning condition. In the upper river where we had that very large catch, at least 12 percent were in increased spawning condition. We were unable to inspect all the fish. That number is probably actually a lot higher due to different issues and not all fish were inspected.

In February we only observed three fish, but all three of them did express milk. One thing that I should have mentioned on the graph, in March in all three years of the study there has never been a sturgeon observed in that upper portion of the river. All right, in terms of mortality, throughout the three years of study only four fish were recorded as dead, which calculates out to a 2.3 percent mortality rate, and that's based on a total log and observed catch of 174 fish.

So on to the discussion about this; there is some bycatch that's going to be observed in any river that has both a shad fishery and shortnose sturgeon populations, and they are susceptible to the gear. We did observe some bycatch in all three years of the study. In 2007 and 2008, if that's how the study would have kept going on, I probably wouldn't be sitting here talking to you today because we would say there is probably not a problem in the fishery, but then 2009 was huge in terms of bycatch.

It accounted for approximately 60 percent of all fish that we were either observed or logged, and we saw that massive influx of fish in the spawning areas, which sets what we feel is an important precedent for future surveys of bycatch. You have to take into account the stochastic habitat variables that can affect the fish along with their unique life history strategies such as that protracted spawning periodicity.

If all those conditions aren't right and the fish don't make the spawning migration, you're not going to see them in the bycatch, but on years when all of that lines up correctly and the fish make that migration, if there are nets blocking their way, they're going to find a way into those nets. We had this greatly increased catch-per-unit effort in 2009. Why?

Well, perhaps it was because of better river conditions. In 2007 and 2008 Georgia experienced historic drought levels and may not have been the right conditions for the fish to spawn. In 2009 river levels started increasing in January and obviously it has been going on ever since, which our state needed greatly.

That can lead to the idea of shortnose sturgeon of pent up spawning demand that has been suggested by researchers such as Boyd Kinnard in the past that if those stochastic habitat variables aren't correct and the conditions where they need to go aren't going to be right, the fish will reabsorb their eggs or their milk and move back down to the estuary and spend time feeding for the next year.

This I guess leads us to the main question here; were a high percentage of spawners incidentally captured during 2009? That's yes or no question and I'll let you answer it for yourself, but we estimate that approximately 2,100 adults are in the population. Because of that spawning periodicity, not all those fish are going to run every year, so let's say on a good year about a thousand of them do make the run.

Our point estimate this year for total adults being captured throughout the entire river is 498 fish. The confident interval is around that 279 to 731. Basically, we're presenting a good news bad news situation to you today. In the lower 184 kilometers of the river, which is where most of the fishery operates, catch-per-unit effort was very low.

There were sturgeon being captured but it was at a much lower rate than what was observed in the other section of the river. Unfortunately, in that upper 30 kilometers of the river there are a few individuals who fish on or near confirmed spawning grounds of shortnose sturgeon and they are catching at a very high rate.

That leaves us two different decision alternatives; just suggestions that we have talked about. There is the idea of shortnose sturgeon spawning reserves such as suggested by Collins et al in 2000 where we have confirmed evidence of the fish spawning in this area and we see ripe individuals showing up in the gill nets and perhaps the area should be closed.

A little bit more liberal approach would be a temporary closure of the spawning areas. In all three years of the study we never saw fish show up in March. The fishery closes in March and perhaps the fishery could be extended like March and April so that those guys up there could still fish if they wanted to, but that would protect that critical time for the shortnose sturgeon.

In terms of mortality, that 2.3 percent mortality rate was much lower than was previously observed in the Southern Shad Fisheries. That's 16 percent so that was a good news story here. Probably in Georgia the cold water conditions when the shad season is open it really does reduce the stress levels of fish when they're captured.

I handled over a hundred sturgeon that were captured as bycatch in this study, and most of them looked in really good condition when we were releasing them. Granted, that's just my semi-expert opinion of looking at the fish. There is nothing to say that these sublethal and post-release effects aren't causing the fish to abort the spawning run or to even die sometime after they're released. Those effects are still not well studied and they're very difficult to quantify.

In conclusion, the bycatch was highly variable year to year, and we do recommend that future bycatch studies take that into account. You can't form conclusions based on short-term data because you may be missing something that's going on there. We saw an exponential increase in catch-per-unit effort if the nets were being fished in upriver spawning areas where the ripe sturgeon were shoaling or spawning during their migrations.

