

NWX-DOC CONFERENCING

**Moderator: Kate Naughton
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1:00 pm CT**

Coordinator: Welcome and thank you for standing by. At this time all participants are in a listen-only mode. During question-and-answer session, please press star 1 and record your name as prompted and please limit yourself to one question.

Today's conference is being recorded. If you have objections, you may disconnect at this time. I would now like to turn today's meeting over to Kate Naughton. Thank you. You may begin.

Kate Naughton: Thanks, (Carolyn). Welcome everybody who called-in today to our expert's phone call. I'm Kate Naughton. I'm the Director of Communications for NOAA Fisheries. Happy to host this call today to try to get to some of your questions and concerns over the Atlantic shark fishery.

The way this call is going to work is I'm going to invite Margo Schulze-Haugen to give some opening remarks and I'm also going to introduce the rest of the experts that are with me here, then we're going to immediately go to Q&A and that's where as (Carolyn) mentioned you hit star 1 to queue-up for questions.

There are a lot of folks on the line today so I'd like to ask you all to limit yourself to one question and if you have another question, we'll have you queue-up again so we can move it right along.

So just to let you know who's here with me, Margo is here, Karyl Brewster-Geisz also of NOAA Fisheries, Guy DuBeck is here and we also have John Carlson on the phone from Panama City. He's one of our shark experts. Margo, turning it over to you.

Margo Schulze-Haugen: All right, thanks Kate so NOAA Fisheries strives to achieve balance between the long-term survival of fish stocks with the long-term survival of fisheries which includes commercial and recreational fishermen and the shark fishery is no exception.

Last week NOAA Fisheries published a final rule announcing January 1st as the start date for the 2016 Atlantic commercial shark fisheries. The agency has published a similar rule every year since NOAA Fisheries began managing the Atlantic shark fisheries more than 20 years ago.

Except for a few years including 2014 and '15, shark fisheries have opened on January 1st since 1994. NOAA Fisheries' decision to open the season on January 1st this year instead of July 15th was based on comments from industries and states.

After the final rule published, an online petition began requesting that NOAA Fisheries end commercial shark fishing. While NOAA agrees that sharks are a valuable and incredible resource and need conservation, the regulations currently in place are carefully designed on the best scientific information available to prevent overfishing of sharks and rebuild depleted shark stock.

In the Atlantic and Gulf of Mexico there are strict requirements for both commercial and recreational fishermen including permits, (unintelligible) gear limitations, retention limits and a prohibition on 20 species so they cannot be landed at all.

Additionally all shark fishermen must land shark carcasses with their fins naturally attached and the United States is one of the first in the world to implement fins-attached regulations.

It's also important to note that the status of shark populations in the Atlantic is very different from the global status of sharks in part because of the intent of U.S. management of shark fisheries for 20 years.

U.S. shark populations are either healthy or if stocks are lower than they should be, our management measures allow the stock to rebuild while still supporting commercial and recreational fishing.

Finally NOAA Fisheries welcomes everyone to comment on our regulations. The annual Atlantic commercial shark fishing rulemaking process was open for 30 days with public comments and announced via the Federal Register.

The Atlantic highly migratory species e-mail list which is open to anyone who signs-up online and phone calls to interested constituents including fishermen and environmental groups. Anyone with an interest in this topic is encouraged to sign-up for Atlantic HMS News for e-mail updates on Atlantic shark fisheries management.

And so with that I think we're ready to take some questions. I'm sure you have some.

Kate Naughton: Great, thanks Margo. (Carolyn), if you could give instructions again, that would be great.

Coordinator: Thank you. We will begin the question-and-answer session. To ask a question please press star 1, make sure your phone is unmuted and record your name fully and clearly to introduce your question and to withdraw that request, you may press star 2. Again please limit yourself to one question.

For follow-up questions you will need to press star 1 again. Again that's star 1 to ask a question or make a comment. One moment, please. And our first question does come from (Arnavas) and please state your affiliation. Your line is open, please check your mute feature.

Kate Naughton: (Arnavas), are you there?

Coordinator: (Arnavas), your line is open. Please check your mute feature on your phone. Maybe they can press star 1 again to bring themselves back up into the queue and again for further questions or comments, please press star 1.

