

UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

ATLANTIC HIGHLY MIGRATORY SPECIES
ADVISORY PANEL MEETING

Silver Spring, Maryland
Thursday, September 10, 2020

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4 Recreational

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P R O C E E D I N G S

(9:03 a.m.)

MR. BROOKS: Okay I think we should get going here. I just did a quick count and we seem to have about 35 AP members on the call, about 15 members of the public or so and of course the full HMS team. So, good morning everybody. This Bennett Brooks with the Consensus Building Institute. Our apologies for some of the sign in snags this morning. I obviously try to make sure that that doesn't happen but hopefully the extra time we've taken has given folks a chance to get in here and thanks for those of you who commented on that in the chat.

I just want to thank everyone for a very productive day yesterday. I think we all came away feeling that was a very good conversation around A12, issuing economics report, enforcement, the bluefin tuna update, I think a lot of strong presentations and really focused and really helpful comments. So, thanks to everybody there who contributed.

1 Today's focus is going to be heavily
2 around sharks. We'll have a shark update that
3 will look at shark review which is a sort of broad
4 review of the shark fishery. We'll then have an
5 update on shark depredation which I know is
6 important to many folks on the phone. And then
7 we'll also talk in the afternoon we'll hear from
8 leadership which is always valuable for you to
9 hear from them and probably even more importantly
10 for them to hear from you. So, we have a good
11 time set aside for that at 1 o'clock and then
12 after that, we will talk about research and data
13 collection in support of spatial fisheries
14 management.

15 Participation today looks very strong.
16 Again, we've got a really good cross section of
17 the AP in the mix, already about 35 plus the
18 public here. A couple of other finer points on
19 the agenda. Just to note, we have, as I mentioned
20 yesterday a couple of times, the HMS staff has
21 worked very hard to schedule this in a way so that
22 we have hopefully left a good chunk of time for

1 your comments and participation on each topic.

2 Yesterday seemed to work well. We
3 really seemed to have a chance to get everyone in
4 the mix. So, we encourage you to use that time.
5 I will, as I did yesterday, do my best to get
6 everybody in and not have us fall painfully
7 behind. We will take a short break at around
8 10:15. Lunch will be from 11:30 to 1.

9 We will really try to honor that time
10 break because we know you all have lots of other
11 things going on in your lives and we're trying to
12 leave you a good chunk of time that you can attend
13 to email or reliably get on a phone call. So,
14 anyone has a need to do that, please steer any
15 phone calls or anything pressing to that 11:30 to
16 1 lunch window. We will have public comment at
17 2:45 and then we will wrap up about 3:15 or so.

18 Just a brief reminder on ground rules
19 and some technology stuff. Our usual ground rules
20 apply so the AP members contribute, share ask
21 questions, integrate, you know, in your comments.
22 As always, be respectful, avoid personal comments

1 or characterizing other people's perspectives.
2 And when we get to public comment, those same
3 rules apply to the public as well.

4 As far as technology, everyone will be
5 on mute the entire time until you are recognized
6 to come in and then we'll bring you off. That
7 seemed to work very well yesterday. If you want
8 to get in the queue, the best thing to do is raise
9 your virtual hand. And again, to do that, if you
10 click on the round button on -- on my screen it's
11 at the bottom, it's got an outline of a person.
12 And it's the participant button and you'll see
13 your name and you can raise your hand.

14 That way the way we would like folks to
15 provide comment and I very much encourage to use
16 the chat function as folks did yesterday very
17 well. We ask you to click on the icon that has
18 the quotation mark, that's the chat function and
19 ask you to put, if you have any specific questions
20 but don't feel the need to be in the talking
21 queue, add a question there. If you have a
22 comment that you want fold in or just put a, you

1 know, yeah, I totally agree with what the previous
2 speaker just said, that's a great way to do that.
3 We get more feedback and it allows everyone to
4 participate more fully and still sort of stay on
5 point.

6 If you do use the chat function, just
7 remember you'll be sending that out to our team.
8 But again, really helpful to have that kind of
9 information in there. To the chat, I will note
10 that there was a question posed to Angel Willeye
11 yesterday. She did a little digging for us so
12 thank you Angel.

13 And if you chat, Pete, I think the most
14 recent comment in there is Pete posted Angel's
15 feedback on the question that she was asked. This
16 was around the economic update that we got
17 yesterday in a question around some of the data we
18 were seeing out of that area. So, please take a
19 look there.

20 Let's see, I think that's most of what I
21 want to say. I do want to note that today in our
22 first presentation, we're going to do a little

1 polling. And it's always worth using that to
2 emphasize that, you know, the AP as you all know
3 is not a consensus seeking body. It's a body
4 where we bring together, you know, a very well
5 informed group of people who can share
6 perspectives that are very helpful for the HMS
7 staff here.

8 Polling is not voting but it is a way
9 for us and the HMS team just to get a group sense
10 of like individuals what are you thinking. And
11 so, that's the way we use it but it's always worth
12 kind of emphasizing that. With that, I think I'll
13 just pause and see if there are any questions from
14 the AP and if there are if you would just raise a
15 virtual hand would be helpful. And then Randy,
16 before I do that, I want to hand it off to you
17 though and see if there's anything you want to
18 hold in or any welcome you want to give at this
19 point.

20 MR. BLANKINSHIP: Thanks, Bennett.
21 Yeah, just basically wanted to say good morning
22 and welcome back to everybody. And thanks for

1 your patience as we work through some of the
2 technical difficulties this morning with getting
3 some folks signed in. And just that we're looking
4 forward to another great day with you all and
5 hearing what input you have to offer us on the
6 subjects that we'll be talking about today.
7 That's it, thank you, Bennett.

8 MR. BROOKS: Okay, great. Thanks, I'm
9 not seeing any comments in the chat so let's see,
10 Dewey, you have a question or a comment? I see a
11 question mark by your name. If we could open up
12 Dewey Hemilright.

13 MR. HEMILRIGHT: Yes, I don't have no
14 question.

15 MR. BROOKS: Yeah, please do.

16 MR. HEMILRIGHT: I don't have no
17 question.

18 MR. BROOKS: Oh, you don't have one,
19 okay, all right good. Okay then in that case, all
20 right I'm want to hand it off to Guy Dubeck to
21 take us into the shark review. Guy it's all yours
22 and Matt if you can give Guy the controls so he

1 can share his screen that'd be great.

2 MR. DUBECK: Can everybody see the
3 presentation?

4 MR. BROOKS: Yes, we can.

5 MR. DUBECK: All right, perfect. So,
6 good morning everyone. I'm going to be giving the
7 SHARE presentation. So, this SHARE is kind of an
8 acronym for a review of the shark (inaudible) a
9 lot of things, a lot of preliminary analysis we're
10 going to show today. So, first off just a quick
11 outline of the presentation, kind of give a
12 history, objectives and a description of the
13 different sharks in the fishery and then talk
14 about next steps.

15 So, first off, a quick management
16 history. Since 2014 through now we've had sort of
17 big management changes with the shark fishery in
18 around six where we had the regional quarters in
19 the Gulf and then fell flat (inaudible). Then
20 Atlantic we had changes with some regional reports
21 for blacknose and then also we changed the
22 retention.

1 And then 5b we had measured for dusky
2 sharks and then 9 for the retention of smoothhound
3 sharks and then 11 for (inaudible). And then as
4 it says here and also as Randy mentioned,
5 Amendment 14 is the way in which we can
6 (inaudible). So, and then we also (inaudible)
7 blacknose (inaudible) to kind of the quarterly
8 (inaudible) small coastal fishery. And then in
9 the Atlantic we implemented our blacknose
10 (inaudible) trip to minimize the closure of that.
11 And then we have the annual shark season rules
12 where overages and opening date, retention limits,
13 adjusted quotas and then also the percentage
14 threshold mostly for the Atlantic. Inseason-wise
15 the average about two retention limit adjustments
16 per year and then we averaged a little over two
17 closures per year.

18 So, moving on to kind of the objectives
19 of SHARE. So, as I said, this is kind of a review
20 of all aspects of the Atlantic share. I just want
21 to note as it says here Draft Amendment 14 is
22 where we're going to assess the general approaches

1 for the shark ACLs, AMs and ABC Control Rule. So,
2 all those comments will be for that when they're
3 available.

4 We're going to identify areas of concern
5 in the fishery and then what we determine here is
6 going to help utilize for future management
7 actions. So, this is kind of ongoing and we want
8 to share some of the information with you today.

9 So, now we're going to talk next on the
10 slides about the commercial fishery. So, general
11 2014 to 2019 the number of active permit holders
12 has declined. The number of trips, targeting or
13 landing sharks has also declined. Also, the mean
14 landing per trip by weight has declined. But
15 there is a small number of shark fishermen that
16 account for a large portion of the landings.
17 We'll go into more detail after the break.

18 Now we're going to talk about commercial
19 permits. I just want to orient you with this
20 slide here. So, on the right hand side of the
21 graph we have the years on the x-axis on the
22 bottom and the scale, the Y-axis changes for each

1 one of the graphs. So, the top one is blue is the
2 shark directed permit holders. The red is the
3 shark incidental permit holders. The teal is the
4 state permit holders, the grey is the triple pack
5 directed shark permit holder. So, you see here on
6 this slide we're talking about the shark directed
7 permit holder with various swordfish and Atlantic
8 longline permits. The gold is the triple pack
9 owner with the incidental permit and then the
10 black at the bottom is the non-active.

11 So, as you see the percentage for each
12 one of the permit holders, you know, overall, like
13 we're seeing a 41 percent reduction in active
14 permits especially in the shark directed permit
15 holders. And then that reduction is from 14
16 through 29 fish. Also, the total number of issued
17 permits for the directed end is a number that has
18 decreased by about 10 percent. So, you can see
19 here the different changes for each one of the
20 permits.

21 Now we're going to go into trips and
22 (inaudible) figure here. So again, the years are

1 the same at the bottom but the scale on the Y axis
2 is changed. The color schemes are the same as the
3 last line where you got the direct as blue, red is
4 incidental, teal is state, grey as the triple pack
5 directed and then gold as the triple pack
6 incidental.

7 So again, this includes any trips any
8 sharks. You know, trips are taken by state water
9 permit holders. And then there was a large
10 decline in 2019 in the Gulf. That coincides with
11 the Texas fin ban. But overall, the state water
12 range remains consistent. State water permit
13 holders' range (inaudible). Now we go to the
14 smoothhound fishery permit usage.

15 So, on the figure there, the colors, so
16 the fishermen who got the federal smoothhound
17 commercial fishing permit are in blue. The ones
18 who have the permit but are not actually using it
19 are in red and the teal color is for state water
20 fishermen who don't have the permit but are
21 landing the (inaudible).

22 So again, this was an open access permit

1 that was required since 2016 after the (inaudible)
2 of number 9. The fishery primarily focused on
3 smoothhounds in the Atlantic but we are still
4 evaluating some of the issues with permit and
5 fishery. We just want to show this graph with
6 determined usage where a lot more people are
7 starting to get the federal permit.

8 MR. BROOKS: Guy, I want to step in here
9 for one minute here. Your sound is a little bit
10 muffled and it sort of comes in and out. So, I
11 don't know if you can get closer to mic but
12 anything you can do to that with that would be
13 good.

14 MR. DUBECK: All right, sorry about
15 that.

16 MR. BROOKS: Yup.

17 MR. DUBECK: So now, moving on to
18 commercial landings. So, on the left hand side
19 we're talking about the commercial, excuse me, the
20 top species landed for each management group over
21 all years so that's '14-'19. So, you see it's
22 listed in priorities by management groups and how

1 many has been landed.

2 The top three for large coastal sharks
3 were blacktip, bull and spinner. Pelagic is mako
4 and thresher. Small coastals, Atlantic sharpnose
5 are dominating the small coastal landings followed
6 by finetooth. And then over this time period
7 Smooth Dogfish were a little over 5 million pounds
8 have been landed.

9 In the graphs over here, on the right
10 hand side landings by management group and the
11 years were on the X axis and there's a scale on
12 the Y axis. And this is and each one is by year.
13 So, then you see the fluctuation by (inaudible)
14 landing. It stated high and now it has started to
15 decline in 2019. The smoothhound permits have
16 kind of stayed relatively (inaudible). We've also
17 seen a decline in the Pelagic and Small Coastal.

18 MR. BROOKS: Guy, it's still a little
19 muffled. I'm wondering maybe just why don't you
20 try turning off your video and let's just see if
21 that makes it a little better.

22 MR. DUBECK: Okay.

1 MR. BROOKS: If it doesn't make any
2 difference then turn it back on. Go ahead.

3 MR. DUBECK: All right, sorry about
4 that. Now we're on to the Highliner. So, as I
5 mentioned, a small portion of -- a small number of
6 fishermen are landing large portions of the
7 fishery. So, in the figure here which is
8 percentage of management group and landing. The
9 teal color is the landing of -- teal green color
10 is the landing of three vessels in that year. So,
11 potentially not the same vessels each year but the
12 top three landers of each year account for, you
13 know, roughly 15 percent of the overall rating to
14 the management group. However, in 2019, permits
15 three fishermen landed close to 45 percent of the
16 large group landing. And that also (inaudible)
17 fishery and is about 40 percent. And then also
18 we're still looking at the smoothhound permit
19 holder from permit information so they don't
20 (inaudible) into that group.

21 Now I have a quick summary of the
22 commercial fishery. So again, from 2014 to 2019,

1 the number of inactive permits has increased. The
2 total number of permits issued has decreased.
3 Shark landings by weight and the number of landing
4 trips have decreased, particularly in the Gulf of
5 Mexico. And then for each management group, three
6 vessels landed approximately 15 percent of the
7 permits. Now we're going to take a quick break
8 here and I can see the questions on the side and
9 we'll (inaudible).

10 MR. BROOKS: Okay thanks. And just to
11 give folks a sense of the rhythm of this
12 presentation, we're going to -- we just had a bit
13 on commercial. After this, we'll hear a similar
14 presentation on recreation and then on market
15 prices. That should take about 30, 40 minutes and
16 then at the end we'll have about 20 minutes for
17 just an open conversation.

18 But after each one of these sections
19 what we want to do first is any quick clarifying
20 questions on material that was presented. We're
21 not looking for comments right now on the issues
22 but just any quick questions and then we'll do a

1 poll. So, let me just check and see first, is
2 there anyone looking to get into the conversation
3 right now with any questions?

4 And I for some reason am not able to see
5 the attendee list. Okay, now I have it. Again,
6 if you want to get into the queue just raise your
7 hand. Okay Rick, I saw Rick Weber and then Jason.
8 Rick Weber. And again, just quick clarifying
9 questions right now.

10 MR. WEBER: Yeah, it's more of a
11 clarifying observation. On page 11, Guy, you
12 know, where you compare top three to the rest of
13 the fleet. That bump would appear to be a problem
14 because it would be easy to interpret that that
15 the top three were suddenly taking a larger share
16 which I suppose is technically true
17 mathematically.

18 But the fact of the matter is that as
19 the fishery is shifting, other people have left
20 the fishery and left it with only those people who
21 are most committed which has the effect of
22 creating a larger share amongst the top three.

1 It's not so much the top three coming in to take
2 more but rather everyone else walking away.
3 That's all, just a clarifying observation.

4 MR. DUBECK: Thank you, Rick.

5 MR. BROOKS: Thanks, Rick. Jason.

6 MR. ADRIANCE: Thanks, Bennett. I'm
7 going to save mine for the discussion. It's not
8 really a clarifying question. It's going to be
9 about 2020 landings.

10 MR. BROOKS: Okay, great. Let me just
11 see if anyone else wants to jump in here. Okay.
12 In that case, we want to do a poll and let me just
13 emphasize, this poll and the two to follow we are
14 asking only AP members to participate in the poll.
15 So, members of the public, please don't
16 participate in the poll though obviously the
17 results of the poll will be shared with everybody.
18 I was seeing the poll a minute ago in mine and I'm
19 not seeing it now. Are others seeing it?

20 MR. VANKLUENEN: Bennett, I can go ahead
21 and restart it when you're ready.

22 MR. BROOKS: If you would, yeah if you

1 would restart that that would be great. Okay
2 great. So, AP members, you should be seeing poll
3 questions that says what are your greatest
4 concerns for the commercial fishery; permit usage,
5 landings decline, retention limits, overall state
6 of the fishery or other. And if you want to
7 choose other, it would be very helpful if you
8 would throw in the chat what, you know, what is
9 that other piece that you're worried about. So,
10 please take 30 seconds, 60 seconds, think about
11 what your answer is and just choosing one, all
12 right. Matt, my screen is telling me the poll has
13 ended. What are you seeing on your end?

14 MR. VANKLUENEN: Yes, sir it's open for
15 30 seconds.

16 MR. BROOKS: And how many responses are
17 you seeing?

18 MR. VANKLUENEN: It looks like we have
19 24.

20 MR. BROOKS: Okay, that's kind of light.
21 I wonder if there wasn't enough time for people to
22 respond. 24 left out about 10, 15 people. I'm

1 wondering if that's worth relaunching it and
2 asking people to do it again. I can't quite tell.

3 MR. VANKLUENEN: I think that sounds
4 like a pretty good idea, especially for the first
5 time there and people getting familiar with the
6 30-second timeline.

7 MR. BROOKS: Yeah. So, let's relaunch
8 it and if we can give it 60 seconds and not 30, I
9 think that's better.

10 MR. VANKLUENEN: Sure, stand by just a
11 moment.

12 MR. BROOKS: Okay thank you. Okay
13 great. So, relaunched here, you've got a minute
14 to respond. So, please, please again, fill out
15 the poll even if you did it already, AP members,
16 again, just kind of a repoll-. If you put your
17 other in the chat you don't have to worry about
18 that. You've got 5 seconds left so if you haven't
19 weighed in yet do so fast.

20 Okay, great. If you could launch the
21 results, Matt, that would be helpful. And what
22 we're going to do is just take a look at this.

1 We're not going to talk about this right now,
2 we're just going to see what's emerging and then
3 again after we walk through then the rec and
4 market prices, we'll have a more general
5 conversation. So, the results are, once again, I
6 can't see this well. Is anyone else able to see
7 the poll results?

8 MR. DUBECK: Yeah. Of those that voted,
9 percent voted for the overall state of the fishery
10 followed by 4 others with commenting in the chat
11 box and then the decline in the fishery followed
12 by the retention limit and the permit.

13 MR. BROOKS: So, the overall state of
14 the fishery seemed to be the primary one that got
15 the most attention. I'll just note that the
16 numbers here are fairly low again at 21, 24, 31.
17 In terms of other issues that were cited, other
18 concerns, a comment on impact on the rec fishery.
19 Another selected as bull and blacktip quotas and
20 species links need to be revisited in the Gulf of
21 Mexico. Those are the only comments that I'm
22 seeing in there for other.

1 Thanks, this will probably be a little
2 bit smoother next time around and just I'm seeing
3 a comment in the chat about having problems on
4 having trouble on how to raise your hand. Matt or
5 Pete, if you would just quickly remind folks how
6 they raise their hand.

7 MR. COOPER: So, if you look on the
8 right hand panel, you should have a participants
9 list. In your chat, there's a small hand icon
10 right there you can click to raise your hand and
11 you can click it again to lower your hand. If
12 you're having a hard time finding that you can
13 always just write something in the chat saying I'd
14 like to make a comment and we'll get you in the
15 queue.

16 MR. BROOKS: Okay, thanks, Pete. And
17 just a note to HMS staff, for some reason when the
18 polling is going, it makes it very hard for me to
19 track all the attendees. So, there may be people
20 who are raising hands with questions that I'm not
21 able to see. I am seeing right now that both
22 Dewey and Jeff Oden had their hands up. We want

1 to, again, we want to have the discussion on this
2 after we walk through the rec and the general.
3 But Dewey or Jeff is it a technical question that
4 you have right now? Dewey, let's see what you
5 have.