Because of mortality in possible sublethal effects, bycatch causes both direct and indirect population level effects for this endangered fish. As with any natural resources issue, all the stakeholders working together here to minimize these fishermen interactions is in the best interest of all the parties involved. I realize we probably only have a limited amount of time here, so Dr. Peterson wanted to invite anyone who may need to discuss this further with him, to have dinner with he and I later. At this time, if there is time, I'd be happy to take any questions.

MR. CUPKA: Thank you, Bob. Are there questions for Bob? Mac.

MR. CURRIN: Bob, good job, a lot of work went into that. It looks like you did an excellent job on your study. It sounds like fun as well. What was your unit of effort in your CPUEs; was that a net day unit of net days or –

MR. BOND: Yes, one net day. They all fished different lengths and different meshes and we chose a net in the water for 24 hours.

MR. CURRIN: A follow up on that one is what is the variation in the amounts of nets that they fished?

MR. BOND: The maximum length of a hundred feet and it has to be tied to the shore.

MR. CURRIN: Maximum length of a hundred feet?

MR. BOND: Yes, sir.

MR. CURRIN: Okay, thank you. My other question, I think you answered with the low mortality rates, but I was wondering whether Georgia had ever considered requiring attendance or a use of drift nets in that fishery. Again, I think you answered that with the low mortality rate. The other thing that occurred to me is has Georgia considered a prohibition of what appears to be a very small number of individual fishermen fishing above the US 1 bridge? It would seem to take care of many of the problems that you identified.

MR. BOND: Yes, sir, and I'm just here reporting the results. I'd let Doug answer that question because he has more communication with them than I do.

MR. PETERSON: Everywhere we go people want to know so what is Georgia doing? Being a researcher at the University of Georgia, I'm not always privy to what is happening behind closed doors and social circle. I can tell you the things that I'm hearing coming out of the social circle and what I've heard sort of through the grapevine unofficially is that Georgia DNR plans to do something. What that something is I don't know. I suspect they will do the least they have to do. That would be my guess. I don't know what they're going to do, but I think it is going to happen before the next season.

DR. LANEY: Mr. Chairman, Mac asked my question. I can't shed a lot more light than Doug did, but I did talk to Mike Harris of Georgia DNR, and he did confirm to me the same thing Doug said, that Georgia is going to do something; most likely or probably some sort of closure of that upper area at least.

MR. PETERSON: There is also another fishery – you mentioned the drift net. We only assessed half of the shad fishery. There is a full 'nother half of the fishery that is restricted to the bottom; what is it, Bob, 30 kilometers?

MR. BOND: Well, then can drift throughout the river but –

MR. PETERSON: They can drift throughout but when –

MR. BOND: – they tend to stay below 30, yes.

MR. PETERSON: Okay, primarily below 30 it's entirely drift nets, and we know that they also catch shortnose, but because the nets are tended constantly it is less of a concern. It's not zero concern, but it's less of a concern because of the soak time – just a clarification on that.

MR. PHILLIPS: Mr. Chairman, I'm not on your committee but this is my backyard, and I'm probably buying a fair amount of those shad that are coming from those nets. So this I know a little bit about. First of all, there is not much sense in extending the season because the price of

shad has already crashed by then, so that when most of my fishermen quit. They're catching shad up north and they're tired of catching shad by then.

The set net fishery I think is probably a lot smaller fishery than the drift net fishery. There is a lot more effort in drift netting on the lower end. I don't think I get very many people bringing fish that far to me from that upper end of the river. I've talked to some of the fishermen that work in the tagging, like Dave Lester Gale. You've probably worked with him.

MR. BOND: Yes, sir, he's one of them.

MR. PHILLIPS: And they tell me that they're seeing a lot more sturgeons as the year goes by because I think he has been doing this for a while. I'm pretty impressed with your methodology. You seem to have done a good job. I'm a little bit concerned on one year with not too many people involved in it. I think it definitely needs looking at, but I'd be inclined to think Georgia is going to try to do the right thing instead of not necessarily the least amount, but we'll have to see.

MR. BOYLES: Mr. Chairman, I'm not on your committee, but in reference to Mac's earlier question – and for the record I'm not speaking for the state of Georgia and I think Spud would chime in probably and inform the committee that the Atlantic States Marine Fisheries Commission is looking at a Shad Fishery Management Plan Amendment and it may very well be – I would speculate that Georgia is probably going to wait to see what the requirements of that FMP Amendment will be before they move to initiate anything.