Make sure your phone is unmuted and record your name and to withdraw that request, you may press star 2. Once again for a question or a comment, press star 1 at this time. One moment, please, while we standby for questions or comments. And we do have a question or comment coming from Richard Apple and please state your affiliation.

Richard Apple: I am an underwater photographer. The name of my company is Applecorps Photography.

Kate Naughton: Hi, Richard, we can hear you fine. Please go ahead.

Richard Apple: Yes, my question is this. We dive every week with the lemon sharks and other sharks, sometimes several days a week. We know firsthand from observations how many sharks and what kind of sharks we see every time we go out. Our information with regard to what we see varies vastly from the data that we see NOAA Fisheries putting out.

My question is this. With all the obvious disparity between what we shark divers observe firsthand week after week as versus your own data with regard to the shark populations in the Jupiter area. Doesn't it behoove NOAA Fisheries to at least pause or postpone the opening of commercial shark fishing season and send some of your own divers to see for themselves what kind of shark populations are in our area. Thank you.

Kate Naughton: Thanks, Richard. Margo's going to start on that.

Margo Schulze-Haugen: Yes, so thanks for the comment Richard and I certainly understand your concern given what you're seeing locally versus our information. One thing to note would be that our information is for the entire shark fishery which is from Maine to Texas including the Gulf of Mexico and so we have fisherman reporting data from their catches.

We have independent observers on the number of vessels also recording catch information by species and so some of the variation may be the scale at which our data is coming-in which is for the entire stock versus what you may be seeing in a local area so there may be differences there but we're managing at a stock level and so that's the level that we look at the data. John, would you have anything to add to that?

John Carlson: No, just to pretty much reiterate what you had said. Many of our fishery independent surveys as you indicated are stock-wide. What the divers may be seeing may be more of a localized effect where there could be many factors involved with the sharks moving-out of an area during a certain period of time.

The water temperature may be different. They may be moving to areas where there's other prey so as you indicated Margo we manage our populations on a population-wide or a stock-wide basis and localized areas may be seeing different things than what the entire population is doing.

Kate Naughton: Thanks, John. (Carolyn), ready for the next question?

Coordinator: Thank you and we do have (Arnavas) at this time and please state your affiliation.

(Arnavas Itribustaba): Hello, my name is (Arnavas Itribustaba). I work for teachers unions in the State of Illinois but I am an avid scuba diver that has done diving predominantly in the Maldives (sosico sibisia) and much in the Caribbean and in the Southeast Florida so like the previous caller, I see a large disparity in the volume of the shark life that I see on the Southeast Coast of Florida as I do in other areas such as the Maldives.

And I called earlier today to your office and spoke to a very kind person, I'm not going to mention her name on the phone unless she wanted me to do that but I learned in discussion with her that some of the sharks that are taken are finned after the fact and their fins are sold to the Asian market.

My question is simply why in the world would we be doing something like this in the United States when we purport to be supportive of sharks and I

understand we're doing the finning in a different process but nonetheless it's being done after the fact, after the shark was taken out of the water and then being sold to a foreign market really, really disturbs me.

So I'd like to know why that hasn't been publicized more perhaps would be a good way to ask that question. Thank you.

Kate Naughton: Thank you for calling-in, thank you for your question. I'm going to turn that over to Margo.

Margo Schulze-Haugen: Yes, so what we do in federal waters is manage under federal regulations. We are charged by Congress to manage the marine resources to benefit the American public.

We are required to make sure that the populations are sustainable in the long term and so that's for generations but also to provide access to those resources to benefit the public in a sustainable way and so there can be a variety of different benefits to the public that can come from fishing in general and shark fishing specifically.

There's recreational fishing which is where the individuals don't sell the sharks, they may keep it and eat it or they may release it, just having the pleasure of interacting with the sharks. Commercially that implies sales, that's what a commercial fishery is and there are a variety of products that can be obtained from sharks. The meat is sold domestically.

Some species are quite commercial viable in that way. Fins are also a valuable commodity. It does often mean a global market for the fins but there's also value from oil and skin and teeth so it's not just for fins although that is one of the products from shark fisheries.

And so the fact that it is sold internationally is not as much what we are managing the fishery for. It's more for the benefit of the U.S. public.