6 MR. HEMILRIGHT: Can you hear me?

7 MR. BROOKS: Yeah, I can, Dewey.

8 MR. HEMILRIGHT: Yeah. In looking at
9 this poll here, it's kind of skewed. It says 130
10 folks and yet 72 didn't vote and --

11 MR. BROOKS: That's, Dewey that's
12 because we were asking only AP members to vote.

13 MR. HEMILRIGHT: Okay. The results
14 don't say that. Okay, thank you.

15 MR. BROOKS: Yeah, that's just a
16 technical issue. It's just sort of scanning
17 everyone who potentially could. We're just
18 looking to gauge, get a read on the AP but thanks
19 for clarifying. Jeff, did you have a similar
20 clarifying question?

21 MR. ODEN: Can you hear me?

22 MR. BROOKS: I can, good morning.

1 MR. ODEN: Good morning. Yes, I ended
2 up putting other and to me where this is actually
3 heading is with all the fin bans proposed, you
4 know, I'm watching guys say why bother, why
5 continue. And anyway, it's pretty alarming to see
6 the decline in the effort and there are few guys
7 still doing it but pretty disconcerting. And
8 there's one other thing I would like to --

9 MR. BROOKS: Jeff, what I want to do is
10 I just want to put this comment on hold and when
11 we open it up after we go through rec and
12 commercial, I'll put you first in the queue, okay.

13 MR. ODEN: Thank you.

14 MR. BROOKS: Okay, thanks. Okay let's
15 jump in here. Let's go to rec and then again, the
16 discussion is going to happen after we have a
17 chance to walk through rec and then market price.

18 MR. DUBECK: Thanks, Bennett. So yes,
19 moving on to recreational fishery. So generally,
20 from 2014 to 2020, we include 2020 for mostly the
21 permit endorsement. So, the number of people who
22 got the shark endorsement, the recreational permit

1 did not change, they stayed consistent.

2 The number of directed shark trips have
3 declined in the last six years. Overall,
4 smoothhound, sharpnose and bonnethead sharks are
5 the most caught shark species. But most of the
6 sharks caught are being released and many are not
7 identified which is generally (inaudible).

8 So, orange in this figure here shows the
9 top left hand side is angling permits. So again,
10 the shark endorsement is orange in all of them.
11 The angling permit is top left, Charter?Headboat
12 is top right and then the tuna general permit is
13 at the bottom.

14 So, the number of permit holders with
15 the endorsement has stayed consistent. 55 percent
16 of the Angling permit holders have the
17 endorsement. 35 percent is the Charter/Headboat
18 and then 45 of the General permit holders have the
19 endorsement. Even though the Atlantic tuna
20 General permit has declined since 2018, the number
21 of shark endorsements permit holders (inaudible).

22 Now we're going to talk about the

1 targeted sharks for recreational effort. On the
2 left hand side is the LPS and the right hand side
3 is the MRIP. I just also want to point out that
4 the scale, the Y axis does change in this one but
5 the colors are same. Green is charter, blue is
6 private and shore based is orange.

7 So, in both the LPS and MRIP, the number
8 of rec fish sharks by private anglers has
9 declined. The number of for hire and pro based
10 directed (inaudible). And I just point out that
11 the scale is significantly different for
12 (inaudible). They have more (inaudible).

13 Moving to the targeted species. Again,
14 on the left hand side is the LPS, the right hand
15 side is MRIP. So, overall on the LPS you have 80
16 percent. Trips targeted sharks are targeted
17 (inaudible). In MRIP, over half, 55 percent that
18 are targeting of the structured species
19 (inaudible) species. The directed or trips only
20 account for about 17 percent of the MRIP trip and
21 (inaudible) shark.

22 Now we're going to go into disposition.

1 And again, this the Pelagic sharks without the LPS
2 data source. And I also want to note that the
3 darker scale, darker color of each one of them is
4 the harvested numbers and then the lighter bar are
5 the release numbers. So, LPS, you know, shortfin
6 mako account for 89 percent of the harvested
7 sharks while blue sharks account for 83 percent of
8 the release sharks.

9 Harvest of shortfin mako has declined
10 due to the limitation of the (inaudible) permits.
11 And also, I just want to point out from 2014 to
12 2019, the average annual release of --

13 MR. BROOKS: Guy, we're not hearing you.
14 Sorry Guy, we just lost whatever or at least I
15 didn't hear. Randy, were you able to hear what he
16 just said as well?

17 MR. BLANKINSHIP: I think he came back
18 in for a second. Guy, can you say something?
19 Yes, we can hear you now.

20 MR. DUBECK: Okay. So now going to the
21 harvested shortfin mako size distribution. This
22 kind of shows kind of where the size limit was, 54

1 inches in 2018. With the new male size limit, it
2 was 71 inches after implementation of Amendment
3 11. And then were the female size limit of 83
4 inches, that was implemented with the emergency
5 rule in Amendment 11.

6 So, the efforts of the new size limit
7 are reflected in (inaudible) here showing that
8 sharks observed caught had decreased. (Inaudible)
9 they're legally harvesting larger ones but the
10 numbers have declined.

11 Now going into disposition of
12 smoothhound dogfish, blacktips and -- so now this
13 is MRIP data. Again, scale the Y axis is totally
14 different for the harvested on the left hand side
15 and the right is the released sharks. And then
16 the color scheme for the regions are the same
17 between the two. Teal is New England, green is
18 Mid-Atlantic, orange is the South- Atlantic and
19 then purple is the Gulf of Mexico.

20 So, this kind of just shows that 95
21 percent of these sharks are being released. They
22 are legally harvested. The most harvested sharks

1 are smoothhound, Atlantic sharpnose and
2 bonnethead. All the most released sharks are
3 smooth dogfish and bonnethead.

4 Now we're going into the disposition of
5 large coastal sharks. Again, this is MRIP data
6 and on the left hand said is harvested and the
7 right hand side is released. And again, the scale
8 of the Y axis is different in each one. The color
9 schemes for regions of the sea and (inaudible).

10 So, for this one, 98 percent of each
11 species are being released. Bull and spinner are
12 the most harvested. Then (inaudible) while the
13 most released are urse, just hammerhead because
14 they haven't -- they aren't (inaudible) species
15 because (inaudible) issues. So, (inaudible) and
16 then sandbar are the most released.

17 Now the last slide I have here for the
18 recreational one is talking about the unidentified
19 sharks in the U.S. Recreational fisheries and
20 this is MRIP data. I already have the figure here
21 so this is just total sharks harvested and
22 released. So, harvested is green, or excuse me

1 release is green and harvested is the blue color.
2 And the scale as you can see is very large on the
3 left hand side. And then smooth dogfish does
4 include smooth dogfish in the Gulf and
5 smoothhounds. And again, this does not include
6 (inaudible) unidentified sharks (inaudible).
7 After Amendment 5b, you know, the (inaudible) has
8 increased outreach efforts to help fishermen
9 identify sharks but also included, you know, you
10 don't know let it go. This goes to show, you
11 know, that a lot more fishermen are releasing the
12 sharks but annually the unidentified are released
13 each year is really high. And this could be that
14 the timing of release is you weren't sure about
15 it, because you took a line so you (inaudible).

16 So, kind of a quick summary. The
17 majority of the HMS recreational permit holders
18 have the shark endorsement and the numbers have
19 remained steady since 2018. For-hire and shore
20 efforts have remained steady while private boat
21 effort has declined. The recreational fishery is
22 overwhelmingly catch-and-release and largely an

1 incidental fishery for most species. And a large
2 number of released sharks are reported as
3 unidentified. Now we're going to break for
4 questions and then do the poll.

5 MR. BROOKS: Okay so same -- thanks,
6 Guy. Same as the last time. Let's see if there's
7 any quick clarifying questions on the material and
8 then we'll poll again just to get a sense of how
9 folks are thinking about these issues. First, are
10 there any quick clarifying questions? Greg Hinks
11 here, your hand went up. It looks like that's
12 going down, okay. All right, let's just get to
13 Rick Weber, a quick clarifying question?

14 MR. WEBER: Seems I'm talking a lot this
15 time. Guy, can you help us understand how a trip
16 or a shore trip is classified as a shark trip
17 versus or comparable to how a recreational boat
18 trip is classified as a shark trip?

19 MR. DUBECK: Yes, so those kind of were
20 observed, identified as they're going (inaudible)
21 fishing from shore (inaudible) other species. And
22 then also, you know, (inaudible) going out

1 targeted. We understand is especially
2 recreational fishery there could be a mixed bag
3 between if they're going offshore for something
4 and then fishing from inshore as something else.
5 But those were the ones that were determined to be
6 targeting sharks.

7 MR. BROOKS: Okay. Jason Adriance.

8 MR. ADRIANCE: Thanks, Bennett. Yeah, a
9 couple clarifying questions. First one is you
10 chose to use some 2020 preliminary data in this
11 recreational section. Some of it is commercial
12 and then the rest of the recreational is 2019.
13 Any particular reason for that? That's my first
14 question.

15 MR. DUBECK: Yeah, sorry I didn't
16 clarify that. So, we used 2020 for the shark
17 endorsement because it's only been implemented
18 since 2018 so we only have two years data. So, we
19 felt that most of the fishermen who would have
20 gone shark fishing would have had endorsement
21 permits to this point so we added a third year for
22 that data. But 2020 for shark landings and things

1 like that for commercial wise is not finalized
2 yet. Even a lot of the recreational data is not
3 finalized yet so we didn't want to show
4 information that's not finalized.

5 MR. ADRIANCE: Gotcha. Now second
6 question. When you're discussing the MRIP is that
7 calibrated to the FES data or is it CHTS MRIP? Is
8 that new numbers basically is what I'm asking. Is
9 there --

10 MR. DUBECK: Yes.

11 MR. ADRIANCE: Okay. Because there is
12 known issues with now that shore effort expanded
13 at least in my mind. So, something to keep in
14 mind. And the third is more of a comment that
15 data is not going to include any Louisiana
16 information in it. If you ever want the LA creel
17 data for when you're putting the presentations
18 together don't hesitate to ask.

19 MR. DUBECK: Will do. Thank you, Jason.

20 MR. BROOKS: Okay just for the sake of
21 time I know we have a couple of folks in the
22 queue. Mike Pierdinock, I'm going to let you ask

1 one quick question and then we're going to go to
2 the poll and then to the market price. Mike
3 Pierdinock, quick question.

4 MR. PIERDINOCK: Bennett, actually thank
5 you. I figured it out. I'm kind of color blind
6 here or didn't read it right. But I have been
7 having problems. I can't find how to raise my
8 hand. I could yesterday, I don't know why I can't
9 find it today.

10 MR. BROOKS: Okay.

11 MR. PIERDINOCK: I'll just communicate
12 the other way. Thanks.

13 MR. BROOKS: Okay great, thanks. Let's
14 go to the poll and before we do that, I just want
15 to direct people to the chat. There's been some
16 interesting information shared there. A bit from
17 Raimundo, some from Greg Mayer. So, just take a
18 look at that and Matt, if you would launch the
19 poll that would be great. Again, we would just
20 ask AP members only to weigh in and again, this is
21 just an opportunity for HMS staff to get a sense
22 of what people are thinking as individuals.

1 So, polling questions. What are your
2 greatest concerns for the recreational fishery?
3 You've got 60 seconds so again, AP members if
4 you'd weigh in. Again, I see folks doing that but
5 if you clicked other, if you could put what it is
6 that you're thinking of in the chat that's very
7 helpful. You have just a couple seconds left.

8 Okay Matt if you just launch that so we
9 can see the results. All right. So, let's see
10 better education and outreach about HMS
11 regulations at 26 percent. Both reporting of
12 unidentified sharks and other at 18 percent. Post
13 release mortality is 16 percent and then 11
14 percent for minimum size limit retention limit.
15 So, pretty actually evenly spread across the
16 possible areas of concern. And I won't read them
17 but I'll just encourage people to look at the
18 chat. There are several other ideas put in there
19 so thanks.

20 With that, let's turn to the last topic
21 here which is market prices and then we'll follow
22 that with another poll and then open it up for

1 general questions.

2 MR. DUBECK: Yes, so now moving on to
3 market prices. So, from 2014 to 2019, ex-vessel
4 price for shark meat has generally increased while
5 the price for fins remains consistent overall.
6 And to the graph here on the top left hand side is
7 the average large coastal meat price. The orange
8 is the Atlantic, the grey is Gulf of Mexico and
9 then blue is the overall combined. So overall,
10 the Atlantic is the larger price for the meat
11 price for large coastal.

12 The top right in the same color scheme
13 is the Pelagic. The average and the overall and
14 Atlantic, the prices stayed pretty much the same
15 and mirrored each other while the Gulf fluctuated
16 from high point to low point.

17 The bottom left is the small coastal
18 meat prices. So again, like the large coastal,
19 the Atlantic gets a larger meat price for small
20 coastal sharks and (inaudible) 2019. And then the
21 bottom right hand side is the Atlantic smoothhound
22 prices and again, that fluctuates so much over the

1 time period that has increased this past year to a
2 high of \$.85.

3 Moving into the fin prices, again, this
4 is overall average fin prices. It's fluctuated
5 but, you know, overall has stayed consistent.
6 Between '14 and '19 it's pretty the same price
7 with a slight (inaudible). Now we're going to
8 break for more questions, clarifying questions and
9 then the polling questions (inaudible).

10 MR. BROOKS: All right let's see if
11 there's one or two clarifying questions and then
12 we'll shift to the poll again. Raimundo, I see
13 you've got a question mark by your name. Let's
14 open that up and see what that is. Do you have a
15 clarifying question here?

16 MR. RAIMUNDO: Nope.

17 MR. BROOKS: Nope, you're good, okay.
18 All right, and then Mark Sampson, I know you had
19 your hand raised last time. Is this up for market
20 prices or for the previous conversation?

21 MR. SAMPSON: Yeah, it was actually for
22 the previous conversation. Real quick, can I

1 discuss that one now or not?

2 MR. BROOKS: Let me put that on hold for
3 two minutes and then we're going to open it up
4 here in a minute. We're going to start with Jeff
5 Odene and then I'll throw it to you and then we'll
6 open it up to the floor.

7 All right, let's launch the poll here.
8 Again, this is around market prices. There's
9 international seafood driving prices down, market
10 volatility, demand for shark products decreasing
11 or other. So again, poll is launched. Please
12 indicate what seems to be of greatest concern to
13 you. And if you choose other, again, throwing
14 something in the chat will be very helpful.

15 Okay that is time. So Matt, if you
16 would launch the poll. Great. And so, what we're
17 seeing here is so the vast majority didn't answer
18 the question so that's interesting. And the rest
19 just sort of balanced between three of them and
20 then there's a couple of others which are in the
21 chat as well so thanks for doing that.

22 What we want to do now is we've got

1 about minutes just to have a general conversation.
2 And again, this conversation can move across
3 commercial, recreational, market prices. Guy, did
4 you have another slide if you wanted to wrap it up
5 before getting in there?

6 MR. DUBECK: Yes, just real quick, yeah.
7 All right, just real quick so again, this is
8 (inaudible) plan to expand on this analysis on a
9 white paper in the coming year. And again, this
10 will include (inaudible). But then later in the
11 year we'll put a little more information out and
12 hoping the information we gather will help
13 consider future action. And then we had some
14 questions here that gave some of the (inaudible).

15 MR. BROOKS: Great. So again, open it
16 up to the floor here, commercial or recreational.
17 Getting a better understanding of the concerns
18 that you have, faults on regulations or
19 restrictions that are hindering the fisheries, and
20 if the regulations that should change or stay the
21 same. I've got a few folks in the queue. Let's
22 start with Jeff Odene and then Mark Sampson and

1 then to Dewey. Jeff, the floor is yours.

2 MR. ODeNE: Yes, good morning. Sorry we
3 all can't be together again. Anyway, my concerns
4 to start, I'm sorry it's for the people, you know.
5 I would love to direct and I tried to send this
6 through to an 18 minute consortium party this
7 morning and I couldn't get it through. I've been
8 having trouble with my computer and I still can't
9 get in on the chat here so I can't type. Anyhow,
10 I don't know what's going on with it.

11 I would just like to direct some -- if
12 you all have an access or another device just
13 Google Facebook Brian McArthur and it will show
14 you a video yesterday of Hatteras inlet and sharks
15 feeding right in a foot of water, you know. My
16 concern is not for the sharks themselves it's for
17 the people. I almost lost a mate this year when I
18 had gear in the wheel. He was in a (inaudible)
19 which we thought maybe out there he might be okay.
20 Well, he jumped overboard to cut mono off the prop
21 and a big dusky just about took him out.

22 So, it's all up and down the coast.

1 It's not just great whites and (inaudible dropped
2 audio), it's bulls it's everything. I mean,
3 bulls, sandbars, blacktips, the abundance is
4 immeasurable. I mean, there may have been a
5 problem in the past but believe it's well behind
6 us and anybody and everybody up and down the coast
7 be it sail fishermen from, you know, Florida or a
8 tuna fishermen off North Carolina and I don't know
9 what the problems may (inaudible skipped audio)
10 but I'm promising you depredation is an issue and
11 it's certainly a concern for those, you know, who
12 are along our beaches too. And, you know, this
13 charade can't go on forever. You keep having
14 these mail surveys come along with all-time highs
15 across the board. You can't keep shoveling this
16 under the rug. It's time to open this fishery up
17 and that's my point anyway and I thank you all.

18 MR. BROOKS: Thank you, Jeff. I want to
19 bring Mark Sampson in. Before I do that, I just
20 want to flag for HMS staff just a reminder that I
21 think folks on the line can only see chats that
22 are -- that we all post. They can't see the chats

1 of everyone else. So, if someone from the AP
2 staff would be able to go into that chat and pull
3 out some of those other categories and things send
4 them around in a chat so the folks could see that
5 would be very helpful. Let's go to Mark Sampson.

6 MR. SAMPSON: Yeah, actually I'm good.
7 I'm good. I'm sorry I could not find a way to
8 lower my hand.

9 MR. BROOKS: Okay no problem, all right.
10 And again, if you can find a way to lower your
11 hand that'd be helpful. So, if you just go back
12 and click back on that hand it should lower it.
13 Dewey Hemilright. What do you got, Dewey?

14 MR. HEMILRIGHT: Yeah can you go to page
15 of the presentation?

16 MR. DUBECK: This one here, Dewey?

17 MR. HEMILRIGHT: Yeah. Am I reading
18 that correct on the far left for shortfin makos.
19 How many were harvested in that graph in 2014?

20 MR. DUBECK: I don't know for sure but
21 estimated 2800.

22 MR. HEMILRIGHT: How many?

1 MR. DUBECK: About 2700, 2600.

2 MR. HEMILRIGHT: And I was under the
3 impression in doing some research earlier this
4 year that in 2014, the U.S. Reported ICCAT over
5 800 metric tons of mako sharks harvested in 2014
6 or it might have been '15. And I was wondering if
7 that assumption is correct what I read and is
8 there any other surveys that's being used for
9 large pelagic. Because that's almost 1.8 million
10 pounds that the U.S. is accounting for with the
11 new MRIP data. And I was curious what's the --

12 MR. DUBECK: Dewey, this is the LPS data
13 that's always been used for that number. Did you
14 hear me, Dewey?

15 MR. BROOKS: I'm not sure if we just
16 lost Dewey. Let's go to the next -- let's bring
17 in Scott Taylor and then we'll bring in Jason
18 Schratwieser. Scott Taylor.

19 MR. TAYLOR: Good morning, everybody. I
20 wanted to talk about a couple of those stories
21 that (inaudible) but I think will sum up the state
22 of affairs of the fishery. But we were fortunate

1 enough and privileged to receive a sandbar
2 research permit this year for our area. And even
3 though we started late with all the challenges
4 with the observers we have been able to get
5 ourselves caught up on a lot to, you know, with
6 the production.