I can tell you that's certainly what we'd be looking in South Carolina. I think that's again based on a stock assessment and not necessarily with a bycatch issue driving it, but I suspect were I in that same boat I'd probably wait to see what the commission is going to mandate before we went out and did something on our own.

MR. HARRIS: At one time shad was probably one of the most politically sensitive issues in fisheries in Georgia. There was and still is a recreational gill net fishery for shad. It's the only recreational gill net fishery that I'm aware of. At one time the Coastal Resources Division was very much involved in managing shad in Georgia, and we got very, very intelligent and turned all that over to the Wildlife Resources Division a long time before I retired.

They became the folks that did all the research on shad and to some extent sturgeon, but it is a difficult fishery to manage simply because of the political sensitivity I think. We tried many times to do things that were very unsuccessful politically within that arena. I'm sure the Wildlife Resources Division right now is walking a tightrope in that respect.

It is going to take this kind of research to force the issue, I believe. Now we've got some information that you all worked three years to collect, and I'm proud that you've done that because I think that is what it is going to take to rein this fishery under the control that it really needs to be reined in under.

MR. CUPKA: I can tell you in South Carolina is the same situation. I'd say back in the mid-1980s that half the laws that we had on the books, half the marine resources laws were related to shad fishing. Not only every river but every section of the river had its own set of laws and criteria and everything, and it was a pain to deal with. Robert.

MR. BOYLES: Mr. Chairman, just to follow up, we have followed Georgia's lead and now the Wildlife and Freshwater Fisheries Division is responsible for anadromous species in South Carolina as well, so, Duane, thank you for the inspiration.

DR. LANEY: One follow-up question for Bob or Doug, and that is whether or not they have funding and will continue bycatch studies beyond 2009? Then I have another question, too.

MR. PETERSON: I guess that one is for me; Bob wouldn't know that. Bob is looking for a job, by the way, so that's one of the reasons we wanted to bring Bob here so you could at least meet him. Along those lines, this was the third and final year of the National Marine Fisheries Service funding for the bycatch study, which went through Georgia DNR, by the way.

Georgia DNR was an active cooperator on this project, so let me give them credit where credit is due. This project is now in the wrapup mode. At this time we have no further funding to continue that work; however, the gentleman in the yellow shirt there mentioned that one-year data he wouldn't hang his hat too much on one year's worth of data, but that is why these long-term bycatch studies are so important for sturgeon in general because these fish don't just go up the rivers and spawn every year.

Had we only done this study for two years, we would have had a very, very different conclusion than if we had conducted the full three years. Without trying to pass my hat around to collect additional grant money, somebody ought to keep an eye on this fishery. If there is going to be a shad fishery where there are short nose sturgeon, somebody ought to be watching at least at a low level.

DR. LANEY: Well, I guess the followup is more of a comment than a question. Robert already alluded to Amendment 3 and Amendment 2 of the Atlantic States Marine Fisheries Commission Shad and River Herring Fishery Management Plan. Both of these fisheries entail a lot of inshore gill nets and the bycatch is not just of shortnose sturgeon. It may be low for Atlantics in the Altamaha but it's certainly much higher than that in other South Atlantic river systems, particularly in Albemarle and Pamlico Sound where actually one of the better indices of Atlantic sturgeon reproduction that we have is coming from the North Carolina Division of Marine Fisheries Fishery-Independent Gill Net Survey.

Sturgeon bycatch is an issue. It is going to be a whole lot more of an issue should the National Marine Fisheries Service recommend listing that species. Then in addition to the paper that Mike just distributed this morning on protected species interactions with offshore commercial fisheries, Karen Lindberg and John Wallman just put out a brand new paper in Bioscience that looks at the state of diadromous fishes in the whole North Atlantic, on both sides of the North Atlantic, Europe and the U.S.. Generally speaking, it's pretty dismal for a lot of those.

If you take in conjunction with those new amendments and the charge the ASMFC has to not only try and regulate those fisheries in a sustainable manner but also get a handle on the bycatch, there is a lot of new information out there. I hope that the ASMFC Shad and River Management Board will take that into consideration in their February meeting when they're trying to formulate final measures for Amendment 3, which deals with American shad but also – Amendment 2 I guess has already been passed, but there needs to be some correlation between those two amendments, some consistency developed between those two amendments.

I guess I'll just ask Robert as the new Chair – congratulations again by the way – of the Atlantic States Marine Fisheries Commission whether or not it would be productive to have Bob and Doug make the same presentation to that board meeting in February?

MR. BOYLES: Absolutely; I think it was very informative, and I'd certainly endorse that.