Kate Naughton: So Margo this is Kate. Earlier you mentioned that we were among the first to require fins on. Can you talk a little bit more about that landing sharks with fins on?

Margo Schulze-Haugen: Yes, so that is something that we implemented in 2008. Many of the early challenges with shark management is that the fins are the most valuable part of the shark and so prior to management it was legal to fin the shark which means catching the shark, removing the fin and then discarding often what was a live shark back to the ocean and so that shark would drown essentially.

One of the first things that we did when we implemented management in the U.S. and the Atlantic was to ban finning and what that was was to require that fins be landed with carcasses, not necessarily attached but with at the same time and so that stopped the practice of finning which was again the kind of cruel practice for the shark.

But we continued to have some issues with identification and things that having the fins landed naturally attached meaning still attached to the shark really allows better identification and then enforcement of that so we were among the first in the world to do that.

It has been recognized as a global best practice and we have been promoting that internationally in all of the international management arenas that deal with sharks so that's been a big push for us to get that implemented globally.

Kate Naughton: Great, okay, thank you. Let's move on to the next caller (Carolyn).

Coordinator: Thank you. Our next question or comment is from Michael Scott and please state your affiliation.

Michael Scott: Hi, my name's Michael Scott. I have no affiliation. I'm a recreational scuba diver and underwater photographer and as I'm sure you're aware, you know, the great hammerhead and scalloped hammerheads are listed on the IUCN red list as endangered and my question is how do you justify the killing of multiple endangered species?

Margo Schulze-Haugen: Yes, the IUCN assessments are done at global levels and so that group gets together and looks at all of the information across the globe to give an evaluation of that species and so quite often at the global level because of the many, many countries that catch sharks, we have a different status than we do domestically where we've been collecting data, doing stock assessments and intensely managing our fisheries for about 20 years.

And so while at a species global level you can have a situation that's driven by other countries' action or inaction. Domestically, which is what our job is to do, we can have very different shark statuses, very different population levels.

Not all species are distributed globally. We can have subpopulations that are within our local waters and so we're doing those assessments and doing that management on our domestic stocks and so there's differences again at the species level.

I think what IUCN looks at for criteria is quite different than what we look at domestically and so it's not uncommon that you would have a domestic

assessment showing you that a stock is okay whereas at the species level globally it may not be.

Kate Naughton: Great, thank you, Margo. Next question, (Carolyn)? (Carolyn)?

Coordinator: I apologize, yes, our next question or comments is from Walt Stearns and please state your affiliation.

Walt Stearns: Yes, my name's Walt Stearns. I'm the publisher of the online magazine Underwater Journal. Also in addition to being a resident diver, recreational diver in the Palm Beach County area, I was also heavily involved with Dr. Gruber when he started the lemon shark aggregation study that was held in Jupiter.

My question is going to be on basically subgroups as far as I know the data that (since we) collected and reviewed for determining quotas at season's opening and closure base, etcetera, was whether Dr. Gruber's paper when published in (persentee) was given proper consideration on this subgroup behavior meaning lemon sharks are predominantly were found in U.S. waters mainly Florida with the exception of going all the way up to Virginia and the Bahamas.

And the paper did outline that the sharks were in fact aggregating in the Jupiter area every winter between the months of December and April.

Margo Schulze-Haugen: So Walt I'm sorry, is there a specific question...

Walt Stearns: No, I wanted to find out if that paper was given proper consideration and how?

Margo Schulze-Haugen: So Dr. Gruber's work is certainly something that's before the agency. We have looked at that and it is part of our analysis for essential fish habitat for lemon sharks specifically and so actually our essential fish habitat we're doing a five-year review currently and so some of the more recent information I think can be folded into that.

We've also been talking with Dr. Kessel who I think has been working with Dr. Gruber as well and so we do acknowledge that there is important habitat for lemon sharks in that area but again as we're setting management measures, we're doing it lemon sharks are within the large coastal group and so the management measures are for the group.

And most of the commercial fishing is not targeting lemon sharks. Lemon sharks do occur but they're a fairly low percentage and the commercial fisheries are targeting more black tips especially in the Atlantic.