7 We found while that's been extremely
8 desirable in the past, product to sell some
9 challenges in moving the meat itself. But the two
10 main defining events through our sandbar rules
11 this season were about 30 days ago with the
12 federal observer and the government.

13 A group of divers coordinated by a
14 couple of individuals that we talked about in the
15 past and that I'm not going to name. And out of
16 Jupiter inlets went on a mission to seek us out,
17 pulled of the gear into the boat, took all the
18 sharks that were on the gear. Put all the gear
19 into a dive boat, brought the dive boat back into
20 Jupiter inlet and preceded to go all over Facebook
21 essentially degrading our company and making a
22 mockery out of the federal research program with

1 an observer on there.

2 Then called the (inaudible) and tried to
3 have an action brought against us. Obviously,
4 that didn't work out very well and there was a
5 mention of it yesterday during the enforcement
6 briefing when it was mentioned (inaudible)
7 discuss. So, I thought I would take the
8 opportunity to do that.

9 As if that wasn't bad enough, the most
10 valuable part of the fishery were the fins were
11 all (inaudible) by a gentleman by the name of Mark
12 Harrison (inaudible) last week was raided by fish
13 and wildlife. And all of the things associated
14 with the sandbar fishery that represents tens of
15 thousands of dollars in revenue were confiscated
16 by (inaudible) paid for. Now these are legally
17 harvested fins with a federal observer on the boat
18 and you guys wonder why you're seeing a decline in
19 the number of individuals that are actually
20 involved in the fishery. Not only are we not
21 being economically rewarded but we're being
22 economically punished. And whether or not that's

1 it been Dewey or Jeff or a plethora of other
2 people over the years that have been seeking about
3 just how disconnected the -- you guys are from
4 what's going on in the general public. This is
5 becoming a definition of (inaudible). So, you got
6 -- this is another example, and I'll finish up
7 then. For example, from our perspective in the
8 fishery, a strong recovery in a lot of additional
9 stocks and zero ability to be able to capitalize
10 on that from an economic standpoint. And you guys
11 you've got to get your head out of your backside
12 if you want to save any of this from the
13 standpoint of the economic viability.

14 MR. BROOKS: Thanks, Scott. I'm going
15 to bring a few other folks in here. We've got a
16 couple minutes left here. Let's get Jason
17 Schrattwieser in next then Jason Adriance and then
18 to Mark Sampson.

19 MR. SCHRATWIESER: Can you hear me?

20 MR. BROOKS: Yes, we can. Thank you.

21 MR. SCHRATWIESER: Okay. Thanks for the
22 presentation. This is kind of a follow up.

1 Sorry, if this kind of bleeds into to the next
2 presentation but I have a conflict and won't be
3 able to attend all of it. It looks like shark
4 landings are down but we're seeing cases of
5 depredation in some fisheries going up as we'll
6 see in the next presentation.

7 I was just curious and I didn't see this
8 information presented anywhere in the
9 presentations that are coming up. But do we have
10 evidence for the shark stocks that are being
11 assessed that we're seeing considerable rebuilding
12 or that they had been rebuilt?

13 MS. BREWSTER-GEISZ: Hey Jason, I'll
14 take that, this is Karyl. So, for some of our
15 stocks we are seeing some rebuilding. We have
16 that for sandbar sharks. The assessment showed
17 they are no longer overfishing. They are still
18 overfished but we were slightly ahead of our
19 rebuilding track so that is good news.

20 Gulf of Mexico blacktip is a very
21 healthy stock as Jason Adriance will probably
22 point out. We should be able to increase that

1 quota so we are working towards that. A lot of
2 that will be coming out when we release Amendment
3 14. In the (inaudible) Amendment 14 in order to
4 adjust any of our quotas and make sure that we are
5 fully consistent with the national standard one.

6 MR. BROOKS: Thank you, Karyl.

7 MS. BREWSTER-GEISZ: We're currently
8 undergoing an Atlantic blacktip stock assessment
9 that we should have the result for that by the end
10 of the year and I'll leave it at that.

11 MR. BROOKS: Thanks, Karyl. Just a
12 quick time check. I've got about five or six
13 people in the queue. I'm really hoping to get
14 everyone in but we've got on the schedule about 7
15 minutes left. If we need to run about 5 minutes
16 long, I think I will sort of encourage us to do
17 that and just have 10 minutes for the break. But
18 I encourage all the speakers to be focused so we
19 can try to get everybody in. Jason Adriance.

20 MR. ADRIANCE: Thanks, Bennett and
21 thanks for that segue, Karyl, you're right. So,
22 talking about regulations and restrictions. I

1 think we're going on now with blacktip, eight
2 years two assessments. The first time the
3 projections weren't reviewed. This go around
4 we're being asked to wait for Amendment 14. And
5 it's not just a commercial issue it is commercial
6 and recreational with the amount of blacktips out
7 there at least off our coast. And I guess we're
8 going to get depredation and it's a big issue.

9 We've got these species that are healthy
10 and it's still handcuffed us to the harvest
11 whether it's commercial or recreational. The same
12 goes with bulls, who knows when there will be an
13 assessment because you had so many other
14 priorities and I understand that but it's an
15 issue. We need to be able to legally harvest
16 those sharks that can be and then the amounts that
17 are available under Magnuson. In order to keep it
18 short, I'll leave it at that.

19 MR. BROOKS: Thanks. Thanks, Jason,
20 that's helpful. Mark Sampson, it looks like your
21 hand went down. Do you have a comment? Okay
22 maybe not. If not, let's go to Greg Hinks.

1 MR. HINKS: Yeah, I just have one
2 comment on the breakdown of the targeted shark
3 recreational fishery effort. That's a good
4 picture but I think an even better picture would
5 be to further break down that down even by region
6 or state. You know, it looks like it's a five
7 year trend and, you know, on average it's probably
8 pretty flat but that's pretty hard to believe up
9 here, at least in the Northeast as far as I'm
10 thinking shore based shark fishermen.

11 The past couple of years there's been
12 all kinds of issues which I'm sure other states
13 (inaudible). I'd be interested to see if it's
14 decreased or increased down south if the average
15 is showing pretty flat maybe it's decreased down
16 there and increased up here but just a thought.

17 MR. DUBECK: Thank you, Jason.

18 MR. BROOKS: Thanks. Let's go next, I'm
19 going to go to Marcus Drymon then Mike Pierdinock
20 then Rusty Hudson and then Alan Weiss. So, Marcus
21 Drymon.

22 MR. DRYMON: Yes, this is Marcus Drymon.

1 So, I just wanted to reiterate what Jason said.
2 The same situation is happening over in
3 Mississippi and Alabama. And, you know,
4 Mississippi just recently in 2020 opened a state
5 fishery for blacktip shark to try to address folks
6 concerns about increasing populations and, of
7 course, increasing depredation.

8 Guys aren't able to move the sharks that
9 they're legally harvesting oftentimes because of
10 fin bans and packing legally harvested sharks.
11 So, I just wanted to go and basically reiterate
12 what Jason was saying to that end.

13 MR. BROOKS: Okay, thanks Marcus. Mike
14 Pierdinock next.

15 MR. PIERDINOCK: Thank you, Bennett.
16 Thank you for the presentation. It does a good
17 job at demonstrating how landings has
18 significantly gone down for most species
19 commercially and recreationally. And as a result
20 of that, we see greater interactions, more than
21 ever nowadays and I can attest to the fact that
22 that's going on here in New England. And from my

1 buddies and where I fished all the way down the
2 Florida, it seemed the same.

3 I mean, with that the data streak 2019
4 I'd hate to see what the additional reductions are
5 or interested to see the additional reductions as
6 a result of COVID. That's going to have to be a
7 lot more than what you see with 2019 for 2020.

8 You know, ultimately, we have an
9 ecosystem that's out of balance and we need
10 selective localized culls, problem sharks by the
11 longliners would probably be the best approach to
12 do to try to address this condition. I'll save my
13 depredation comments to the next presentation
14 which ties into these observations. Thank you.

15 MR. BROOKS: Thanks Mike, that's
16 helpful. Appreciate it. Rusty Hudson and then to
17 Alan Weiss.

18 MR. HUDSON: Am I coming through okay?

19 MR. DUBECK: Yes.

20 MR. HUDSON: You can hear me?

21 MR. DUBECK: Yes.

22 MR. BROOKS: Yes, we can thank you.

1 MR. HUDSON: Thank you. Got to agree
2 with Jason, I've got to agree with Chuck, got to
3 agree with Scott, got to agree with Mike, we have
4 a problem from Maine to Texas. Bull shark needs
5 to be assessed, that's for sure. But it should
6 possibly be divided between Atlantic and the Gulf.

7 We're doing Atlantic blacktip. The
8 review is at the beginning of November. This
9 should finalize that part of it and then I guess
10 by next spring we'll be discussing the results of
11 Atlantic blacktip shark for the first time in 14
12 years. We're starting hammerheads soon, all three
13 large species. And that is not really anything
14 but a linkage problem for us. We don't have an
15 overfishing problem or a sighting problem with our
16 stock from Maine to Texas of scalloped hammerhead.
17 And, of course, we also throw in the smooth which
18 is way off shore and the great hammerhead which is
19 more of a loaner or swim by pairs or whatever.

20 So, that being said, we need to look at
21 the volatility of the market and this situation
22 that occurred with Phoenix Fisheries had nothing

1 to do with Phoenix Fisheries. It had everything
2 to do with the investors from the other company
3 and whoever shadow world that person was involved
4 in.

5 I don't know the man but I am really
6 concerned because his problems seem to go back to
7 2017, 2010. And like I said, I don't know this
8 multimillionaire that deals with Hong Kong but
9 we've had a volatility with the Hong Kong market
10 since last year. And we've had a problem with the
11 prices and we've had a problem with areas that we
12 used to process like California, New York that
13 would buy all this stuff.

14 So, if we're going to wind up increasing
15 let's say changing from a number of fish to maybe
16 a two or three thousand like we used to have a
17 4000 pound trip limit. This is going to be all
18 about the meat market, the same meat market we
19 started back in the '80s and then the shark fins
20 became valuable in the late '80s.

21 So, I'll save a lot more of my
22 depredation comments for later but you need to get

1 bull shark in the queue. Simply because off Cape
2 Canaveral you have a nursery ground in that region
3 and that's the end of what we call the end of the
4 sandbar nursery ground and they predate on small
5 animals. We cannot fish in Florida State waters
6 commercially with a longline, only a single hook.
7 That's the rules since '92.

8 All of these different things are
9 increasing the shark populations and we've been
10 decreasing the ability to catch the sharks
11 commercially and recreationally. So, a lot of
12 people need to put their heads together. Thank
13 you.

14 MR. BROOKS: Thanks, Rusty.

15 MS. BREWSTER-GEISZ: Bennett, can I just
16 jump in real quick?

17 MR. BROOKS: Yeah, of course, Karyl.

18 MS. BREWSTER-GEISZ: So, both Rusty and
19 Jason talked about the quota linkages both in
20 terms of the Gulf blacktip which actually isn't
21 directly linked and is still open right now. But
22 also, in regard to hammerhead sharks and I just

1 want to point out that in Amendment 14, we are
2 looking at quota linkages. So, I know Amendment
3 14 will be difficult for people to really grasp
4 and understand but I also can't emphasize enough
5 how important it is for people interested in these
6 topics, the quotas and the quota linkages to
7 really be on the lookout for Amendment 14 because
8 it will dictate how things go overall in the
9 future.

10 MR. BROOKS: Thanks, Karyl. Alan Weiss.

11 MR. WEISS: Thank you. Can you hear me
12 okay?

13 MR. BROOKS: Yes, we can. Thank you.

14 MR. WEISS: What a difference a day
15 makes. Could we go back to slide number 22 in the
16 presentation? Okay this really stood out to me.
17 The -- bear with me a moment. ICCAT
18 recommendation number 11-08 prohibits the
19 retaining transshipping or landing silky sharks.
20 If you look at this slide you have about 7500
21 silky sharks harvested, almost none released.
22 What's going on here?

1 MR. DUBECK: Go ahead, Karyl.

2 MS. BREWSTER-GEISZ: All right. So, for
3 silky sharks you are correct that ICCAT prohibits
4 the retention of that for ICCAT fisheries. So, we
5 do have directed shark fisheries that we do not
6 consider to be ICCAT fisheries. If you are a
7 recreational fisherman, you can still land silky
8 sharks as long as you do not have any ICCAT
9 species. That's swordfish, billfish or tunas on
10 board.

11 MR. WEISS: Well, unless it's a
12 different subspecies or different stock that's
13 being caught here wouldn't it make sense to have
14 those things consistent?

15 MS. BREWSTER-GEISZ: This was the rule
16 that we implemented as a result of that ICCAT
17 recommendation. We interpret it to mean for ICCAT
18 fisheries not to our directed shark fisheries.
19 The language in the recommendation if you'll look
20 at it is those silky sharks that are caught in
21 association with ICCAT fisheries. So, that is why
22 we limit if you have tunas, swordfish on board you

1 cannot retain silky sharks but if you don't you
2 are allowed to.

3 MR. WEISS: I see. So, if someone with
4 swordfish and tuna on board were to catch silky
5 sharks it's a conservation problem. But if
6 someone that doesn't have ICCAT species on board
7 catches silky shark it's not a conservation
8 problem. Let me ask another follow up.

9 MR. BROOKS: Actually Alan, I'm going to
10 jump in for the sake of time just because we're
11 over. I want to get one more person in. Maybe
12 you and Karyl can chat either, you know, sort of
13 by text after the phone call if that's all right.

14 MR. WEISS: Well, if I could just one
15 more quick thing. Are these silky sharks that are
16 landed in this recreational fishery reported to
17 ICCAT as part of the catch of the United States?

18 MS. BREWSTER-GEISZ: I would have to
19 double check that with our scientists that report
20 the landings to ICCAT. They are very specific on
21 what is reported and what isn't reported.

22 MR. WEISS: Okay, thank you.

1 MR. BROOKS: Okay. Let's see, I think
2 that kind of gets everybody in who's had at least
3 one bite of this. I think we should probably go
4 to a break. It's 10:20. We are going to reconvene
5 at 10:30 and we'll dive back into the depredation
6 topic at that point in much greater detail.

7 So, thanks everyone. Again, encourage
8 everyone to just keep your phone line open, keep
9 your computer link on. Just, you know, go on mute
10 and turn off the video and we'll see you all in
11 about 10 minutes. Thanks.

12 (Recess)

13 MR. BROOKS: Can people hear me now?
14 Ben, can you hear me? Yeah. Okay, great, sorry,
15 thanks about that.

16 All right, so, we want to jump into the
17 next topic, which is on shark depredation, and I
18 want to hand it off to Ben Duffin, and the team
19 over there, to walk us through the presentation,
20 and we should have a good chunk of time for
21 conversation on this topic, which I know is very
22 important to folks. So, Ben, over to you.

1 MR. DUFFIN: All right, let's quick
2 check the audio and video, we're good?

3 MR. BROOKS: Yeah, video is looking
4 great, and we can hear you fine.

5 MR. DUFFIN: Thank you and thank you for
6 the introduction here. So, we're going to
7 continue the talk with shark fisheries and a
8 little bit on shark depredation. A quick outline
9 of what we're going to be talking about during
10 this presentation today.

11 So, going into the background of kind of
12 the impetus per se, with the research we've been
13 looking at, on shark depredation. The objectives
14 of -- of this specific presentation and also
15 diving into some of the analysis performed so far,
16 and, of course, we'll be looking at these two
17 fisheries here, the Pelagic Longline Fishery and
18 the Reef Fish Fishery, and also, you know, at the
19 end of this, we'll be looking for -- any further
20 input is also appreciated.

21 So, a little background on depredation,
22 I'm sure many of you are familiar with it, you

1 know, whether it's a crab trap, or of a pike
2 eating your bass, or other fish stealing your
3 catch. You know, depredation occurs in many
4 fisheries, and it's not a new phenomenon. We've
5 had concerns raised by the South Atlantic
6 Fisheries Management Council, The Gulf of Mexico
7 Fisheries Management Council. There's other
8 stakeholders from organizations, representing
9 recreational and commercial interests, and
10 wildlife enthusiast, as well.

11 There has been pretty limited research
12 on shark depredation. So, one of the -- our
13 recent reviews from 2018, we looked at the number
14 of papers published on shark depredation, and
15 there was only 61 papers, from 1955 till 2018, so
16 you're looking at less than one, you know, peer-
17 reviewed publication on shark depredation for a
18 year, on average, and the shark depredations has
19 also been identified as a Management Based
20 Research Priority, for the -- from the document
21 that the HMS Management Division prepared, and so
22 it is something we're working on.

1 So, there's some of the objectives of
2 this presentation. Kind of the main objective is
3 to address some of the questions, with those,
4 previous AP meetings, and in that research needs
5 and priorities document. So, the -- we're going
6 to be looking at the preliminary analysis for
7 shark depredation, and that it is quantifying
8 depredation rates in Pelagic Longline and Reef
9 Fish Fisheries. Also, we're looking at spatial
10 and seasonal trends, and giving a kind of
11 comparison between gear types in the two
12 fisheries, the Pelagic Longline and Reef Fish,
13 and, of course, do there is person discussion on
14 depredation issues, but I just want to kind of
15 highlight that this is still pretty preliminary,
16 and hopefully that we can advance this research to
17 be used as a reference, and support management of
18 the fisheries, all of them.

19 This is kind of also interesting. It's
20 a first look at depredation in the Reef Fish
21 Fishery, in the Gulf, and the first kind of
22 reexamination of depredation in the Pelagic

1 Longline Fishery, since they've been collecting a
2 little bit more detailed information on
3 depredation.

4 So, we're going to start off with the
5 Longline Fishery, the Pelagic Longline. The data
6 used here, that we have available, is Pelagic
7 Longline Observer Program Data, and it's from 2007
8 to 2019, when the period was reexamined. So,
9 notably, in 2007, as kind of an outcome of the
10 Pelagic Longline Take Reduction Team. Depredation
11 data collection was augmented to include fish
12 level depredation, so, if a fish on -- on a haul
13 was depredated, and that information was recorded
14 for each individual fish that was observed. So,
15 this is the kind of -- the driving force behind
16 that was to identify economic issues and patterns
17 of various fish.

18 So, the Pelagic Longline, the program
19 shoots for about eight percent coverage of the
20 fleet. So, there's some -- some recent statics on
21 the fishery, totaling -- was almost 1,800 unique
22 trips observed with around 13,400 hauls, which

1 came to over 400,000 animals caught, that were
2 observed. If you look here, we have the number of
3 shark depredations per set, and the proportion of
4 all catch depredated by sharks. So, on the left
5 side, you can see that's the number of
6 depredations per set on the Y axis, you have the
7 frequency, and on the X axis, you have number of
8 depredations (audio skips).

9 You can see that there are many sets
10 with zero depredations, and obviously the
11 frequency of depredations decreases as you get to
12 -- or the frequency of sets with the larger number
13 of depredations decreases as you move along the X
14 axis. So, that represents about 11,000 shark
15 depredation events from 5,700 sets. So, I have a
16 couple of things to point out, with regards to
17 this, is that -- that the mean fish caught from
18 each set, for the whole time period was about 30
19 fish, and anything that kind of, any sets with
20 more than around 12 depredations, usually had more
21 than around 60 fish caught, and in any sets that
22 had a very high proportion of the catch

1 depredated, they were generally lower in the
2 number of fish caught, and so, this worked out to
3 be about 57 percent of the sets that did not have
4 depredation events.