MR. CUPKA: Any other questions or comments?

MR. HARRIS: Just an observation; before we turned everything over to the Wildlife Resources Division, we did fund some research where we were catching Atlantic sturgeon in the Altamaha River with gill nets and planting them with ultrasonic transmitters. When we would set those nets, we would catch as many shortnose as we did Atlantics. It always made me wonder, okay, is shortnose not endangered or should Atlantics be endangered and catching that many of both, an equal number of both. Anyway, just an observation.

MR. CUPKA: We want to thank you, Bob and Doug, for your comments and your presentation here. That brings us down to other business. Is there any other business to come before the committee?

DR. LANEY: No, other business, but I guess a follow-up question for Roy, and that's whether or not the National Marine Fisheries Service has had any conversation with Georgia about a Section 10 Permit for their shad fishery; is that something they're considering or no?

DR. CRABTREE: I don't know, Wilson. If you could get us these questions in advance so we'd have answers, but I can't keep track of all of this in my head so I don't have that answer for that answer, but perhaps Jenny, if she is in the room. Jenny, can we get an answer to that question? Thank you.

DR. LANEY: And I apologize, Roy. I mean, I just found out about this whole thing at the AFS meeting in Nashville just a couple of months ago, so I just wondered if they had – and Georgia I think just found out about it, too, pretty recently as a result of the fact that the research was recently done.

MR. CUPKA: Okay, I don't see a need for a timing and task motion; so with that, Mr. Chairman, we are adjourned.

(Whereupon, the meeting was adjourned at 5:00 o'clock p.m., December 7, 2009.)

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South Atlantic Fishery Management Council 2009 - 2010 Council Membership

COUNCIL CHAIRMAN:

Charles Duane Harris
105 Demere Retreat Lane
St. Simons Island, GA 31522
912/638-9430 (ph)
seageorg@bellsouth.net

COUNCIL VICE-CHAIRMAN

David M. Cupka
P.O. Box 12753
Charleston, SC 29422
843/795-8591 (hm)
843/870-5495 (cell)
palmettobooks@bellsouth.net

Deirdre Warner-Kramer
Office of Marine Conservation
OES/OMC
2201 C Street, N.W.
Department of State, Room 5806
Washington, DC 20520
202/647-3228 (ph); 202/736-7350 (f)
Warner-KramerDM@state.gov

Robert H. Boyles, Jr.
S.C. Dept. of Natural Resources
Marine Resources Division
P.O. Box 12559
(217 Ft. Johnson Road)
Charleston, SC 29422-2559
843/953-9304 (ph)
843/953-9159 (fax)
boylesr@dnr.sc.gov

Dr. Wilson Laney
U.S. Fish and Wildlife Service
South Atlantic Fisheries Coordinator
P.O. Box 33683
Raleigh, NC 27695-7617
(110 Brooks Ave
237 David Clark Laboratories,
NCSU Campus
Raleigh, NC 27695-7617)
919/515-5019 (ph)
919/515-4415 (f)
Wilson_Laney@fws.gov

Dr. Brian Chevront
N.C. Division of Marine Fisheries
P.O. Box 769 (3441 Arendell St.)
Morehead City, NC 28557
252/726-7021 Ext. 8015 (ph)
252/726-6187
brian.chevront@ncdenr.gov

Dr. Roy Crabtree
Regional Administrator
NOAA Fisheries, Southeast Region
263 13th Avenue South
St. Petersburg, FL 33701
727/824-5301 (ph); 727/824-5320 (f)
roy.crabtree@noaa.gov

Benjamin M. "Mac" Currin
801 Westwood Drive
Raleigh, NC 27607
919/881-0049 (ph)
mcurrin1@bellsouth.net

George J. Geiger
566 Ponoka Street
Sebastian, FL 32958
772/388-3183 (ph)
georgejgeiger@bellsouth.net

Ben Hartig
9277 Sharon Street
Hobe Sound, FL 33455
772/546-1541 (ph)
bhartig@bellsouth.net

Rita G. Merritt
38 Pelican Drive
Wrightsville Beach, NC 28480
910/256-3197 (ph); 910/256-3689 (f)
miridon@ec.rr.com

John V. O'Shea
Executive Director
Atlantic States Marine Fisheries
Commission
1444 Eye Street, N.W., 6th Floor
Washington, D.C. 20005
202/289-6400 (ph); 202/289-6051 (f)
voshea@asmfc.org