In the Gulf of Mexico where we also have information that lemon sharks are common. There are also other species that are targeted and lemon sharks are caught occasionally and sometimes landed.

Kate Naughton: Thanks. All right, back to you (Carolyn).

Coordinator: Thank you. Our next question or comment comes from (Brian Arnone). Your line is open.

(Brian Arnone): Yes, good afternoon. My name is (Brian Arnone). I'm a Florida resident, local scuba diver, shark diver and underwater videographer. My question reflects to the first initial question from Mr. Apple in regarding your response that the information that you're gathering relating to populations of these species of

sharks are essentially coming from fishing industries, more commercial industries, not from a local perspective.

So your answer was based on the entire Atlantic base as I'm paraphrasing. We're concerned about the local aspects of these specific species that we interact with as Mr. Apple mentioned on a daily or weekly basis.

So the information that you have already mentioned is coming from the fishing industry - commercial industry - they have a profit of having those numbers fall into certain lines, not raising any red flags.

We're asking for there to be more evidence based on the local aspect which is what this phone call is about is about the local populations for these species, not and the entire focus on the Atlantic-based numbers. That can be handled on a separate situation. We're referring to Florida, Jupiter.

Kate Naughton: So (Brian), this is Kate. This call is about the Atlantic shark fishery which as Margo explained runs quite a ways along our coast. This is not a specific call about, you know, the fisheries right there in your area or we can touch on that so I just wanted to clear-up that it's, you know, misperception. It's a call for this coast-wide fishery.

So I assume your question is about gathering local data so I'll ask Margo or John and see if they have any more insight on that.

Margo Schulze-Haugen: So one thing I would add is that our information doesn't come just from commercial fishermen. We have information on recreational catches as well as a number of scientific surveys. We run two different programs that do scientific surveys in coastal bays and estuaries on an annual basis and so that

is also part of our information as well as any other studies on life history and tagging and things of that sort.

So it's not just commercial fisheries but Kate is right. We are managing and we're doing the assessment of the stock at the stock level so that's what I was saying earlier about there may be some variations in local populations but again we're managing at the stock level. John, do you want to elaborate on the science?

John Carlson: No, yes, just to reiterate what you had mentioned Margo is the stock assessments do not only use fishery commercial fishing data. As you indicated we have surveys on a broad basis from the Southeast Fishery Science Center as well as the Northeast Fishery Science Center.

And I should add as you briefly mentioned that we have a Gulf of Mexico fishery-independent survey and an Atlantic Ocean fishery-independent survey which is a group of state agencies, universities that conducts localized fishery-independent surveys which are also piece of information that we use on a stock-wide basis to analyze the population.

Kate Naughton: Great, thank you, John.

John Carlson: You're welcome.

Kate Naughton: Next question.

Coordinator: Thank you. Our next question or comment is from (Catherine Kilduff) and please state your affiliation.

Kate Naughton: Hi (Catherine).

(Catherine Kilduff): Hi, this is Catherine Kilduff. I'm with the Center for Biological Diversity.

Kate Naughton: Great.

Catherine Kilduff: Thank you. I'm concerned that the fishery continues and the quotas continue to be set even in the absence of updated assessments and I know that (NOAA) struggles a lot with budget and resources for monitoring and doing that science that Dr. Carlson just mentioned.

But you know, in particular I'm worried about black-nosed shark and I know that the last assessment there some questions over the modeling but I was curious about, you know, is there some sort of standard for how often assessments should be done and if they're not done, what's the backstop?

And I know a lot of it relies on fisheries' data but there's big holes and weaknesses in doing that because fishermen will find the sharks even if there are fewer or, you know, in refuge type habitats.

So I was wondering if you had an idea or any specifically when the black-nosed shark assessment would be done and then also more generally how you handle resource limitations in assessments.

Margo Schulze-Haugen: Yes, thanks (Catherine) and you're right. Not all sharks have had species-specific assessments specifically the next black-nosed assessment is I'll have to check on when that would be scheduled so in the absence of an assessment, one of the things that we can look at is information about relative abundance as well as size of the catch in terms of size of the animals.

These sometimes are good indicators of the stock status that, you know, if you're seeing smaller animals coming-in meaning the larger animals have been removed, that can be a sign of an issue or if you're seeing catch rates go down.