5 So, moving over to the right-hand side,
6 the figure there, on the Y axis, you have the
7 proportion of catch, so, that's at the individual
8 fish level that is depredated, and for each year
9 on the X axis. So, it's either the little bit of
10 variation, over time, but it's, you know,
11 generally remained fairly constant since 2007, and
12 that red line, the dash line, is the mean, and
13 it's about 2.7 percent of all catch depredated.

14 We also wanted to take a look at the top
15 species, that were experiencing depredation, and
16 this is from the observer data, and so, you have
17 there the table at top right. So, this is sorted
18 by the number of depredations for each species, or
19 species group, so, about 3,200 swordfish, and
20 that's roughly 3.9 percent of the total catch
21 observed, and there are number of tunas that were
22 (inaudible) -- that were probably not identifiable

1 because of the depredation event. So that number,
2 you know, the proportion of tunas is a little bit
3 higher there because of that, probably.

4 So, combined, the BAYS tunas, so, that's
5 bigeye, albacore, yellowfin, skipjack, and
6 swordfish. So, it combines, proportion depredated
7 was about 4.7 percent, so, a little under five
8 percent of all swordfish and BAYS tunas that were
9 observed were depredated.

10 On the bottom, we -- there was also --
11 they were recorded on -- to the extent, the fish
12 is damaged, in the Pelagic Observer Program. So,
13 we have that, you know, the majority there being
14 only the head is retrieved, a small number of
15 unknown damage, and about 16 percent of the total
16 economic loss, and little over a third of pie
17 there is total economic loss, and I'd like to
18 point out that it's probably a total economic
19 loss, if only if the head is retrieved, and the
20 data kind of back this up, about 10 fish from the
21 6,000 that were -- the head only retrieved, were
22 retained for the data from the Observer Program,

1 so most of that is getting discarded, and there's
2 just a total economic loss, and about 60 percent
3 of the 1,500 or so fish that were marked as a
4 moderate economic loss were still retained by the
5 vessel.

6 So, I guess everyone then, take a look
7 at the, you know, the regional variation of
8 depredation. So, we're still looking at Pelagic
9 Longline here, with the proportion of sets, the
10 shark depredation. So, we've shifted on metric a
11 little bit, from looking at the proportion of
12 number of fish, to the proportion of sets, that
13 recorded any depredation. So, notably here, you
14 have the -- in the upper-right, the map of the
15 areas that we -- we used. So, the Gulf, South
16 Atlantic Bight, Caribbean, and for the East Coast,
17 and moving north, you know, of Mid-Atlantic Bight,
18 and the Northeast Coastal, and then the further
19 off-shore areas, on the right side of the map.

20 I would like to point out that the area
21 off of Eastern South America, there -- there was
22 -- there was a pretty limited data, so it's not

1 included in the figure below, that map, and
2 another thing I'd like to point out, with regard
3 to the figure. So, that's the portion of sets on
4 the Y axis, through time, and you can see that
5 there is pretty similar depredation across the
6 regions, with exception to the areas that NCA, NED
7 and SAR, so that would be kind of the areas
8 further off shore there, in the map.

9 So, looking at this table, we have a
10 seasonal look at the number of hauls, I'm just
11 going across the columns here. The total number
12 of hauls, the total hooks deployed, the total
13 number of hauls of depredation events, and what
14 that works out to, or the proportion of hauls in
15 depredation, and then the number of individual
16 depredations that were observed. You can see in
17 the yellow, highlighted is the maximum for each
18 column. So, spring across the board, there was
19 the most effort, and the most hauls, but it is the
20 second highest in the proportions of hauls of
21 depredation, and some reason, you know, over --
22 over half of the hauls had some type of

1 depredation.

2 But in the whole fishery, so, winter has
3 the lowest, and is still over 36 percent of sets
4 with depredation, so, it's a relatively high
5 number, and a high proportion, and just another
6 thing to point out here is that the average number
7 of hooks, for each season, per set, remain about
8 the same, in terms of 730 hooks, and this is
9 across all years, from 2007 to 2019.

10 So, where I went with this data next,
11 was to, kind of build an exploratory model, with
12 some flexibility, and then -- and that smooth
13 terms, so you see that the model kind of is the --
14 predicting the proportion of sets in depredation,
15 including the year, the fishing area, the season,
16 and then an interaction that would allow us to
17 look at the season for each fishing area, and what
18 we're seeing here is through time for the Pelagic
19 Longline Fishery, how it's remained. It's had a
20 little bit of ups and downs, but it's remained
21 relatively around the same level for the predicted
22 shark depredation, proportion of sets. So, that

1 the Y axis here, the response variable, and you
2 can move on and look at the seasonal and regional
3 predicted shark depredation for -- for all these
4 kind of collapsed areas, and one of the reasons
5 that I did collapsed areas was just so that we
6 could have enough observations to build this kind
7 of a model, to look and see what kind of trends we
8 can pull out.

9 So, looking at the top-left here, and
10 just for reference, the seasons are along the X
11 axis, where you have the proportion of sets
12 predicted, and had depredation along the Y axis,
13 and it goes from -- it's from zero to one, so it
14 would be -- zero would be none predicted and one
15 would be all of them predicted. So, you're seeing
16 around, you know, .5 and the CAR and FEC, in the
17 top-left panel, and you can see that that is down
18 in the map as well. So, these -- all these panels
19 correspond to a geographic region, in the map, in
20 the bottom right.

21 So, not much variation, in the top-left
22 panel was the Caribbean and Florida East Coast. A

1 little bit more in the Gulf, I see in the summer,
2 is when it peaks, the predicted shark depredation,
3 and then similarly, and the Mid-Atlantic Bight,
4 and Northeast Coastal area, you have summer and
5 autumn, kind of the peak times. Off-shore and
6 then the NCA, NED, SAR is -- again lower for that
7 region for the shark depredation, and South
8 Atlantic Bight, the middle bottom panel, is also
9 pretty consistent across season.

10 Now, we're going to take a little bit of
11 a look at the Reef Fish Fishery, and the data that
12 was available for that, to examine shark
13 depredation.

14 (audio fades out) -- there's a
15 Federal Reef Fish Observer Program,
16 but then I'd like to point out
17 there are some differences in the
18 data (audio fades out) -- Pelagic
19 Longline Observer Program, and the
20 Reef Fish --

21 MR. BROOKS: Hey, Ben.

22 MR. DUFFIN: Yeah.

1 MR. BROOKS: Ben, your voice is cutting
2 in and out a little bit, at least for me. Randy,
3 is that happening for you as well?

4 MR. BLANKINSHIP: (inaudible), so just
5 try to stay close to your mic.

6 MR. BROOKS: Yes, right, and that just
7 started, Ben. You were very clear up until just a
8 second ago.

9 MR. DUFFIN: Okay, thank you. I'll try
10 and make sure I'm closer to the mic here, so we
11 can --

12 MR. BROOKS: Okay. Thanks. Thanks.

13 MR. DUFFIN: So, as I was saying, that
14 there are some differences in the Observer
15 Programs between these two fisheries. The Reef
16 Fish Observer Program observes several different
17 gear configurations. So, you can see in the
18 figure on the right there, that there is bandit,
19 which is any type of assisted reel, that's
20 vertical line fishery, so that's a weight at the
21 bottom of the line, and hooks coming up at --
22 similar to handline. It's typical rod and reel,

1 some of you would think of, and then there's also
2 the bottom longline, which, you know, had fewer
3 sets observed, but it is, you know, a longline
4 with weights at both ends, that fishes the bottom
5 of the water column.

6 And there are actually other gear
7 configurations that are observed, such as spear
8 fishing, buoy fishing, in the program, the
9 Observer Program, but I did not include those for
10 any of this analysis. So, you see that we have a
11 similar data range. The Observer Program started
12 in 2006. So, 2007 was the first full year of data
13 collected through 2019. They have about 1,700
14 trips observed, and there is no fish level
15 depredation that is kind of recorded. So, that --
16 this is the set level indicating that the sharks
17 were feeding on the catch.

18 You can see that we have fewer sets with
19 depredation, so about almost 1,800 out of 53,000
20 sets that were observed. So, there are some
21 differences to keep in mind. I'm looking at just
22 kind of the regional breakdown. So, it's -- it's

1 only data from the Gulf of Mexico, and you can see
2 in the map there, the statistical zones are
3 numbered from, kind of from -- kind of Key West
4 (audio fades) -- and then the inset there, so
5 that's (audio fades in and out) -- the Chandelier
6 Islands, and so just kind of, to break it down
7 regionally, those are the areas that I chose to
8 spilt the region by, so it's kind of -- one
9 through seven is the Florida Peninsula, and then
10 coming across from eight until -- this is the
11 Chandelier Islands, is the Florida Panhandle, the
12 Mississippi Area, and then Louisiana and Texas
13 were grouped together.

14 And you can see that most of the
15 observed sets were in the Peninsula of Florida,
16 but it could be due to the -- kind of a product of
17 the style of fishing that occurred there, so, you
18 know, bandits or handlines kind of tend to make
19 more stops, and that would be considered a set, by
20 the Observer Program. So, on the left here, we're
21 looking at the number of sets with depredations
22 per trip. On the Y axis, we have a frequency of

1 sets -- of trips. So, it would be, if you added
2 up all of (sounds fades) the numbers on the Y
3 axis, that would (sound fades) and then on the X
4 axis, you have number of sets of depredation
5 (audio fades). You can see on those trips, no
6 shark depredation was recorded, and on the right,
7 you have the proportion of sets, the depredation
8 for a year. So, if it does seem, you know, in the
9 Reef Fish Fishery, to be increasing, from 2007,
10 until the last year made available in 2019, with a
11 few exceptions, it seems to be kind of trending
12 up, with a proportion of sets, it -- the
13 prediction.

14 So, looking at those three areas, that I
15 mentioned previously, for the Peninsula, the
16 Panhandle, the Mississippi, (audio fades) --
17 similar trends across these regions, it seems like
18 -- (audio fades) -- the Y axis, where you have
19 the proportionate sets, with depredation, and
20 that's just across all years --

21 MR. BROOKS: Okay, Ben, just so you
22 know, you are continuing to cut in and out. I

1 don't know if there is anything you can do on your
2 end. Maybe try cutting out your video and see if
3 that makes a difference. Let's keep going, just
4 be aware.

5 MR. DUFFIN: -- and we did, also, a
6 comparison of gear types. So, we're looking here
7 at the vertical line, which would be the Bandit
8 and the Handline Fisheries, against the Longline
9 Fishery, through time. So, you have the
10 proportion of sets for the longline fishery, which
11 is a pretty marked difference, and showing an
12 increase, as compared to the vertical line
13 fisheries. So, similarly, we wanted to build an
14 exploratory model, to look at kind of the
15 different -- (audio fades) -- year, the gear type,
16 region, the season, and then interactions for the
17 gear in the season, and gear in depth. So, what
18 we're looking at here, is the gear type by season.
19 So, in the longline, you can see it increases from
20 winter to spring, summer, and peaks in autumn,
21 whereas there's a slight bump in summer, in the
22 vertical line fisheries, but it is much lower for

1 the predicted shark depredation.

2 Further, just looking at overall
3 trajectories, across the years, you can see in
4 vertical lines, there is a little bit of an
5 increase towards the more recent years, 2018- '19,
6 where it has generally stayed low, compared with
7 the Longline Fishery, the Bottom Longline Fishery,
8 which is seeing (audio fades) -- 25 percent of the
9 sets, I'm sorry. Looking at it regionally, I did
10 have to collapse the -- the West Regional (audio
11 fades) -- but it's due to the number of sets
12 observed, but you can see the Longline, once
13 again, much higher rate (audio fades) and in the
14 Western Gulf it seems, depending on, regardless of
15 the year, you're seeing higher rate of
16 depredation.

17 So, depth was something I was interested
18 to look at here, (audio fades) -- where the years
19 are fishing, and it kind of seems that, as
20 depredation (audio fades) longline, and you see on
21 the right-hand side, with the vertical line (audio
22 fades) uncertainty around the estimate for

1 depredation, and I'd like to point out, too, that
2 there was less than one percent of the sets that
3 were observed were greater than around 500 feet,
4 for vertical line. So, that's, kind of, why you
5 see that large amount of uncertainty there, which
6 is the shaded area in the estimate.

7 So, a little bit in conclusion here.
8 The Pelagic Longline, you see generally much
9 higher rates of depredation when looking at the
10 set level (audio fades) and it seems to be pretty
11 consistent through time. If there was some
12 regional and seasonal variations, so (audio fades)
13 -- those areas further away from shore seem to
14 have lower depredation rates, and summer was the
15 season with the highest depredation rates, and in
16 the Reef Fish, it does seem to be increasing over
17 time, especially for the Bottom Longline Fishery.

18 So, in 2007, you know, the two vertical
19 line and the bottom longline both seem to start
20 out at similar levels, but we saw just a much
21 larger increase in depredation in the bottom long
22 line fisheries, and then the West Gulf also had a

1 higher depredation for both gear types, and it did
2 seem that the -- the depth kind of affected
3 differently depredation for the two fisheries --
4 two fishing ears there. So, kind of, where were
5 going from now, always looking for ways to obtain
6 better (audio fades) -- regardless of the sector,
7 (audio fades) data available for recreational
8 fisheries. I'm looking into including some these
9 shark indices, and any other data sources, into
10 the model as we kind of develop this research, and
11 some of this might be used in -- to kind of inform
12 the shark fishery review, which we talked about
13 previously, and I'd just like to highlight there,
14 that depredation is identified as a management
15 based research priority, and that's the link that
16 can take you to the document, where you can read a
17 little more about that, and any questions for us,
18 and things to -- other things to explore, and --

19 MR. BROOKS: Yeah.

20 MR. DUFFIN: -- the opinion on what
21 factors are driving depredation.

22 MR. BROOKS: So, Ben, I want to open

1 this up for questions or comments, and I think
2 we've got a bunch of folks in the queue, who want to
3 get in. Your sound quality has been getting worse
4 and worse. I'm wondering if we can ask you to
5 dial in, and patch in by the -- by phone, and then
6 you'll be disconnected from any bandwidth issues
7 that you're having in your computer. Karyl, I
8 don't know if someone else can sort of be -- be
9 jumping in, while Ben -- while Ben does that, just
10 to sort of help keep conversation going, if
11 questions are coming, but, Ben, if you're able to
12 patch in by phone, I think, that will be helpful
13 for the balance of the conversation.

14 MR. DUFFIN: Okay, give me one moment.

15 MR. BROOKS: Okay. While you're doing
16 that, let me just flag in the chat, is a comment
17 from Marcs Hanke, talking about the depredation in
18 the East Caribbean. So, that's been sent out for
19 everyone to be able to see, and with that, I'd
20 like to go to the queue, and let me just remind
21 folks who are in the queue, if you can, if -- and I
22 think some of these may be left over, it's not

1 clear to me, from before, but if you were
2 commenting earlier, and you didn't lower your
3 hand, if you would do so, that'd be great, but at
4 this point, let's just dive in. Greg Hinks, I see
5 you are maybe in the que here, and then we'll go
6 to Marcus, and then Jason Adriance. So, Greg
7 Hinks, first. Matt, are you able take Greg off of
8 mute? Okay, let's try Marcus Drymon. Matt, can
9 you take Marcus Drymon off of mute? Okay, Marcus,
10 the floor is yours.

11 MR. DRYMON: Great, thanks, Ben. That
12 was a really great presentation. You know, we've
13 been submitting depredation related proposals to
14 various funding agencies, since 2014, so, over a
15 half of decade now, and I'm glad this is finally
16 coming to forefront because it's a huge issue.

17 Three clarifying questions, please.
18 First of all, with your bandit gear analysis, for
19 your vertical lines, did you just look at the Gulf
20 of Mexico, or were those data also available for
21 the South Atlantic?

22 MR. DUFFIN: So, that was just available

1 from the Gulf of Mexico. I think there's been
2 pretty limited coverage of the commercial vertical
3 line fishery in the South Atlantic. So, I didn't
4 have any of that data available to me.

5 MR. DRYMON: Okay, roger that. Second
6 question, in your comparison between bottom
7 longline and bandit gear, did you account for
8 soak, because it strikes me that, you know, you're
9 going to see increased depredation on bottom
10 longlines, where soaks are obviously much longer
11 than they are in Atlantic gear.

12 MR. DUFFIN: No, I didn't include that
13 in this research, but it's definitely something
14 that, you know, we can look at going forward --

15 MR. DRYMON: Okay, cool.

16 MR. DUFFIN: -- and especially
17 considering, like, some of the hook timer studies
18 that have looked at, you know, that the time it
19 takes sharks to bite and stuff like that, so, it's
20 definitely an interesting avenue.

21 MR. DRYMON: Yeah, okay. One last
22 question for now. In your analysis, does depth in

1 bandit g fishery -- you say that there was very
2 few sets below 500 feet, is that -- is that
3 correct? 'Cause your -- the figure shows data all
4 the way to 4,000, is the feet or meters, but
5 either way that's -- there's no data to actually
6 fill or inform that portion of the curve, correct?

7 MR. DUFFIN: Yeah, yeah. It was very
8 data limited there on that end of the spectrum.
9 So, I -- it's not something that I would consider
10 very, you know, lean on very heavily for that part
11 of the vertical line analysis.

12 MR. DRYMON: All right, thanks, man, I
13 appreciate it.

14 MR. BROOKS: All right, thanks. If we
15 let in Jason Adriance, and then to Rusty Hudson,
16 and then to Walt Golet. So, Jason Adriance is
17 next.

18 MR. ADRIANCE: Thanks, Ben.

19 MR. BROOKS: You're up.

20 MR. ADRIANCE: Yeah, thanks. If he
21 could go to slide nine, just more of a clarifying.
22 Great, yeah, and I understand you're looking at

1 proportion of the sets, but did you -- did you
2 look at anything in relation, and it may be a good
3 point, in relation to the trends and number sets
4 over the years? It might help inform that. In
5 other words, you know, is there an influence in
6 the number of sets that have -- that have happened
7 over the years, informing that trend or not?
8 Thanks.

9 MR. DUFFIN: So, in regard to, kind of,
10 the number of sets, it -- I'm going to zip over to
11 slide 6, real fast. So, it follows, pretty
12 closely, the number of trips. So, you can see
13 that this -- and this is just observed, so, you
14 know, we may be able to look at data from other
15 sources for the -- the total for the whole fleet,
16 for the longline. But now I've mostly just
17 examined the proportion of sets for that, for
18 slide nine.

19 MR. ADRIANCE: All right, thanks.

20 MR. BROOKS: All right, let me go to
21 Rusty Hudson, and then if you could open him up.
22 But in the meantime I just want to read one flag

1 that Marcus Hanke put in the -- Hanke put in the
2 chat, that depredation is very common on deep
3 water snapper fishery, queen snapper, and other
4 species, 1,000 to 1,800 feet, and a question from
5 Anna Beckwith, around -- are there any thoughts on
6 how much of this issue is from learned behavior,
7 in addition to increasing population? So, why
8 don't you weigh in on that, Ben, and then we'll go
9 to Rusty.

10 MR. DUFFIN: So, from the learned
11 behavior aspect, I'm not really sure, you know,
12 what -- what kind of, looking at that would be
13 like, but I didn't look at that for this research
14 we've done so far, but, yeah, definitely kind of
15 the habituation for sharks would be something
16 interesting to look at.

17 MR. BROOKS: Okay, great. You can open
18 Rusty Hudson's line.

19 MR. HUDSON: Can you hear me now?

20 MR. BROOKS: We can, Rusty.

21 MR. HUDSON: Okay, thank you. Let me
22 back up to just a point I wanted to make about the

1 previous presentation, I couldn't get back to the
2 que, on that page 22. I questioned why it was
3 spinners and not blacktip, on both of the
4 displays. That being said, let me move on to my
5 comments here. I put on my reef fish hat because
6 I have to represent these people, and I get
7 information from the private, the for-hire, and
8 the commercial, plus my experience, dating back to
9 the '60s, and all those sectors.