Charles Phillips
Phillips Seafood / Sapelo Sea Farms
1418 Sapelo Avenue, N.E.
Townsend, GA 31331
912/832-3149 (ph); 912/832-6228 (f)
Ga_capt@yahoo.com

Mark Robson
Director, Division of Marine Fisheries
Florida Fish and Wildlife
Conservation Commission
620 S. Meridian Street
Tallahassee, FL 32399
850/487-0554 (ph); 850/487-4847(f)
mark.robson@myfwc.com

Spud Woodward
Director, Coastal Resources Division
GA Dept. of Natural Resources
One Conservation Way, Suite 300
Brunswick, GA 31520-8687
912/264-7218 (ph); 912/262-2318 (f)
Spud.woodward@dnr.state.ga.us

Lt. Brian Sullivan *LT GRIS ✓*
U.S. Coast Guard
Brickell Plaza Federal Building
909 S.E. First Avenue
Room 876/ DRE
Miami, FL 33131-3050
305/415-6781 (ph)
305/415-6791 (f)
Brian.A.Sullivan@uscg.mil

Tom Swatzel
P.O. Box 1311
Murrells Inlet, SC 29576
(C/O Capt. Dick's Marina
4123 Hwy 17 Business,
Murrells Inlet, SC 29576)
843/357-1673 (ph)
tom@capticks.com

ANIK CLEMENS NOAA

ROD DALTON NOAA

OTHA EASLEY

JENNIFER BEE

PHIL STEELE

MONICA SMIT BRUNSWICK

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JACK MCGOVERN
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Representative
Staff contact: Gregg Waugh

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Staff contact: Gregg Waugh

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Spud Woodward
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Brian Chevront
David Cupka
Ben Hartig
Vince O'Shea
Mark Robson
Tom Swatzel
Staff contact: John Carmichael

South Atlantic Fishery Management Council Staff

Executive Director

Robert K. Mahood
robert.mahood@safmc.net

Deputy Executive Director

Gregg T. Waugh
gregg.waugh@safmc.net

Public Information Officer

Kim Iverson
kim.iverson@safmc.net

Senior Fishery Biologist

Roger Pugliese
roger.pugliese@safmc.net

Staff Economist

Kathryn (Kate) Quigley
kate.quigley@safmc.net

Cultural Anthropologist

Open Position

Environmental Impact Scientist

Rick DeVictor
richard.devictor@safmc.net

Science and Statistics Program Manager

John Carmichael
john.carmichael@safmc.net

Public Information / Outreach Assistant

Anna Martin
anna.martin@safmc.net

Fishery Biologist

Kari Fenske
kari.fenske@safmc.net

SEDAR Coordinators

Julie Neer - julie.neer@safmc.net
Dale Theiling - dale.theiling@safmc.net

Coral Reef Biologist

Myra Brouwer
myra.brouwer@safmc.net

Administrative Officer

Mike Collins
mike.collins@safmc.net

Financial Secretary

Debra Buscher
deb.buscher@safmc.net

Admin. Secretary /Travel Coordinator

Cindy Chaya
cindy.chaya@safmc.net

Purchasing/Adm. Assistant

Julie O'Dell
julie.odell@safmc.net

SEDAR/ Staff Administrative Assistant

Rachael Lindsay
rachael.lindsay@safmc.net

PLEASE SIGN IN

So that we will have a record of your attendance at each meeting and so that your name may be included in the minutes, we ask that you sign this sheet for the meeting shown below.

PROTECTED RESOURCES COMMITTEE Atlantic Beach, NC Monday, December 7, 2009

<u>NAME & ORGANIZATION</u>	<u>AREA CODE & PHONE NUMBER</u>	<u>P.O. BOX/STREET CITY, STATE & ZIP</u>
David Hixson	859.921.0142	DMFS-SPED PO Box 1450 Oceanport, NJ 07960
Ron Linkers (386) 454-7192	27716	NW 182nd Ave High Springs, FL 32643
Dave Allison	202.833-3906	135D Connecticut Ave NW DC 20036
Bob Bahm	University of Georgia 478 696 6029	307 Grove St. EATONTON, GA 31024
Doug Peterson	USA 706 542-2944	Warnell School - USA Athens GA, 30602
Mike Green	CCAFS	Wilmington, NC
Fritz Ruhl	252-838-0828	NC
Libby Estevenson		DC-FL

South Atlantic Fishery Management Council
4055 Faber Place Drive, Suite 201
North Charleston, SC 29405
843-571-4366 or Toll Free 866/SAFMC-10