And so actually John Carlson had done a paper a few years ago and specifically looked at lemon sharks as well as a couple of other species and found that the relative abundance was actually increasing slightly in the last several years and that the sizes of the animals being caught was stable.

And so those are two good signs that lemon sharks are doing okay under the current management and so I'll have to get back to you on black-nosed so John, do you want to talk about your paper?

John Carlson: No, no, I've responded besides you indicated in the absence of a full stock assessment, what we try to look at is information from scientific surveys or long-term trends in abundance which might give us a signal as to how the stock is doing.

And as you indicated we look at the average size of the animals and the relative abundance trends and for some of the species that we have not had full assessments done, some of the relative abundancies that we've looked at are showing a general increase in abundance since the early 1990s.

Kate Naughton: Okay, thank you John, thank you (Catherine). Back to you (Carolyn).

Coordinator: Thank you. Our next question or comment is from Bill Parks and please state your affiliation.

Bill Parks: Yes, I'm Bill Parks. I was a commercial diver here in Palm Beach County. I now I've worked extensively with Dr. Gruber, Dr. (Hamerschlag) another scientist on the shark projects doing nuts and bolts work for them installing equipment, designing equipment for them to monitor the animals.

And what my first comment that it sounds as though if you have a situation such as the very unique area in Northern Palm Beach County which has shown to be an aggregating area for numerous species not just sharks, it seems as though there's no way to do any kind of at least in your comments there doesn't seem to be any way to do anything but look at the whole coast.

I have a very unique situation here. We have a unique phenomenon here. It was mentioned that we, you know, everything's supposed to be done for the highest and best benefit of the public and in this case these sharks generate a lot of money every year from the tourist dive industry but the downside of that is once they became known where those sites were, the shark basically know where they are too.

And while maybe from here to the northern end of the range lemon sharks have seen some significant, they pound them into the ground and we've found over the last few years that the returns of tagged animals has gone into the floor as is probably indicated in Dr. Kessel's paper.

And my question is is there anything in your methodology that would allow for the HMS to consider a regional closure this time of year to protect this very unique phenomenon that happens just right here? Thank you.

Margo Schulze-Haugen: Yes, thank you so a lot of what I've been talking about is doing assessments at the stock level and all of the information we gather-up at

across the range of the stocks to do that assessment. We also have a variety of other management measures that are at a, you know, spatially-specific level.

We have time area closures for certain years. There's a shark closed area off of North Carolina that's based on it's a juvenile over-wintering area for over-fished dusky and sandbar sharks so there is potential for that.

To close an area, that would require a rulemaking process that would likely take a year or two to complete and it's a pretty intensive process with a lot of public input and so that is something that we could consider and, you know, we've looked at the information coming-in, what came-in early on isn't all that has come-in in the last couple of days and so I can tell you that we can look at that but that would be a separate rule-making process.

Bill Parks: Okay, can you still hear me?

Kate Naughton: Yes, we can hear you, go ahead.

Bill Parks: Okay, well would that still be would involve presentations to the HMS panel?

Margo Schulze-Haugen: I'm sorry, could you repeat that again?

Bill Parks: I'm sorry. What I'm saying is if we wanted to come-in and present our evidence and our reasoning for this, would that again be when the HMS committee meets and we make a presentation, our scientists from whatever. Would that rule-making process would involve public input like that?

Margo Schulze-Haugen: Yes, it would so yes, we're looking at our next advisory panel meeting towards the end of March and so that would be something you would certainly be welcome to come and do.

Bill Parks: Thank you very much.

Kate Naughton: Great, thanks Bill. Our next caller?

Coordinator: Our next question or comment is from (Sean Havus) and please state your affiliation.

(Sean Havus): Hi, my name is (Sean Havus). I'm an underwater cameraman that spends a lot of time underwater with these, you know, sharks that we're discussing. You know, I'm a bit late to the call so if this is already covered, I apologize but I was wondering how many shark commercial shark finning fishing permits are there given for the region that we've been discussing of, you know, Florida and more specifically Northern Palm Beach County?

Margo Schulze-Haugen: (Sean), I don't know if we have those numbers right handy but we're going to look real quick, hold on.