10 We have a big problem in the South
11 Atlantic Fisheries Management Council Region, from
12 North Carolina down to the Florida Keys, with
13 shark depredation, and it has been going on for
14 several years. It's gotten to the point, whether
15 your trolling, or whether your bottom fishing.
16 You go out there, and you get to, like, reefs,
17 where some of these sandbar sharks might be
18 hanging out, or little further off, where dusky
19 sharks may be hanging out. It gets to where you
20 can't be there five or ten minutes, one or two
21 fish, and then the next thing you know, they're
22 getting ate off the hooks, you have to move, and I

1 don't believe the concept of these sharks en masse
2 are following you from reef to reef to reef,
3 particularly when some people put many miles
4 between the reefs, and they have the same problem,
5 because we have these massive transits of over
6 wintering sandbar and duskys, coming up from
7 Mexico, in the late winter, early spring, breeding
8 off of the Central East Coast of Florida, and as
9 far as that goes, and then they -- having their
10 pups in the case of the pregnant ones, usually
11 further north, like North Carolina and that region
12 for the pupping grounds and stuff.

13 But that being said, we just have a
14 terrible problem with depredation, and it keeps
15 coming up. Jessica McCulley, our Chair of South
16 Atlantic Council, has sent letters to y'all
17 indicating use of -- constant problems.

18 Now, here's the other thing. We can't
19 fish in state of Florida waters, as far as state
20 waters, because of the rules from 1992. So, we
21 have to, on the East Coast, have those sharks,
22 like, blacktip when it's the easterly flow, where

1 the bull sharks come outside three miles, and then
2 we have some longline that might catch them.
3 Longline is about the only effective way to catch
4 those. On the West Coast of Florida, it's 10
5 miles. So, that's a lot of area. There's no
6 fishing in a lot of places for the sharks to do
7 their thing.

8 The other part of the things that I want
9 to note is depredation complaints that I get from
10 Texas to Maine and down into Caribbean for years,
11 and part of the issues in the gulf, like Jason
12 indicated, it's not only blacktip and bull near
13 shore. We, you know, most of our commercial guys,
14 for fishing, want blacktip and whatever they can
15 catch on the Atlantic side, in the Federal waters,
16 but if you move north, you get on up there where
17 the tuna guys are getting depredated off of North
18 Carolina. Then, you get on up where the great
19 whites are feeding on those seals, and then we're
20 seeing a lot of increase in the big great whites,
21 down off of Florida, and that's because, probably,
22 they're following the right whale having calves,

1 and hopefully the mothers are at least effective
2 in preventing losing their calves. I don't know
3 if there's any documentation of all that, but it's
4 something to keep in mind, that we do have these
5 problems.

6 So, most of my stuff is comments, the
7 fin bans and everything, the efforts in Congress.
8 The efforts by states and stuff has crippled the
9 shark industry, and unless there's a way, and I
10 saw that y'all had a presentation with an increase
11 in the shark rate prices, but was, you know,
12 something decent I -- for a change, but that's how
13 we built the market, until '87-'88, when the shark
14 fins became a little more valuable than the two
15 and four dollars a pound we were getting paid back
16 in the early and mid '80s, but once you get up
17 into the '90s and the management plan starting,
18 and of course in 2008, once you took us off of the
19 trip limit and put us on the number of head, next
20 thing you know, we have increasing populations
21 even more. So, all of that said, it's made for
22 the problem, and I don't know how you're going to

1 solve it quicker, unless you have a way of -- like
2 Mike's saying, or some selective targeting, but
3 you have to be able to have a market. That's the
4 only way any of this will fly. Thank you.

5 MR. BROOKS: Okay. Thanks, Rusty.
6 We'll go to Walt Golet, next, and I'll just note a
7 couple of questions and discussion in the que.
8 One question is whether marine mammals might be a
9 source of any of the depredation that we're
10 seeing, or a significant amount, and then a
11 question of whether or not there's anything in the
12 literature that's showing any kind of mitigation
13 measures, either in gear, or gear configuration,
14 or fishing practice that can reduce depredation,
15 and a little bit of a comment there, that there's
16 some evidence that mitigation measures that maybe
17 could be deployed.

18 MR. DUFFIN: So, I'll speak to the
19 marine mammals' depredation, so that the -- the
20 type of animal depredating for both these data
21 sets is indicated. So, it's not just an overall
22 catchall for depredation. That said, I do have an

1 extra slide here, that we could kind of take a
2 look at some of the marine mammal depredation as
3 well.

4 So, on the left here, you have the
5 Pelagic Observer Program, kind of a comparison
6 there between the proportion of sets with marine
7 mammal depredation, so much smaller, and then
8 looking at some of it of -- indicating dolphin
9 depredation by the Reef Fish Observer Program, and
10 just a comparison there of gear type. You see
11 that the longline also has higher depredation by
12 marine mammals.

13 MR. BROOKS: Thanks.

14 MR. DUFFIN: Thanks.

15 MR. BROOKS: Let's open up Walt Golet.

16 MR. GOLET: Hi, everybody. Ben, can you
17 hear me okay?

18 MR. BROOKS: Yes.

19 MR. GOLET: Okay, great. Well, hello,
20 everyone. Ben, thanks for the presentation. I
21 just wanted to comment on a couple of things.
22 Number one, I think one of the keys to sort of

1 beginning to unravel what's going on here is to
2 identify which species are actually doing the
3 depredations. I'm sure it's more than one
4 species. I can speak from firsthand experience,
5 when I fished with Greg a couple years ago, and we
6 were trying to tag. There were multiple species
7 of sharks that were depredating our catches, but I
8 think that's an important thing, and there are
9 methods that are in place, rather that you can use
10 to actually do that. So, I think that's an
11 important thing.

12 So, you -- so, of course, we have
13 obvious economic effects here for commercial
14 boats, for charter boats, and so, and what have
15 you, and I also want to point out the effect that
16 this has on the scientists trying to do work on
17 other species. You know, I fished with Ron and
18 with Greg, down in North Carolina for a few years,
19 as have my colleagues, and I cannot tell you how
20 frustrating it is to invest unknown tens of
21 thousands of dollars into a trip, and tags, and
22 personnel, and boat time, and then to see your

1 tunas either not make it to the boat or make it to
2 the boat and then when the tag pops off notice
3 that that tag is in the belly of the shark. So,
4 the impacts are far reaching for a lot of this
5 depredation stuff, but it certainly affects the
6 boats and the people who are doing the fishing for
7 income, but it also has further reaching effects,
8 and I think it definitely needs to be a high
9 priority for NOAA to get an -- a better
10 understanding of what's going on.

11 With respect to Anna's comment on
12 learned behavior, again, I didn't test this, but
13 my personal observations with Greg and with Ron is
14 there's no question these sharks have learned
15 where these boats are fishing. The tunas, when
16 you -- when you hook these tunas, the sharks are
17 on within seconds, and they're gone. Most of
18 time, you can't even get them to the boat, and so,
19 again, it's a really big problem.

20 And then the last thing, you know, I
21 brought this up at the -- at maybe two or three AP
22 meetings ago, but just to kind of give you an

1 anecdotal example of what's going on, when I was
2 down there with Greg, about our six or seven, and,
3 Greg, if he's on here, he can correct me, I
4 believe there was six or seven of us from the
5 Oregon Inlet Fleet that were out. We lost 177
6 yellowfin tunas in one day. So, just, you know,
7 again, just for some perspective, that's one
8 little niche, one little -- one little nook of the
9 world. So, thank you for your comments. Ben,
10 thank you for your presentation. Thank you,
11 Bennett.

12 MR. BROOKS: Okay. Thanks very much.
13 I've got a bunch of people in the queue. I've got
14 Marty Scanlon, then Marcus Hanke, then Mike
15 Pierdinock, then Tim Pickett, then Scott Taylor,
16 and then Rick Weber, definitely will do our best
17 to get all of those folks in before the break.
18 So, let's go to, next, to Marty Scanlon and then
19 to Marcus. Marty, you're up.

20 MR. SCANLON: Okay.

21 MR. BROOKS: Morning.

22 MR. SCANLON: Yeah, as far as

1 depredation in the Pelagic Longline seen here, you
2 know, you got to understand that once that fish
3 has been depredated, the value of that fish goes
4 from, say, five to seven dollar a pound fish, and
5 it goes, you know, 50 cents to two dollars a
6 pound, minus the cost of the trucking and the
7 packing, which is -- can be anywhere from 50 cents
8 to 70 cents a pound, in our -- for, you know,
9 exportable fish, that's even more than that.

10 As far as the heads on, you know, I
11 mean, what about the size limit? I mean, there's
12 size limits on the sword, there's size limits on
13 tunas, and up until recently, we weren't allowed
14 to retain the tuna fish, the bigeyes, yellowfin,
15 and the bluefin, without the tail on. So, that's
16 my comment.

17 MR. BROOKS: Thanks, Marty. Marcus
18 Hanke, and then to Mike Pierdinock.

19 MR. HANKE: Hello, everyone. Good
20 morning.

21 MR. BROOKS: Good morning.

22 MR. HANKE: And just to highlight the

1 comments I did before, depredation at the boats,
2 to get to the point that they've arrived to the
3 fishing spots and turned off the engine, and in
4 five minutes we have the fish swimming, before you
5 drop any line in the water. You have the sharks
6 swimming around the boat, and you have to move
7 along, trying to get to another spot with less
8 sharks. Silky and Caribbean sharks are the most
9 common ones that eat our catches on the shallow
10 water, range from 80 to 180 feet.

11 The insular shelf here are very thick,
12 which makes different species of shark interacting
13 with the fishermen because the drop in the shallow
14 water and the deep water are really kind of
15 blended and mixed together because of -- there is
16 no slow slope dividing them too much. Then, to the
17 point that the -- some clients, they stop coming
18 or stop asking for some trips, because they cannot
19 deal with the sharks anymore. That's all. Thank
20 you.

21 MR. BROOKS: Okay. Thanks. Mike
22 Pierdinock, and then Tim Pickett.

1 MR. PIERDINOCK: Thank you, Bennett.

2 Great points made by people so far. I'd like to

3 specifically talk about our New England waters,

4 so, some species that haven't been mentioned. For

5 quite some time now, we've -- we have constant

6 interaction with porbeagles and blue sharks, and

7 to some extent makos. If you're north of the Cape

8 in Western Gulf of Maine, while you're

9 groundfishing, depredation from porbeagles and

10 blue sharks is significant, and then while you're

11 groundfishing, and then with makos mixed in there,

12 while groundfishing, or with bluefin tuna that may

13 be in that in area, and south of the Cape's a

14 different story. There's a different mix of

15 sharks, more makos, and there's no lack of them.

16 We see a lot more of them now, as a result of the

17 restrictions and measures. I mean, everybody is

18 aware that, you know, it's a success story. The

19 great white sharks have returned because of

20 conservation measures, and we have the juveniles

21 near shore, and the big guys that are out there,

22 and we have more encounters with them, with them

1 cutting bluefin tuna in half, and near shore, with
2 the juveniles eating striped bass while we're
3 bringing them in.

4 I would like to just note to anybody
5 that fishes, for sharks, they know that noise is a
6 -- something that attracts sharks, and there's
7 various methods and means and things you can do to
8 do that, and, for instance, the proposed wind
9 turbines, which when they get put in, what will
10 that impact to that noise be, and will it attract
11 sharks? I really don't know, but I use noise to
12 get them to the boat and do different things that
13 -- to make that happen. So, it's kind of like a
14 dinner bell.

15 As far as the marine mammals note, that,
16 you know, our dinner bell up here for the great
17 whites are 50,000 seals that populated our waters,
18 and the fact that they're here, and what they do,
19 and what they eat, and how they impact our
20 environment, but, unfortunately, there's nothing
21 we can do about that. You know, and as Rusty
22 pointed out, this is, and others have pointed out,

1 this is nothing that is specific to New England,
2 or Florida, or so on. This is from New England
3 all the way down to Texas.

4 I fished with Bouncer Smith before he
5 retired, and he got us re-ef fishing, and had some
6 monster grouper that 75 percent of them were cut
7 in half or the line cut by blacktips, while we
8 were fishing. So, we got a -- even a more
9 significant problem down there, as well as off of
10 North Carolina, from the anglers I speak to, and
11 to some extent, from New York, New Jersey, on
12 south, depending upon the shark species that are
13 there. So, that kind of sums it up. Thank you.

14 MR. BROOKS: Thanks, Mike. I've got Tim
15 Pickett next, and then we'll go to Scott Taylor.
16 I want to note that there's at least one name of
17 someone in the que who is not an AP member, and I
18 just want to remind folks, for -- for members of
19 the public, we will be taking public comment later
20 this afternoon, at 2:45. So, there'll be an
21 opportunity to weigh in at that point. Let's go
22 to -- go to Tim.

1 MR. PICKETT: Hi, guys. Yeah, I've been
2 waiting to speak to this, here, for quite a while,
3 you know, a lot of -- a lot of points I'd like to
4 make. Number one is that the shark problem in
5 South Florida, in the Florida East Coast, is the
6 -- the best word I can use to describe it is
7 ludicrous. You know, Scott spoke earlier of the
8 event, where he had the fisherman, that his gear
9 got hauled and all of that stuff. I won't speak
10 to that, exactly, but, you know, in that -- that
11 event kind of spurred on a lot of the -- a lot of
12 awareness to the shark problem that was here, and,
13 you know, kind of had some organization behind it.

14 I just want to emphasize that there's
15 two people that are in the que that are going to
16 speak this afternoon, during public comment, Pat
17 Price and Art Seth. They've been organizing a lot
18 of people to, you know, get the recreational
19 community to vote very highly sought after charter
20 fishermen and tournament fishermen, that have
21 organized a lot of really powerful names behind
22 them to draw attention to this issue. So, I -- I

1 suggest everybody, you know, tune in to hear what
2 they have to say during the public comments, but
3 in terms of, you know, this presentation and
4 everything, in the effort to gather data, I would
5 strongly suggest some more emphasis on the Florida
6 East Coast.

7 South Florida, in particular, doesn't
8 have a whole lot of vertical line or obviously
9 bottom longline data to be collected because
10 there's not a lot of those -- the fisheries really
11 don't exist that much there. A commercial fishery
12 to focus on might be the Kingfish Fishery, which
13 is struggling with a lot of problems with the --
14 with the shark issue here on the East Coast. On
15 the other side of the coin, the recreational data
16 collecting, you know, you could survey everybody
17 at, you know, local meatfish tournaments. You
18 could survey everyone we had issues with, with
19 sharks that haven't existed in the past, in the
20 sailfish fishing tournaments, in Recreational
21 Sailfish Fishery.

22 It's just gotten so ridiculous in the

1 last couple years, you know, gathering data. You
2 know, you have a concentration of really good
3 fishermen, if you concentrated on tournaments and
4 things like that. You know, I could put you in
5 contact with these people. They would be more
6 than happy to have somebody there collecting
7 information. I think, you know, part of this
8 fund, this effort, the partnership and some of
9 these guys have put forward here with the
10 recreational communities, you know, is very nice
11 because they're encouraging the commercial fishing
12 of these sharks and the exploitation of them
13 because it's not letting them conduct their
14 business on the recreational side of things.

15 So, it's been kind of nice to see
16 recreational, you know, industry has embraced this
17 Commercial Shark Fishery, you know, and I think it
18 -- it's a very encouraging thing, rather than
19 having, you know, the division that usually exists
20 between the commercial and recreational industry,
21 but, you know, just so you know, in terms of, you
22 know, looking forward and, you know, not just

1 telling you that there's a problem, but you need
2 -- I know you need a way to quantify it, and you
3 need a way to deal with it.

4 You know, everybody that organizes a
5 tournament down here would accept the survey with
6 open arms, to survey their fishermen at a
7 Captain's meeting, or something like that, or the
8 same thing for billfish tournaments. You know,
9 everyone in the recreational community is really
10 dying for a way to help, and to help, really,
11 address and show how bad this problem really is,
12 and, you know, they just need a method of being
13 heard, and they need to feel like they are being
14 included in the process. So, that's about all I
15 have to say.

16 MR. BROOKS: Thanks, Tim. I appreciate
17 it. I've got about five or six folks still in the
18 queue. There's a couple of comments in the chat,
19 too, that I would encourage people to look at.
20 Might sort of let this run about five minutes
21 long, or 10 minutes long, if we're still -- have a
22 queue, and sort of trim lunch to about -- well, I

1 know folks may have calls. So, let's see if we
2 can get through this. Scott Taylor, you're up.

3 MR. TAYLOR: So, I felt that's worth
4 listening to, while Jeff and Dewey and (inaudible)
5 we've been hearing over the last five years from
6 every one of (inaudible) members here. I mean, it
7 seems with, almost unilaterally, there seems to be
8 a consensus that this is, you know, a huge
9 problem, and it kind of makes me curious about how
10 we're reconciling that with -- in terms of the
11 science because we would -- if we're science
12 driven, and is that not, and this is really a
13 question (inaudible) in the agency, and then I
14 have one suggestion. What do we do about this?

15 There's really not much that we can do,
16 on our end, without this either being regulatorily
17 changed, or at least a perception of some of these
18 stock assessments and the science that's coming
19 out of -- that seems to be clearly disconnected
20 with what everybody, everybody, in these meetings,
21 is on the observation side, and there is -- the
22 comment that I want to make is that we have a huge

1 problem that -- of which -- that you have various
2 different stage, regulating these shark problems,
3 on a Federally approved fisheries. So, we're
4 maybe legal in one state, for I said -- to sell
5 these products. It's not legal in an additional
6 state.

7 I'm wondering whether or not that
8 there's anything coming out of the agency to deal
9 with this on a more localized level because I
10 think that ties into what Rusty was talking about,
11 in terms, but we don't have a market for the
12 product, if we can't drive the commercial
13 viability of the product, if we don't have either
14 a thin, or that it's cost effective, or I can sell
15 it. There's no point in harvesting this stuff, if
16 it's not going to be utilized as a (inaudible).
17 So, well --

18 MR. BROOKS: Thanks, Scott.

19 MR. TAYLOR: -- before we end, one
20 question that I have is that -- is there anything
21 on the table, here, that the agency can offer, or
22 that's in the queue, here (inaudible) that'll offer

1 results of these issues?

2 MR. BROOKS: Ben or Karyl, do you want
3 to weigh in on that?

4 MS. BREWSTER-GEISZ: So, that's a tough
5 question, Scott. As you know, we started talking
6 about this in some of the AP last year. We raised
7 a number of questions for the AP. We're still in
8 the factfinding mode. I forget, there's been a
9 lot of discussions. So, getting exactly who
10 mentioned -- when we figure out the species, I
11 want to say that was Walt. I agree, we do need to
12 figure out the species, and figure out the extent
13 of the problem with each of the regions. Are they
14 different species in each region, and how do we
15 come to that? And as -- it was -- Mike Pierdnock
16 watches the noise of boats. Are there things that
17 like the noise? Or was a method of setting that
18 can change how that hap -- how depredation happens
19 or doesn't happen. These are all things we're
20 exploring, when we figure out, so, yes, keep this
21 coming.

22 In regard to the tournaments and

1 collecting there, I know some of the electronic
2 methods of collecting recreational catch now has
3 an option for depredation. It's not always clear
4 if it's shark depredation or marine mammal, but at
5 least it's something. So, if you are reporting
6 it, that can only help us.