Kate Naughton: Well (we don't) permit and track permit information by county. We track by state. Again we're managing...

((Crosstalk))

(Sean Havus): Okay, so for the state of Florida, how many are there?

Kate Naughton: ...yes, if you let me finish. We have as of I believe 2014 115 directed shark permits in the State of Florida so that would include both East and West Coasts and 125 incidental shark permits. The difference between these being that directed shark permits are authorized for a higher level of landings and they can land 36 large coastal sharks per trip.

The incidental shark permits have a much lower retention limit. They are designed for people that are fishing for other species but occasionally catch some sharks and so it reduces the waste if those animals come-up dead if they're allowed to retain a few and that limit I believe is three.

So and you know, not all of these permits are active in a given year. These permits are under a limited access program meaning that people had to qualify. We implemented that in 1999 and so people often maintain that permit as it is limited and could be sold so people keep it active.

(Sean Havus): Okay, so where I was going with that is that if the shark season is year-around, a single vessel represents potentially 13,140 sharks taken and - pardon me? Pardon me?

Kate Naughton: No, no, hold on a second (Sean).

Margo Schulze-Haugen: So we don't manage just by the number of permits that are issued. In fact the primary mechanism for shark harvest is based on the quota and so there is the trip limit which helps us slow the fishing and have opportunities throughout the year but when the quota is reached, it doesn't matter how many permits have been issued, the fishing stops.

(Sean Havus): So what is the quota?

Margo Schulze-Haugen: So the quota for the Atlantic right now is for again this is for all of the large coastal is 372,000 pounds. Again they are fishing for black tips and the lemon shark harvest in the last several years has been on the order of, you know, 20 to 25,000 pounds. This year in particular in '16 we are going to be opening January 1st and monitoring the quota.

When about 20% of the quota is reached for the Atlantic, we're going to drop the retention limit partly to enable regions that where sharks are not present early in the year to have an opportunity later in the year and about July 15th we would increase the retention limit again so most of the fishing in 2016 will be later in the year.

(Sean Havus): So have you guys ever considered making more specific rules based on when certain sharks reach certain areas because it would be similar to, you know, the national parks making a hunting season for, you know, a species that, you know, all along the coast.

It kind of it doesn't make sense if you have so many different, you know, areas where animals aggregate for different reasons and in different ways that, you know, if you have typically throughout the world with conservation if you have an area where animals are gathering to breed, you're not allowed to harvest them during that period.

And it's just like the previous that I mentioned because the dive sites are well-known now while, you know, an Atlantic black-nosed fisherman off of North Carolina might go out and might have difficulty fulfilling that quota every single day.

If you go off of Jupiter and you hit, you know, one or two or three starts, you can hammer-out a quota every day and within, you know, within potentially a week or two every single shark can be out of that ecosystem.

Kate Naughton: Okay, (Sean), hey, this is Kate, I'm the moderator. We're looking for questions here and I think your question was how do you all consider new

information for potentially making some rules around these aggregation sites so we're going to go with that for right now, okay? Go ahead, Margo.

Margo Schulze-Haugen: Right, so as I mentioned before we do have some area-based management based on specific data that's collected and so that is a potential. One thing I should also note is that many of these aggregation sites are in state waters and we do not manage state waters.

The State of Florida has prohibited retention of lemon sharks and so all that what I'm talking about is to reiterate is starting at three nautical miles out to 200 nautical miles and so there are some aggregations right on that state/federal line.

So but one thing I would also mention is that a comment that commercial fishermen are going to go catch them all where these aggregations are. The fishing seasons have been opened many, many years in January and I think that diving operations have been in existence for some years as well so I think we haven't seen that in the way that's being suggested.

(Sean Havus): Well, the shark diving...

((Crosstalk))

Kate Naughton: Okay, (Sean), hey, we go to move on. We got other folks on the call. I need to take two more callers here and then we're going to have to wrap it up so I really appreciate you calling-in today, thank you.

Coordinator: Our next question or comment is from (Florian Guette) and please state your affiliation.

(Florian Guette): Yes, my name is (Florian Guette) and I'm an underwater videographer and so to my question is around financials that you published in your report and because you're coming-up with a total for the shark fishing businesses in this area for about like \$4 million in revenue.

Which for me was surprisingly low compared to the value for example of shark tourism, shark diving and those operations and none of these operations are taken into consideration in your report. I didn't find any numbers about the size of obviously these ecotourist operations.

So the second question in this context is also about the price (business) so the prices listed in your report, about less than a dollar per pound of shark meat and less than \$10 for a pound of shark fins. That was the price to see that this business is actually quite small.

Kate Naughton: So Florian thanks for your observations. We don't manage the tourism side of this so I don't think we can really address your questions.

Margo Schulze-Haugen: I would note that our estimate of the Atlantic shark fisheries is about \$2 million, not 4 and there is a variation in price of meat as well as fin. It varies by species so it does vary, some species are more valuable than others.

Kate Naughton: Okay, thanks. Thank you (Florian). (Carolyn), back to you. Folks on the phone, we have limited time on this end. We allotted 45 minutes for the call. We're right up against that. We're going to take one more question and then we are going to have to sign-off so over to you (Carolyn).

Coordinator: Thank you and our final question for today comes from Tony Grogan and please state your affiliation.

Tony Grogan: Yes, my name is Tony Grogan. I'm affiliated with the Website spearboard.com. I'm also a major volunteer on those shark research in the area in question so my question to you is I wanted to understand the process of the current decision to switch from July to January.

I know that there's a bit of a tug of war between the North Carolina fishermen and their interests and perhaps the ones in Florida. I wondered if the switch to year-around fishing has to do with ease of management or what rationale was the key factor in the decision in this particular year?

Margo Schulze-Haugen: Okay, so as I mentioned earlier this is an annual process. We look at what the quotas are based on the latest stock assessment. We look at what the landing rates have been in the previous years. We have a variety of criteria that we look at about, you know, equitable distribution, things of that sort.

We issue a proposed rule every year typically in the fall. I think this year it was late August. That is open for 30 days and we've put-out for public comment what the quotas would be. If there was overharvest in the previous year or under harvest, we make some minor adjustments and then propose what the season's (unintelligible) would be.

We accept public comment from anyone that submits a comment. We work with states that have state fisheries and then ultimately we'll issue a final rule which is again for federal waters on what we're going to issue, open this season and what that quotas will be.

We have been adapting management of shark fisheries every year and so have tried a number of different approaches, some years opening in January, that's

the traditional start time. We used to have trimesters in different seasons where we've really tried a lot of different ways to manage the shark fisheries.

And in the last couple of years we've delayed opening to summer months and next year again building on this history of adapting as conditions change, we proposed and have finalized a January opening with a limited amount of quota, about 20% before we would reduce the retention limit to an incidental level and then intend to kind of go back up to a directed level in mid-July.

Again, it's, you know, an annual process where we look at the variety of information that we're required to to meet the objectives of the regulations and the law so that's...

Kate Naughton: Thanks, Margo, so okay. Folks on the phone, thank you very much. I would encourage you to check-out our Webpage on this. We have lots of information connected to that regarding this fishery and just one more question for you Margo.

Sounds like a lot of folks are interested in participating in this process for the 2017 season. They should be looking for this FR notice in the fall so they can find that through the HMS list-serve.

Margo Schulze-Haugen: Yes, so if you would like to get information sent to you on all of the actions for Atlantic highly migratory species so that's inclusive of tunas, swordfish and billfish as well as all sharks, we have an e-mail list. It's called the Atlantic HMS News.

That can be found on the Web if you Google (NMFS) HMS that'll take you to our main page and there's a box that says sign-up for HMS news and so then you will be added to our distribution list and you will learn everything that we

send-out and then next fall in the general timeframe we would issue a proposed rule just like we did this year and open for the public to comment.

Kate Naughton: Great, and so if you're on that list-serve, you will get that notice.

Margo Schulze-Haugen: That's great and we will add that link also to our Atlantic shark population Website so again thanks everybody, appreciate you calling-in and your interest in this and learning more about it and as you can see and hear, it's a very complex issue with many facets and also thanks to John Carlson for being on the phone with us. (Carolyn), back to you.

Coordinator: That does conclude today's conference call. Thank you for your participation. You may disconnect at this time.

END