7 MR. BROOKS: Thanks, Karyl. Let's go to
8 Rick, Rick Weber, and then Jeff Oden.

9 MR. WEBER: Sorry. I'm going to ramble
10 here just a minute, Bennett, because I -- because
11 this topic has been up for so very, very long. I
12 know Karyl just said we brought it up a year ago,
13 but, really, the shark fishermen have been saying
14 for a long time, that sell our plenty of sharks,
15 in their experience, and we have heard that the
16 plural of anecdote is not data, but at some point,
17 it's telling us something. When this anecdote
18 repeats and echoes and repeats, it's telling us
19 something, and so, my first instinct with this
20 report by Ben is it starts to feel like when the
21 sun -- a report of when the sun goes down, it
22 becomes dark. Yes, when we rebuild sharks, we're

1 going to see increased depredation. There is no
2 shocking revelation to me here, which has been
3 working at rebuilding sharks and or seeing
4 increased depredation.

5 What I do like about it is we are moving
6 out of the anecdote into the data. We can now --
7 there is some quantification going down here, but
8 these guys have been talking about this for a lot
9 of time, and it feels like the industry or the
10 government either doesn't believe or doesn't care,
11 and I have to resolve that with the people that
12 I've met at the agency, and that does not mesh for
13 me. I work with people who believe us. I work
14 with people who care. I have not met this person
15 that wants to destroy U.S. Fisheries. I have not
16 met this person amongst your group, which leads me
17 to believe that somehow you don't have the tools.
18 You don't have the data.

19 There is something. There is a massive
20 disconnect for the entire AP to be telling you
21 something, and you are not able to address it. It
22 looks like you don't want to address it. I don't

1 believe that. I believe you want to address it.
2 I believe you are not able to address it, and so,
3 I find myself wondering how we're going to manage
4 for success with Apex Predators. Do we need
5 guidance from people who have rebuilt coyotes or
6 bears? How do -- how do we manage with a
7 predator, and what does success look like?

8 I'm one for believing maybe we don't
9 have enough basic biology information. Perhaps
10 we're rebuilding local populations. So often, we
11 talk about dusky look like this, or bull look like
12 that, and maybe our language is not yet refined
13 enough to say North Carolina dusky is rebuilt, but
14 Jersey dusky is not, or something. It just feels
15 like you don't have the tools, and, finally, I
16 just made a quick note here on habituation.

17 Of course, habituation happens. Anyone
18 that has spent any time at a fish cleaning
19 station, anywhere with clear water, knows that
20 habituation happens. Those things line up and
21 wait, but if there's -- going back to the -- just
22 the concept of you guys having the tools, if

1 there's something we need to do to help you guys,
2 we're all here because it is absolutely in the
3 recreational. I had to DQ a fish in my own
4 tournament because a blue marlin got a big bite
5 taken out of it. I have people asking about
6 whether world records are going to need to start
7 considering this. If it gets difficult to boat a
8 big fish without suffering at least a mutilation,
9 how are we going to deal with it? This is going
10 to keep going, guys. We need to find a way.
11 Thanks.

12 MR. BROOKS: Thanks, Rick. Thanks, and
13 a couple of folks in the chat sort of giving a
14 thumbs up to your comment. Jeff Oden?

15 MR. ODEN: It was interesting hearing
16 Walter's, you know, rendition of what goes on in
17 the Outer Banks a little bit ago, and I've been
18 back and forth with him, via phone message, here,
19 and he essentially conveyed to me that it was
20 mixed, but I think we also need to -- I think we
21 all realize the biggest impediment, I think, or I
22 see, as ever achieving our -- or getting our shark

1 fishery back has always been dusky.

2 Well, Dewey and myself, in conjunction
3 with Walter a few years ago, did a tagging study,
4 and we showed that the tagging, you know, was five
5 to 10 percent, I believe, max. I think it was
6 five percent on Pelagic Longline discards on
7 duskys, and anyway, Walter initially had hoped to,
8 you know, he assumed we're -- it was going to take
9 us, I guess, four or five trips, a piece, Dewey
10 and myself, to get this study done.

11 Well, in 18 hours, we had got our -- and
12 we were -- not only got our study done, but we
13 were on our way home, and I believe we were each
14 looking at 50, 50 duskys, per, but I can't
15 remember statistics, but anyway, and Walter's
16 response to my phone question inquiry about what
17 was going on with the Outer Banks lead, he said it
18 was a mixed bag. It was hammers, spinners,
19 duskys, that were doing depredation there in the
20 tuna fish region, and predominantly, in our
21 longline fishery, it's more than likely mostly
22 duskys, it seems like, but anyway, it's just --

1 it's just hard to keep watching, and seeing the
2 stonewalling by this agency, knowing where it's
3 probably coming from, and still having to swallow
4 what we're given at these annual meetings, and
5 anyhow, it's --

6 MR. BROOKS: Thanks, Jeff.

7 MR. ODEN: -- again -- okay, thank you.

8 MR. BROOKS: Appreciate it. Mark
9 Sampson, I don't think you've had a chance to
10 weigh in here. Let's see if we can get you in
11 before we go to the lunch break. Go ahead.

12 MR. SAMPSON: Yeah. Real quick, thank
13 you. I just sort of spin it off of what Rick was
14 saying a little bit. I guess, just to clarify --

15 MR. BROOKS: So, you just cut out on us
16 entirely. Mark, you there?

17 MR. SAMPSON: Yes, I'm here.

18 MR. BROOKS: I can barely hear you.

19 MR. SAMPSON: Can you hear me?

20 MR. BROOKS: No, we can't, Mark. You're
21 going to have to try something different or throw
22 it in the chat. We can't hear you at all.

1 MR. SAMPSON: Okay, if you can't hear me
2 at all, I'll go into the chat, okay?

3 MR. BROOKS: Okay. Okay.

4 MR. SAMPSON: Yep. Can you hear me now?

5 MR. BROOKS: I can hear you now.

6 MR. SAMPSON: Okay. Real quick, I --

7 MR. BROOKS: Let's try it again.

8 MR. SAMPSON: Yes, I don't doubt for a
9 second that those who are claiming an increase in
10 shark depredation in their areas are 100 percent
11 spot on in telling us. I just wanted to throw out
12 there, though, that here in the Mid- Atlantic
13 area, where we operate, you know, off of Maryland
14 and to some degree of the Delaware Coast, we're
15 not seeing it, at least -- I'm just talking
16 recreational fisheries here. We're not --
17 certainly occasionally, we get hit by sharks, but
18 it's not happening to the extent that they are in
19 other areas. So, I just keep -- I just, you know,
20 for the sake of argument, we need to keep that in
21 mind, that it's not a blanket thing, where
22 everywhere, you know, the sharks --

1 MR. BROOKS: Right.

2 MR. SAMPSON: -- are creating those kind
3 of problems.

4 MR. BROOKS: Right, so, widespread, but
5 variable, right --

6 MR. SAMPSON: Correct.

7 MR. BROOKS: -- so, don't assume it's
8 universal. Yeah, thanks, Mark. Dewey, I think I
9 see your hand up, and I don't think you've had a
10 chance to weigh in on this one. You're open,
11 Dewey.

12 MR. HEMILRIGHT: Can you hear me?

13 MR. BROOKS: We can, yup.

14 MR. HEMILRIGHT: All right, thank you.
15 Yeah, I started shark fishing in 1994, and since
16 that period of time, the management of sharks,
17 we've watched nothing but a decrease in the catch
18 of sharks. We've put a management in place, the
19 use of circle hooks, Pelagic Longline, and that
20 increases the chances for the survival. It's done
21 nothing but had shark conservation. We've killed
22 the directed shark industry; not many folks left,

1 or too old to fish, or markets are gone.

2 I hate to be the bearer of bad news, but
3 until the science part and the surveys are done
4 and the stock assessments are done, either it's
5 going to continue, it's going to get worse, and
6 maybe the only way to change it would be a
7 executive order of some type for it to happen.
8 So, we'd better get used to it because it's going
9 to get worse. It'll probably be another five to
10 seven years before the science will catch up and
11 the administrative record will change to allow any
12 type of shark fishing directing, and that's -- I
13 only know -- only imagine who's left and what the
14 market would be.

15 I mean, we've kind of -- management has
16 done this to industry, also with the help of the
17 NGOs, so. It's tough, but it's going to get
18 worse. It's going to continue on. It looks like
19 it appears, from reading some letters, that there
20 might be some industry that's in the for-hire
21 industry or recreational industry that's going to
22 go out of business because of all this shark

1 depredation, but it's serious stuff, and it's not
2 going to get no -- it's not going to -- it's not
3 going to be fixed overnight. So, we'd better get
4 used to it (inaudible). Thank you.

5 MR. BROOKS: Thanks very much, Dewey. I
6 want to just encourage people to look at the chat,
7 and, again, there are a number of comments that
8 have been posted there that -- and some more
9 points to this, this conversation. Obviously,
10 Karyl, and team, you're hearing pretty -- pretty
11 strong feedback, that I think you probably
12 expected to hear, which is there is -- there's a
13 lot of widespread concern here, and, again, a lot
14 of suggestions on what kind of actions might be
15 needed, you know, from relax in regulations,
16 finding ways to create markets, improving the data
17 collection, working with fishermen on that,
18 figuring out the tools, as Rick Weber said, doing
19 assessments, so I guess a lot for you all to,
20 obviously, be pushing at. Is there anything you
21 want to say, Karyl or Ben, or where you sort of
22 see heading with this, and just any -- any sort of

1 broader reactions to this conversation?

2 MS. BREWSTER-GEISZ: Thanks, Bennett,
3 and thanks to all of our AP members, and I do
4 always appreciate the discussion. This type of
5 discussion is why we've started what we all share
6 our shark fishery with you, and why our continuing
7 discussions about depredation, to try to help
8 figure out where it is we should be focusing our
9 time, as we push on. I do want to point out Jeff
10 Oden had brought up the post-release mortality, to
11 assess the sharks, on the Pelagic Longline study
12 that they participated in, and that study did
13 publish, and I'll post it in the chat, that study,
14 and they found that there was five percent, which
15 takes mortality (inaudible) Pelagic Longline. So,
16 that is good news (inaudible) we don't have it
17 scheduled yet (inaudible).

18 MR. BROOKS: Thanks, and, Karyl, just
19 from a technical standpoint, that was -- your
20 voice was pretty garbled there. So, I don't know
21 if -- I don't know if this is was a somewhat
22 universal issue that people are having, but you

1 might want to encourage people to phone in
2 separately from the -- from using the voice with
3 your computer, and maybe, Matt or Pete, we might
4 throw something in the chat, just so people are
5 clear on exactly how to do that.

6 Before we go to lunch, I just want to
7 weigh in on a comment in the chat folks may have
8 seen. Marty Scanlon weighed in with some concerns
9 about an -- and some frustration with a -- with
10 the comment -- public comment period yesterday,
11 when Glenn Delaney was speaking, and so, I want to
12 just sort of just talk to that, just for a moment
13 or two, just to say I always try to approach my
14 work as, how should I say it, maybe like a force
15 for good. I see my role as trying to make sure
16 that everyone is heard, to make sure that everyone
17 can share their insights, and that we're working
18 well together.

19 When I weighed in yesterday, on the
20 public comments, it was in that spirit, and I
21 think I can only conclude that I didn't bring my A
22 game at that moment, and certainly did not intend

1 any, any disrespect to Glenn, who I work with for
2 years, and I apologize if it was seen that way,
3 you know, and so, I just -- I just wanted to put
4 that out there. I also want to note that in
5 public comments, and I was going to say this
6 later, that going forward, as should have been
7 yesterday, public comments really are an
8 opportunity for the public to comment, and our
9 general practice is that we don't get into a
10 conversation there. That space is created for
11 public to weigh in. Certainly, that's how we'll
12 manage it going forward. So, I just wanted to put
13 that out there, apologize to anyone who took
14 offense there. It certainly, certainly was not my
15 intent.

16 With that, I want to get us to lunch,
17 remind people, please, to charge your phones,
18 charge your computers, as you needed, when we're
19 at lunch. If you've raised your hand, if you
20 could go into the -- into your computer screen and
21 lower it, so we can start with a fresh que in the
22 afternoon, and with that, just when we reconvene

1 at 1:00, Randy, anything you want to say before we
2 go to break?

3 MR. BLANKINSHIP: No, just -- I'll just
4 thank you for your comments and what you said
5 about the public corrected, and I appreciate the
6 steps you took in there. That's it. I'd -- I'll
7 see everybody after lunch.

8 MR. BROOKS: Okay. I'll see you all at
9 1:00. Thanks, everybody.

10 (Recess)

11 MR. BROOKS: Okay, we are coming up on
12 1:00 here, and I definitely don't want to clip
13 into time with leadership. So, let me just
14 welcome everybody back. A couple of very quick
15 reminders. Just when you have questions or
16 comments, please throw them in the chat only
17 because that's where we're looking. For folks who
18 raised your virtual hands in the earlier
19 conversation, if you can go back in and lower them
20 by clicking back on it, that'll be really helpful.
21 Because then we'll -- I'd love to start this with
22 a clean queue and know who's in the queue. So,

1 Marcus, Dewey, Scott, Marty, Marcos, if you can go
2 in and lower your hands, that'd be great.

3 Our afternoon schedule in a second,
4 we'll hear from leadership. We'll have about 45
5 minutes for that conversation. After that we will
6 have an in-depth conversation, an update on
7 research and data collection that the Agency is
8 doing in support of spatial fisheries management.
9 At 2:45, we will shift to public comment. And
10 then at 3:15, we will do a meeting wrap-up and
11 we'll adjourn by 3:30. So, with that, Randy, I
12 think I want to hand it off to you to introduce
13 leadership.

14 MR. BLANKINSHIP: Okay, thank you very
15 much. We are honored to have Chris Oliver and Sam
16 Rauch with us. And they will be -- Chris, I
17 believe, will be providing a few words. And look
18 forward to the past, and also to comments and
19 questions that the AP members may have in
20 follow-up to that. With that, I'll just turn it
21 right over to Chris. I see that his video's up,
22 so it looks like he's ready.

1 MR. OLIVER: Let me see if my audio is
2 up. You got audio?

3 MR. BROOKS: Okay, it sounds good.
4 Thank you.

5 MR. OLIVER: Great. Just a few key
6 remarks. Thank you, Randy, and good afternoon
7 everybody that's online and happy to be able to
8 join you for a little while. I was hoping to sit
9 in on more of your agenda, but I've got a host of
10 other meetings going on yesterday and today. But
11 I want to start by thanking all of you for the
12 time you're taking. I know even in the midst of
13 the COVID crisis, people have their own lives and
14 their own obligations. So, I appreciate the time.

15 I was looking through the membership
16 list just a little while ago before the call to
17 remind myself who all is on the HMS AP. And I was
18 pleasantly reminded of the breadth and depth of
19 the representation and expertise that (inaudible)
20 upon this advisory panel. So, I just wanted to
21 announce that and start by thanking you for your
22 time.

1 I know to say these have been strange,
2 extraordinary, challenging times, would be a
3 fairly gross understatement. And I know that many
4 of you on this panel are experiencing that
5 first-hand. And I wasn't there for it, but I know
6 yesterday you got some highlights from the
7 Fisheries Economic Situation Report that really --
8 and I don't need to go through the various
9 statistics there. I think everyone's pretty
10 painfully aware of the impacts of our commercial
11 and recreational fisheries and support industries.

12 I think there are a little bit of
13 encouraging signs though, improving trends in some
14 of the commercial fishing efforts and perhaps, as
15 well, in the for-hire charter sector. I've heard
16 anecdotally at least the private vendor fishing
17 effort in many areas is actually up. So, and I
18 think restaurant sales have improved since April.
19 And that may help improve some of the demand for
20 HMS products.

21 We're continuing to do the best we can.
22 I think on a regulatory front, we're largely

1 maintaining our essential regulatory functions.

2 The science side of the house, as you know, has

3 suffered. We've cancelled virtually every major

4 fishery survey around the country over the past

5 three to four, five months. A lot of that is

6 information we just won't ever be able to

7 retrieve. The impact depends on the different

8 fisheries of what data chains we have. But that

9 side of our mission has definitely suffered under

10 this plight.

11 I'll talk just a little bit about the

12 recent executive order for promoting seafood

13 competitiveness and economic growth. The

14 regulatory aspects of that order reach back to

15 previous executive orders going back to 2017 when

16 we first elicited public comment through the

17 Federal Register to the councils and other

18 entities in the public to identify unnecessary or

19 overly burdensome regulations that could be

20 altered or removed. And we've accomplished a lot

21 through that and, you know, we identified several

22 HMS regulations or areas of regulation that

1 warrant consideration. I think several of those
2 were included in the recent and ongoing actions
3 related to the bluefin pelagic longline area based
4 and weak hook management measures through
5 Amendment 13, the swordfish/shark retention rule,
6 and the research and data collection in support of
7 spatial fisheries management. And I'll talk a
8 little more about that.

9 And we want to continue to take any HMS
10 AP recommendations into consideration, and we're
11 always open to that through those suggestions
12 through the HMS AP. And I think, you know, HMS
13 fisheries are an area that I think there's
14 opportunity there, and additional opportunities.
15 And I think too we'll get a presentation this
16 afternoon on conducting research and data
17 collection relative to appropriate spatial
18 management. You'll hear about the PRiSM model,
19 which is hopefully help us take a look at those
20 different time and area closures and other
21 management measures to steer gear-related
22 requirements. So, I think there's additional

1 opportunities there.

2 So, I think it's important to ensure
3 that our measures are still up-to-date and
4 appropriate in what is really an ever-changing
5 environment. And I think that spirit of reg
6 reform was put for both our commercial and
7 recreational fisheries.

8 I know that you continue to deal with
9 shark management challenges. And we've undertaken
10 a review of shark fisheries (inaudible) for-hire
11 (inaudible) future actions and address some of the
12 issues that we've heard. The issues of shark
13 depredation is a growing concern across the
14 fisheries. And I look forward to continuing to
15 learn more about that and hearing about whether
16 there are solutions.

17 Everything's a balancing act. I know
18 that -- I don't think there's a week goes by I
19 don't see a headline somewhere that the sharks of
20 the world are being driven to extinction. And
21 then on the other hand, I hear that there are so
22 many sharks out there, I can't even get a fish to

1 the boat. So, of course it depends on where you
2 are and what species we're talking about. But I'm
3 hearing more and more about that. And now I'm
4 starting to hear about dolphin, bottlenose dolphin
5 depredation as well.

6 So, those are some of the issues I know
7 that you're going to be talking about and that are
8 certainly of keen interest to me. I know you've
9 got the bluefin tuna stock assessment coming up
10 for a final report in late September. And I've
11 gotten some preliminary briefings on that. And I
12 know there's some concern and controversy about
13 that, so I'll look forward to seeing that final
14 report.

15 And I think that, again, despite, you
16 know, the current difficulties that these times
17 present to us and I understand that many of you
18 are missing valuable fishing opportunities or
19 other commitments. So, I'll just again express my
20 appreciation for the time you're taking yesterday
21 and today and inbetween meetings and reading
22 documents and getting up to speed and being

1 well-versed in the issues. I know it takes a lot
2 of time. So, we don't talk that often, but I just
3 want you to know how much it's appreciated by the
4 leadership team.

5 And so, with that I just want to thank
6 you again, and I know Sam may have a few comments.
7 And I got a little bit of time and Sam and I would
8 be happy to have a conversation with you if there
9 are any comments that you have that you think we
10 should be aware of or apprised of or any questions
11 that you have for us. So, with that, Randy, I'll
12 just I'll pause and see if Sam has some comments.

13 MR. RAUCH: I don't have any comments so
14 I'm happy to go straight to questions or.

15 MR. OLIVER: That means you have to take
16 the first two questions then.

17 MR. RAUCH: I may have some comments
18 really quick. Let me see.

19 MR. BROOKS: We're going to make sure
20 the first question is about those ducks behind
21 you, Sam. But, all right, I think we have about a
22 half hour or so to have a conversation here. So,

1 I think we've got a good chunk of time. And
2 again, just raise your hands if you want to get in
3 the queue. And, Scott, your hand is raised and
4 you're the first one up. So, Scott Taylor.

5 MR. TAYLOR: Thank you, Sam, of course,
6 for your time (inaudible) everybody to go over and
7 much appreciate you making yourself available.
8 You were correct, this has been an extremely
9 challenging, you know, time for all of us here in
10 the industry, and will continue to be so for a
11 while. While the economic data shows some
12 tapering and some promise, but one of the things
13 that we discussed yesterday is that there was
14 unquestionably some benefit from the restaurants
15 (inaudible) taking advantage of outside dining,
16 which is going to be a problem moving into the
17 winter months. And the consensus sort of within
18 the industry is that at the very best, we can kind
19 of hope for a flattening at this level.

20 But I wanted to focus on, you know, your
21 comments about some of the regulatory reform.
22 After 10-plus years, 12 years of being on the AP,

1 I certainly understand the process and how things
2 -- how slowly things tend to move. But from the
3 perspective of the PLL fleet, which continue to
4 see attrition, we really have not seen anything
5 materially that is either going to benefit us from
6 sampling the pricing because of the downward
7 pressure on the market from imports or our ability
8 to be able to catch, you know, more product.

9 And one of the most important things the
10 (inaudible) were discussing now for years, and I'm
11 sure that (inaudible) we probably would get
12 (inaudible) and some of the other things, but
13 (inaudible) having move forward is the ability for
14 us to get some additional product, you know, to
15 give us access to be able to catch the quota.

16 And I was just, you know, hoping that
17 maybe somebody could shed some light on the way
18 forward that's going to be meaningful to give us
19 kind of some hope for the long haul. The front
20 end, the frontline here, you know, I've been
21 trying to make this work every single day, but
22 there's, you know, (inaudible) a path forward to

1 deal with some of this spatial time within our
2 closure. Thank you.

3 MR. BROOKS: Thanks, Scott. Sam or
4 Chris, you want to jump in on that?

5 MR. RAUCH: As Chris already said, I
6 think (inaudible). As you indicated, it does take
7 a while to achieve (inaudible). There's not much
8 (inaudible). We do recognize that the regulations
9 (inaudible). So, I think we've had some
10 restrictions previously (inaudible) about how we
11 can both maintain sustainability (inaudible) and
12 also to maximize the economic opportunities
13 (inaudible). We have been (inaudible) the
14 criteria we could use (inaudible) certain areas
15 (inaudible) --

16 MR. BROOKS: Sam, can you -- hang on for
17 one second. Am I the only one who's having sort
18 of breaking up here? You too, Randy?

19 MR. RAUCH: Am I breaking up?

20 MR. BROOKS: Yeah, a little bit. I'm
21 wondering if you can either get somehow closer to
22 your mic.

1 MR. RAUCH: Yeah.

2 MR. BROOKS: We've been having some
3 trouble earlier today too, yeah.

4 MR. RAUCH: (Inaudible).

5 MR. BROOKS: It may be a bandwidth issue
6 too, so if this continues, may I ask you just to
7 phone in? Because we don't want to lose this
8 conversation. But try again.

9 MR. RAUCH: Any better?

10 MR. BROOKS: That's a little better,
11 yeah. Just keep it as close as you can, thanks.

12 MR. RAUCH: Okay. So, there's little I
13 could do about the (inaudible), but we understand
14 (inaudible).

15 MR. BROOKS: Not --

16 MR. RAUCH: All right, let me refer this
17 to Chris and I'll try to call in.

18 MR. BROOKS: Yeah, I think that'd be
19 good, thank you.

20 MR. RAUCH: Sorry, Chris. (Inaudible).

21 MR. OLIVER: Yeah. Okay, can you hear
22 me?

1 MR. BROOKS: Yeah, that actually sounds
2 very good, thanks.

3 MR. OLIVER: Yeah, I don't know what Sam
4 was going to say. And, you know, and -- the
5 gentleman speaking was a little garbled too, so I
6 didn't catch everything or who exactly it was, but
7 it was a little hard to hear. But I know there
8 was some, you know, mention of the continuing
9 attrition within that fleet.

10 I'm still struggling a bit and curious
11 to know more about the root causes of that. You
12 know, how much of that is regulatorily driven
13 versus how much of it is due to market issues. In
14 the meantime, you expressed a frustration, I
15 think, with the (inaudible) EFPP that would have
16 opened the area off of the East Coast there. And
17 I probably share some of your frustration with
18 that. I do think though that despite how long
19 things take, we have made some progress in that
20 direction with the recent amendments with the
21 bluefin pelagic longline areas in the Gulf and up
22 on the East Coast.

1 And I think that, you know, partly
2 stemming from the experience with the EFP, we
3 initiated there's basically research priority
4 program internally to take a broader look at these
5 different spatial management areas. And to
6 determine whether some of those were further ripe,
7 if you will, for considering adjustments to. So,
8 I think we -- it takes time, but I think we have
9 that process in place to evaluate the
10 effectiveness of those regulations, and whether
11 there's some opportunities there that we're
12 missing. So, I do hear your frustration, but I do
13 think we have made and will have an opportunity to
14 continue progress in that direction.

15 MR. BROOKS: Sam, are you back on if you
16 want to add anything to that? Sam's not on yet.
17 Scott, you wanted to just make a quick comment
18 based on Chris' remarks? Picking up on Scott
19 Taylor's line again.

20 MR. TAYLOR: Yes. Chris, I apologize.
21 This is Scott Taylor with Day Boat Seafood.

22 MR. OLIVER: Okay, Scott.

1 MR. TAYLOR: If you didn't hear me.
2 And, yes, to answer your question. This is 100
3 percent regulatorily driven. This fleet is
4 capable of catching our swordfish quota if we can
5 fish where the fish are. And, you know, what has
6 happened is is that over the years, that obviously
7 whether or not, you know, you're an advocate for
8 global warming or a climate dynamics, the areas
9 where these fish tend to concentrate have just not
10 been available to us.

11 This is sort of a major problem with
12 this primary access issue for us. And it extends
13 all the way down through what I will refer to as
14 true sustainability. Because even though the
15 stocks are healthy, this is not a
16 socioeconomically viable fishery at this point.
17 We're losing recruitment. We've got no people
18 coming back into it. Our fishery, with the
19 exception of a few summer months where the fish
20 exist off here off of the northeast coast with
21 proximity, these folks are subject to having to
22 fish 20 or 30 days and literally hundreds and

1 hundreds of miles offshore in order to be able to
2 try to access the product.

3 So, it's very, very difficult to recruit
4 new people coming into the industry because of the
5 geographic restrictions that we're dealing with.
6 So, it doesn't really matter to us in the industry
7 how we catch it. We've been talking about this
8 for years. We're really at a crossroads and we
9 certainly have to figure out some sort of a
10 meaningful path forward whether or not it's
11 cooperative science or a research project that's
12 structured a little bit differently, the reasons
13 that -- a lot of the reasons that these areas were
14 closed no longer exist, and I'll stop it with
15 that.

16 MR. OLIVER: Appreciate it. And I'd be
17 curious to know if there's very, very specific
18 areas that you're referring to that are productive
19 that would be productive to -- I think you said
20 swordfish. And what it would take to provide
21 relief there and, you know, maybe we got to ask
22 Randy to speak to where we are in that spatial

1 management assessment that large spatial
2 management assessment and whether that would be
3 potentially inclusive of some of those areas.

4 MR. BLANKINSHIP: Sure, and so just real
5 quickly. I know from previous discussions over
6 several years now, you know, we know that access
7 to some of the areas primary closures that along
8 the Atlantic Coast are some of those that are I
9 think that Scott has highlighted and others have
10 highlighted over time. Charleston Bump, and
11 northern areas of the Florida east coast are a
12 couple of those.

13 And as far as the spatial data
14 collection and research in support of spatial
15 management goes, that initiative is one that we've
16 been working on developing for quite some time.
17 We continue to work on it. The presentation a
18 little bit later this afternoon will talk about
19 one tool, a modeling tool, that has been developed
20 that may be helpful as part of that initiative to
21 evaluate to help develop some criteria and a
22 process for potentially access in some areas to

1 collect fisheries data from those areas.

2 We have in mind in a proposed rule on
3 that would follow later in 2021, and then we would
4 go from there. The presentation this afternoon is
5 really to introduce the AP to this tool that could
6 potentially be part of that initiative. So,
7 there's a little bit more about that and others
8 may want to chime in.

9 MR. BROOKS: Yeah, let me jump in,
10 Scott. I see that maybe you'd like to come back
11 in, and I want to try to do that. But I first
12 want to get a couple of folks in and then double
13 back to you. Let me have if you could open up
14 Dewey Hemilright's line and Tim Pickett. Dewey,
15 you're open. Dewey, you there?

16 MR. HEMILRIGHT: I'm on now.

17 MR. BROOKS: Dewey, can you hear me?
18 Yeah, now we got you, good. Go ahead.

19 MR. HEMILRIGHT: Thank you. Yeah,
20 thanks for the opportunity to ask a question here.
21 The U.S. And its pelagic longline fleet is the
22 most conservation friendly throughout the world

1 and including in the ICCAT. Our circle hooks, our
2 auger gear modifications. And I was wondering if
3 under the President's directives, is there
4 anything going to be done to leveling the playing
5 field for the American fishermen given all the
6 standards that we have to harvest by meaning
7 circle hooks, bycatch measures?

8 And simply every other country can
9 import into our country and don't have to meet the
10 same standards that the U.S. fisherman does. And
11 it is truly, I guess, that's my adjective,
12 frustrating and just un-American that we have to
13 compete with imports. I'm not asking to ban. But
14 we have to compete with imports that don't have to
15 meet the same requirements for the highly
16 migratory fish that we get a quota from. And this
17 isn't part of the marine mammal turtle act or, I
18 mean, other things.

19 But the gear that we have to use, the
20 United States has said this is the most
21 environmental friendly gear and standards that
22 we're going to put to harvest these species, these

1 are the same highly migratory species that go
2 around this ocean and yet everybody else can
3 import into this country that don't have to meet
4 our same standards. And I'm just wondering is
5 that ever going to change? I would think when the
6 President a directive somehow the American
7 fishermen and imports have got to be asked -- or
8 has got to be addressed. Thank you.

9 MR. BROOKS: Thanks very much, Dewey.

10 MR. OLIVER: I don't know if Sam was
11 able to join us, but I guess a couple of thoughts,
12 Dewey. I share your concern about leveling the
13 playing field. I think that's a central tenet of
14 the recent executive order on promoting American
15 seafood. We are going to be looking harder and
16 harder at, you know, the IUU aspects. We're
17 looking at a proposed rulemaking right now that
18 would expand our IUU identification potentially to
19 include identifying nations that are encouraging
20 another nation's EEZ.

21 We've had a lot of discussion internally
22 about strengthening our position relative to gear

1 and the bycatch provisions and the use of circle
2 hooks, for example. I know our DAS, deputy
3 assistant secretary for international fisheries,
4 Drew Lawler, has been a adamant proponent of
5 really strengthening our position with regard to
6 circle hooks. We do have a comparability program
7 with regard to the Marine Mammal Protection Act.
8 It does allow us to restrict imports from other
9 countries.

10 But this would be different. We're
11 looking internally at a more aggressive approach
12 both within our discussions at the various
13 (inaudible) where these, you know, agreements are
14 made with regard to bycatch and use of circle
15 hooks. You know, dealing with our ability to
16 monitor and how people will report and who will
17 report and who won't report. And because we don't
18 want to just tie our hands to a single use this
19 gear or not, but there are other measures that
20 countries can use to minimize bycatch other than
21 just strictly using circle hooks as an example.

22 But I think we are intending to put

1 together a more aggressive approach to how we
2 interpret the statute and how we can leverage that
3 statute in the way that I think you're suggesting
4 to get some of those issues including the fact
5 that, you know, our fleet using circle hooks and
6 many of the other countries don't. And so, I
7 think there are some ways we can address that, and
8 I think we are looking at several of those, Dewey.

9 MR. BROOKS: Thanks. Let's bring in Tim
10 Pickett then to Mike Pierdinock and then to Sonja
11 Forhdam. And again, if folks can just introduce
12 themselves, name and sector, so Chris and Sam know
13 who's talking.

14 MR. PICKETT: Hi, Mr. Oliver. Thank you
15 for the presentation and thanks for the
16 opportunity to speak. I'm Tim Pickett. I'm with
17 Lindgren-Pitman. We're a supplier of commercial
18 fishing equipment for the pelagic longline fishery
19 all over the world.

20 And I first just wanted to commend you
21 on the press release that you had there explaining
22 that the fin ban would be a bad thing for the U.S.

1 fishermen in promoting the sustainability of our
2 domestic shark fishery and explaining it in a way
3 that people like they talk about see on Discovery
4 Channel and think that the global shark
5 populations are in trouble. And really kind of
6 the domestic guys a pat on the back that they do
7 it correctly and they abide by the rules and that
8 they produce sustainable product.

9 I think that's a very important thing
10 from the leadership to keep supporting, you know,
11 like Dewey said we're up against the most
12 restrictive, you know, fisheries policies in the
13 world. And we produce, you know, superior product
14 and that Americans should be proud and comfortable
15 with eating the product that we produce. Whether
16 it's sharks or it's pelagic species or things like
17 that. You know, that gives us a marketing tool.
18 And it's a marketing tool that's worked for many
19 fisheries and a struggle to work with the domestic
20 highly migratory species.

21 A lot of that has to do with imports,
22 but a lot of the reason why imports have a leg up

1 is because of consistent supply of product. If
2 our fleet gets to a certain size, and our fleet is
3 bare and maybe past there, supply of a consistent
4 product, you know, you get people eating a certain
5 thing. Whether it's swordfish or tunas or both,
6 there needs to be consistent supply on the
7 restaurant end, on the service end, where people
8 are eating it. And you have to be able to get
9 that supply of that fish that you told them they
10 need to eat somehow.

11 And a lot of imports fill that. So, you
12 know, it's a price competitive thing, but it's
13 also an inability for us to catch what we need to
14 be able to sell. And, you know, prices will go up
15 when consistencies and deliveries if you have, you
16 know, if you need a boat landing everyday to
17 support the local market of product that you've
18 developed a market for. You know, and Scott could
19 talk better to this because this is his business.

20 But you need a certain supply, you know,
21 if you're going to market it as a superior
22 product. You know, and I think this pandemic

1 actually kind of helped a little bit. You know,
2 people eating more local stuff, you know, and
3 getting a flavor for, you know, understanding,
4 hey, our stuff is good. And, you know, it's
5 harvested sustainably and everything. But, you
6 know, on the back end of that there's only so much
7 marketing you can do if you can't back it up with
8 a consistent supply.

9 So, you know, I think both those things,
10 you know, we need to encourage people to eat the
11 stuff that we are landing domestically, but we
12 need to pick landings up. Because, you know,
13 things fold if you don't have, you know, you don't
14 have a consistency in landings and in volume. So,
15 that's just the point I'd like to make. But thank
16 you for the opportunity to make that point and,
17 again, kudos on the supporting the -- or not
18 supporting a fin ban, rather.

19 MR. OLIVER: Right. Well, thank you,
20 Tim. And I think I agree with all the comments
21 you just made. And we'll take a pat on the back
22 when we can get it. So, thank you.

1 MR. BROOKS: I think we've got Sam back
2 on here. Matt, if you can take Sam off of mute we
3 can see if we can hear him.

4 MR. RAUCH: Can you hear me now?

5 MR. BROOKS: We can.

6 MR. RAUCH: And it doesn't have the same
7 problem?

8 MR. BROOKS: No, now, we have you
9 crystal clear.

10 MR. RAUCH: Do you want me to weigh-in
11 on anything at this point?

12 MR. BROOKS: We're set to go to the next
13 person.

14 MR. RAUCH: Just go to the next one,
15 okay.

16 MR. BROOKS: Okay, great. Let's bring
17 in Mike Pierdinock and then to Sonja. Mike.

18 MR. PIERDINOCK: Yeah, thank you. Thank
19 you, Chris and Sam for meeting with us during your
20 busy schedule. This is Mike Pierdinock. I'm a
21 charter boat captain for Massachusetts and the
22 president of Stellwagen Bank Charter Boat

1 Association and Massachusetts chairman for the
2 Recreational Fishing Alliance. Our membership
3 consists of recreational anglers, for-hire fleet,
4 as well as your General category hook and line
5 commercial fishermen.

6 As you noted earlier, it's evident the
7 impacts of COVID and what that has done to our
8 economy, our entire blue economy, especially up
9 here in Massachusetts. Commercially as well as
10 for the for-hire fleet with us and the for-hire
11 fleet of Massachusetts, we have about a 50-percent
12 reduction in bookings. And we continue to
13 struggle as a result of the ongoing restrictions
14 for quarantining with individuals coming into the
15 state.

16 I want to commend NOAA for some recent
17 examples that were not HMS related, but they
18 liberalized seasons and bag limits specifically
19 for the for-hire fleet for cod and black seabass
20 in Massachusetts and New England. And that was in
21 recognition of the fact that we were on the water
22 the for-hire fleet and didn't have any effort or

1 landings for a certain period of time and we're
2 able to do that for those species.

3 I ask that you look at that and take
4 that into consideration for any HMS species where
5 the possibility may exist for the liberalization
6 of the seasons and bag limit this year or into
7 next year. You know, ultimately, COVID, I'd say
8 the only good thing about COVID if there is any
9 good thing is that it's the biggest fishery
10 conservation measure since World War II. Landings
11 nationally aren't here up and down the coast as
12 well as internationally. And we see the result of
13 that with a tremendous amount of forage fish and
14 wide range of fish in our waters. And they're
15 there. And for instance, with bluefin, we have so
16 many of them here that a commercial market isn't
17 here either locally, nationally, or
18 internationally. And those fish sit in the water.

19 So, I would hope to keep in mind the
20 fact that the COVID impacts are such that with any
21 measures that are being considered this year or
22 next year, that because of timing issues, you're

1 looking two years ago and not presently here in
2 2020 that you take in consideration this
3 conservation measure for your future actions.
4 Thank you.

5 MR. BROOKS: Thanks, Mike. Sonja
6 Fordham, your hand was up before. Do you want to
7 be jumping in? Sonja, are you there? Matt, are
8 you able to take Sonja off of mute? I think she's
9 still on mute from where I'm sitting.

10 MR. VANKLUENEN: She appears to have
11 dropped off.

12 MR. BROOKS: Appears to have dropped
13 off, okay. All right, in that case let me just
14 see if there's anyone else I'm missing. All
15 right, Scott Taylor, we can bring you back in. I
16 think you wanted to react to some of the comments
17 regarding access to areas. Scott, I think you're
18 on mute.

19 MR. TAYLOR: Thank you. I don't mean to
20 monopolize this (inaudible) conversation, but it's
21 really near and dear to the survivability of
22 (inaudible) fleet. The problem for us is that --

1 and you were asking about some specificity. The
2 swordfish that we target primarily live in the
3 GulfStream. And they're generally in that fast
4 water and the only time that we really get any
5 access to them is through our gear from the
6 Charleston Bump area drawer.

7 But if we get an eddy that spins off out
8 to the east is when we then we see our swordfish
9 production. We've become at least in the
10 (inaudible) area, they have much more of a
11 (inaudible) fleet than a swordfish fleet. And
12 that's been trying with us as well because of how
13 the bluefin market has been if you've noticed
14 within the economic data.

15 So, there's -- essentially there's like
16 Randy referred to, these east coastal fisheries
17 that are existed, you know, the closures back from
18 the Florida straits and in particular we're not
19 concerned about the Florida Straits, but from the
20 Canaveral shoals area, which is east of Cape
21 Canaveral north it allows for at least the six
22 months of the year fleets to be able to have

1 access to the swordfish. But you have to
2 understand there was a seasonal component to this
3 because of weather. So, when we're fishing in the
4 GulfStream, once you get into the winter months,
5 it really becomes unfishable from really from
6 North Carolina from Charleston Bump north.

7 So, it doesn't really matter whether the
8 fish are there or not. The weather and the water
9 conditions just don't exist. So, it really
10 becomes critical for us and we have the ability to
11 transport. We need to be able to get to where the
12 fish are. We can't catch what's not there. And
13 to try to change also the dynamic of the very
14 nature of the fishery.

15 You know, I've been doing this and been
16 involved with the business for about 40 years and
17 watched it through its various (inaudible)
18 transitions. And the biggest problem for us has
19 been in the recruitment side because, you know,
20 back in the, you know, earlier days before all the
21 restricted barriers, a young man could come out,
22 fish two, three, four days, you know, and

1 (inaudible) fisheries. Come back in, have a home
2 to live in, take care of his family, and say it
3 was good life. You know, (inaudible) 20 days
4 offshore, is awfully difficult to maintain that.
5 And if you translate that into the financial
6 compensation, these guys are averaging from all
7 this factors here involved, (inaudible) flipping
8 hamburgers at McDonalds. And that's (inaudible)
9 --

10 MR. BROOKS: Scott --

11 MR. TAYLOR: -- continue to see the
12 attrition within the fleet.

13 MR. BROOKS: Scott, I just got folks
14 back in the queue. So, if you can wrap-up that'd
15 be helpful.

16 MR. TAYLOR: I'm wrapped.

17 MR. BROOKS: You're wrapped, okay.
18 Thank you. Sam or Chris, any comments there or
19 should I move to the next speaker?

20 MR. OLIVER: I don't really have
21 anything further than I mentioned. I think we
22 have an opportunity through this spatial planning

1 to take a further look at some of those areas. I
2 hope (inaudible), Scott.

3 MR. BROOKS: Great, thanks. Let me
4 invite Sonja Fordham, who I think is back with us
5 now into the conversation. Sonja, you are off
6 mute.

7 MS. FORDHAM: Hi there. Can you hear me
8 now?

9 MR. BROOKS: Yeah.

10 MS. FORDHAM: Great.

11 MR. BROOKS: And if you'd just introduce
12 yourself.

13 MS. FORDHAM: Yeah, I'm Sonja Fordham.
14 I head up a project called Shark Advocates
15 International. That's part of the Ocean
16 Foundation in Washington, D.C. And I'm an
17 environmental rep on the AP.

18 Okay, real quickly in case I get dropped
19 off this event. I'm on quarantine camping
20 vacation and facing a few more technical
21 challenges than I anticipated. And I also can't
22 get my chat function to work so I've been

1 uncharacteristically quiet.

2 But in that case, I just wanted to take
3 the opportunity to, in addition to thanking you
4 for your time, just to voice some continuing
5 concerns that the conservation community has about
6 North Atlantic shortfin mako sharks that continue
7 to be overfished despite the pandemic. And from
8 this morning's presentations, I do appreciate that
9 U.S. catches are down as a result of recent regs.
10 But I do need to flag that for this region for the
11 range of makos, only Canada is implementing this
12 scientific advice that's been on the table since
13 2017 for ICAT. And that's a complete retention
14 ban in various situations.

15 So, I'll just underline that shortfin
16 makos are really important species for commercial
17 and recreational sectors and also for
18 environmentalists partly due to the important role
19 they serve as predators in the ecosystem. And
20 this is also an exceptionally vulnerable shark
21 even by shark standards that's been flagged a lot
22 by the scientists. So, the trajectory that the

1 ICCAT scientists have put forward is pretty grim
2 if this overfishing continues. And, frankly,
3 we're already looking at five decades of
4 rebuilding time if we took action right away. And
5 if it continues as is, we're looking at pretty
6 much a total collapse, which would not be repaired
7 in our lifetime.

8 So, again, it's serious for us. We're
9 grateful for NOAA's leadership within the ICATC
10 scientific process to provide such good scientific
11 advice. But the conservation community is quite
12 focused on getting the U.S. to heed and promote
13 scientific advice as it has for other shark
14 species for decades. So, we're hopeful that
15 ICCATC can in the coming weeks, take action
16 ideally accepting Canada's proposal. But
17 regardless, we're going to continue to take every
18 opportunity to urge NOAA to act unilaterally as
19 Canada has. And since we give shortfin makos the
20 same protection that has been afforded to 20-some
21 other Atlantic shark species domestically. And,
22 of course, in line with exceptionally clear and

1 urgent scientific advice. So, thanks for that.

2 MR. BROOKS: Thanks, Sonja. Appreciate
3 it. Is there anyone else on the AP? We've got
4 about three minutes left. If there's one last
5 commenter, something that we may like to share
6 with leadership. It's a moment to throw up your
7 hand. If not, I think we'll thank you both for
8 making yourselves available and give you an
9 opportunity if there's any final remarks you want
10 to make.

11 MR. COOPER: Bennett, I see Marty's
12 hand. I see Marty's hand up.

13 MR. BROOKS: Marty's hand is up? Okay.
14 Marty, you got two minutes, Marty.

15 MR. SCANLON: Okay. Well, I got a
16 couple of quick things in there. I'm going to be
17 short on time here. But I just want to touch base
18 on a couple of things that Scott and Dewey, and
19 then follow up on. As far as, you know, challenge
20 to this specific areas, you know, the challenges
21 in these specific areas, you know, are we talking
22 about -- are you talking about the area-based

1 management thing in the Gulf of Mexico and the
2 weak hooks. I mean, there was three months there
3 that we absolutely needed and was imperative to
4 help revitalize this fishery. We basically
5 pleaded to get. And basically it was denied to us
6 over size. The size that I looked at was one of
7 two interactions. So, you know, through this
8 spatial management initiative, are we going to be
9 looking for reasons not to give us access or are
10 we going to look for reasons to give us access?
11 And that's one of my questions here. Or is this
12 just, you know, window dressing? Are we just
13 going to the dance?

14 The other issue I want to talk to you
15 about is how we could achieve this. You know, the
16 main problems we've got is, you know, political.
17 You know, the pushback. Everybody -- nobody wants
18 us in their backyard. And, you know, I told you
19 this when you were first introduced yourself to
20 the AP there, Chris, and that is we need to have a
21 priority of promoting this industry's sustainable
22 efforts. You know, we're up against Monterey Bay

1 Aquarium and MSC certifications and, you know,
2 they're under-informing or misinforming our
3 public. I mean, when does Commerce step up here,
4 especially during this time of this pandemic, and
5 promote our space. Fill in the blanks. Educate
6 the American public to what we're doing. The
7 sustainable efforts and the sacrifices of our
8 fleet. And the economic situation that this
9 brings in as a result.

10 If you want to get the prices to go up
11 and you want to get access to this area, we need
12 to reeducate the American people. Right now they
13 think we're the devil. You know, we're the
14 destruction of the ocean. And that's what
15 everybody's been led to believe. And we need to
16 spend some time and money especially since we're
17 under commerce here is one advantage should be to
18 promote our sustainable efforts in order to help
19 us overcome this economic times. I'll leave it at
20 that.

21 MR. OLIVER: I don't disagree with
22 anything you just said, Marty.

1 MR. BROOKS: Thanks, Marty. And I'll
2 note in the chat a comment that it's important to
3 note that the majority of tunas coming out of
4 Trinidad are caught by Venezuelan flagged boats.

5 So, I just want to thank leadership for
6 making yourselves available here. I know there's
7 lots on your plate at this time. And, again, if
8 there's any final comments either one of you would
9 like to make, please the floor is yours.

10 MR. OLIVER: Go ahead, Sam.

11 MR. RAUCH: Yeah, well, I just want to
12 echo Chris' comment at the beginning. We really
13 appreciate the work you do. And although we
14 cannot necessarily be immediately responsive to
15 all of the things that you've said here because
16 you've got to follow rulemaking processes that we
17 have to go through. We do hear you. We do know
18 that the industry is -- needs some assistance.
19 We're also concerned about sustainability and the
20 other things.

21 We've been working, slower than you'd
22 like, I know, but we've been working on trying to

1 highlight areas where we could expand economic
2 opportunities, mindful of our other obligations.
3 We do take this seriously. It's just it's a long
4 process and we have to make sure we've got
5 everything under control. But it's not that we're
6 not listening, and we are trying to look for
7 opportunities to provide more assistance where we
8 can. Not just because of the pandemic, but in
9 general this is something we've been trying to do
10 for some time. And I don't know if, Chris, if you
11 have any closing thoughts to add to that.

12 MR. OLIVER: No, not a lot. Just, you
13 know, we heard some frustration from Scott and
14 Dewey and Marty with regard to area closures. And
15 I know that, you know, sort of put your money
16 where your mouth is kind of in terms of the
17 administration's priorities to, you know, maximize
18 fishing opportunities, reduce regulatory barriers.
19 I'd say I think we're making progress. Not
20 everyone is in agreement, of course, to open those
21 areas. Not everyone's in agreement with what we
22 did with inclusionary (inaudible) based management

1 in the Gulf and the Northeast coast.

2 So, I would just, you know, maybe close
3 by saying appreciate the input from the HMS AP to
4 the extent that you all can bring us consensus
5 recommendations on different management approaches
6 all the better. So, I'll encourage you to have
7 those discussions and achieve consensus
8 recommendations whenever possible. And so, thank
9 you very much, again, for your time.

10 MR. BROOKS: Great, thanks again to both
11 of you. And maybe with any luck come the fall --
12 from the spring meeting, you know, maybe we'll
13 have COVID on the run and actually we'll be
14 in-person. We'll figure that one out down the
15 road. All right, thank you both so much.

16 MR. OLIVER: Thank you all.

17 MR. BROOKS: All right, with that, I
18 want to push us to our next and last topic before
19 we go to public comment. Which is to shift into a
20 conversation around the potential to use
21 predictive modeling to inform spatial fisheries
22 management. And I want to hand it off to Dan

1 Crear, Tobey Curtis, and Steve Durkee to lead us
2 in this conversation. I think we'll have about a
3 25 or 30-minute presentation, which should leave
4 us about 30 minutes for conversation. So, HMS
5 folks, the floor is yours. And if we can -- yep,
6 shift over control so you guys can put your
7 presentation up.

8 MR. CREAR: Alrighty.

9 MR. BROOKS: Again, to any speakers
10 because we're having so many audio problems, if we
11 hear that it's garbled, we will probably ask you
12 very quickly to shift to phone. Go ahead, Dan.

13 MR. CREAR: Can you hear me?

14 MR. BROOKS: You actually sound very
15 good. You sound really good.

16 MR. CREAR: Okay, great. Can you see my
17 slides?

18 MR. BROOKS: Yes, we do.

19 MR. CREAR: Okay, great. Awesome.

20 Well, thank you very much everyone for having me.
21 So, I will be talking to you today about research
22 and data collection in support of spatial

1 fisheries management in the Atlantic HMS
2 fisheries.

3 So, the overall goal or purpose of this
4 project was to evaluate the effectiveness of
5 existing spatial management. As you can see from
6 the map on the right, these are different spatial
7 management areas for the pelagic longline. Now,
8 it becomes difficult to evaluate these areas when
9 they're closed, right? Because there's no hooks
10 in the water. But if we can figure out the
11 spatial relationship between these species -- or
12 between these highly migratory species in these
13 areas, we can start to actually assess these
14 closed areas. It can help with essential fish
15 habitat designations, as well as ecosystem-based
16 fisheries management. And it can also help
17 prepare us for climate change.

18 Now, let's take a couple steps back and
19 give you guys a little bit overview of what's been
20 done so far in this project. So, there was an
21 issues and options paper last spring and this
22 included seven options to collect data and perform

1 research in closed areas. So, this is putting
2 hooks in the water. And this was presented to the
3 AP last spring. And then there was a public
4 comment period as well as four public hearings.
5 We are currently considering public comments and
6 options in anticipation of a proposed rule. Now,
7 also during this time, we have come up with
8 additional methods to evaluate these closed areas
9 without putting hooks in the water. And that's
10 where HMS-PRiSM comes in and what I'll be talking
11 to you about today for my presentation.

12 Now, HMS-PRiSM stands for Highly
13 Migratory Species Predictive Spatial Modeling.
14 And what PRiSM uses is a tool called species
15 distribution modeling for habitat modeling. And
16 before I can get into exactly what PRiSM is doing,
17 I want to give a quick overview of what species
18 distribution modeling is. So, in simple it uses
19 the relationship between presence/absence or
20 abundance data and the environment to identify
21 areas of good to poor habitat for species.

22 So, for example, say we have Species A

1 that we're concerned with. And we have
2 presence/absence data for Species A. If we look
3 on this map, we'll say the absence data is the
4 white circles and the green triangles are the
5 presence data. And the next step is to come up
6 with different variables that we think would
7 impact the distribution of Species A. So, let's
8 say we come up with sea surface temperature,
9 bathymetry and chlorophyll-A. And we match these
10 variables to the presence/absence data based on
11 the location and the time of that presence/absence
12 data.

13 And from that we can develop a model
14 where we can then understand the occurrence rate
15 and each of these in environmental variables.
16 And I know that these plots are small, but I will
17 show you a more blown-up view and I'll explain
18 them in more detail in the next couple slides.

19 All right, then the next step is to
20 predict over a given time period. Say we want to
21 predict over the month of May, we then download
22 sea surface temperature, bathymetry, and

1 chlorophyll-A for the month of May and run it back
2 through the model. So, we can get an output that
3 shows the probability of presence for Species A in
4 the month of May. And we end up getting a map
5 that looks like this. And I'll also show you a
6 series of maps, a more blown-up view in a little
7 bit.

8 All right, so what are some current uses
9 for a species distribution modeling? It can help
10 us avoid or help fisheries avoid bycatch. It can
11 be used to project the impacts of climate change.
12 And it can give management the ability to act more
13 dynamically in space and time because as we all
14 know, the ocean is extremely dynamic.

15 I want to give you guys two examples of
16 where habitat modeling or species distribution
17 modeling has been used. The first is a product
18 called EcoCast. It was created on the West Coast.
19 Basically, scientists created habitat models for
20 swordfish and typical bycatch species in the drift
21 gillnet fishery. And those bycatch species were
22 leatherback sea turtles, blue sharks, and sea

1 lions.

2 And basically, the overall goal of this
3 product was to find the ideal locations where
4 swordfish catch could be maximized and bycatch
5 could be minimized. Then scientists created daily
6 output maps for fishermen. So, every morning they
7 outputted a daily map that looked like what we see
8 on the right here. Where, as you get to the more
9 darker blue areas that's a better place to fish.
10 And as you get to darker red areas, it's a poorer
11 place to fish. Now, this product was not used in
12 management at all. It was just to be used a guide
13 for fishermen to essentially avoid bycatch areas,
14 areas where bycatch could be found.

15 The second example I want to give is
16 from the bluefin tuna Australian multispecies
17 longline. Basically, scientists created three
18 zones from a habitat model. A core zone, which
19 were areas where you're most likely to encounter
20 bluefin tuna. A buffer zone where you're a little
21 bit less likely to encounter bluefin tuna. And
22 then an okay zone where you're even less likely to

1 encounter bluefin tuna.

2 Now, scientists provided these three
3 zones to managers every two weeks. So, they
4 predicted these three zones two weeks out. And
5 then fishermen had access to these zones based on
6 observer coverage and quota that they were
7 holding. And in addition, scientists also
8 provided managers with three to four months
9 forecast. So, three or four months in the future
10 of these three zones so that managers could let
11 fishermen know of the potential future
12 restrictions.

13 Now, those two examples I gave you are
14 predicting into the future and you'll notice as I
15 start to go through HMS PRiSM that we're doing it
16 a little bit differently. So, HMS PRiSM is using
17 data from the observer program from the pelagic
18 longline. And we're just going to focus on the
19 Atlantic for today. And our species of concern
20 are target and IBQ species like swordfish,
21 yellowfin, bigeye, and bluefin tuna. And then
22 bycatch species like blue marlin. White

1 marlin/spearfish group, we grouped them together.

2 A billfish group where we grouped all billfish

3 species together. Mako shark, dusky shark,

4 leatherback sea turtle, and loggerhead sea turtle.

5 Then the next step was to come up with

6 different variables that we think would impact the

7 distribution of these species. So, we came up

8 with bathymetry, which is right at the bottom

9 depth. Rugosity, which is the bumpiness of the

10 bottom. Sea surface temperature, sea surface

11 height, which is a proxy for fronts,

12 Chlorophyll-A. Mixed layer depth, which is just

13 the depth where the water column is not as mixed

14 as much because at the surface the water is highly

15 mixed from wind and waves. Vertical current

16 velocity and horizontal current velocity, so how

17 quickly the water moves in a north/south direction

18 and an east/west direction. Sea surface standard

19 deviation, which is just how variable the

20 temperature is in a given location. This can also

21 be used as a proxy for fronts. Then lunar

22 illumination, which is just how bright the moon

1 is.

2 We also incorporated some gear variables
3 as well. Such as hook configurations, which
4 included the size of the hook and the type of the
5 hook. Bait type, the hour the set started, as
6 well as the maximum depth the set was set at. And
7 I want to add that all the environmental variables
8 that I listed (inaudible) to publicly download
9 were accessed from publicly accessible databases.
10 Then I'm able to match all these environmental
11 variables to the observer data based on time and
12 location.

13 All right, so the modeling framework
14 that I used is called the Generalized Additive
15 Model or GAM. And I used presence/absence data
16 from the observer data. And the next step is to
17 predict over a given time period. We were most
18 interested in predicting over recent historical
19 time periods because we hope to use this
20 information to inform current or really near
21 future decisions when it comes to assessing these
22 closed areas.

1 So, we predicted over mean historical
2 conditions from 2016 to 2018 each month. And we
3 plan to use the same approach for other locations
4 like the Gulf of Mexico and other fisheries like
5 the bottom longline. And I want to again
6 highlight the intended use of PRiSM is evaluate
7 these closed areas. Are they doing a good job at
8 protecting the species that they were designed to
9 protect? And I'll add, all the results that I
10 will show you here are all preliminary.

11 So, I want to show you guys some plots
12 and maps of species in a species group just so you
13 can see what we're working with from the outputs
14 from these models. So, the first group I want to
15 talk about is that all billfish species group.

16 So, this is the series of plots blown-up
17 for billfish. And each one of these plots shows
18 the occurrence rate in regards to each
19 environmental variable, as well as from of the
20 gear variables. So, you can see it on the Y axis
21 you have probability of presence for the
22 occurrence rate going from 0 to 1 or 0 to 100

1 percent. And so the way to read this would be if
2 we go over to the sea surface temperature over
3 here in the top right, you can see that the
4 temperature that you're most likely to encounter a
5 billfish species would be around 25 degrees
6 Celsius or in the high 70s in Fahrenheit terms. I
7 also want to add that the positive catch rate for
8 billfish species was 40 percent. So, 40 percent
9 of the pelagic longline sets that at least one
10 billfish species is caught or encountered. And I
11 also want to add that our habitat model for
12 billfish was (inaudible) validated. All right, so
13 the next step I want to go to is then show you
14 what the estimated distribution would be for
15 billfish species each month. So, this is for the
16 month of January and the way to read these maps
17 are dark purple or blue areas are areas where it's
18 not likely to encounter a billfish species. And
19 as it gets from red to orange to yellow, they
20 become favorable for billfish species. And so we
21 have also in the green box one of the closed
22 areas, Charleston Bump, for the pelagic longline

1 and as well as the U.S. EEZ. I also want to add
2 that little white area that you see are areas that
3 we don't have environmental conditions. So, we're
4 not able to predict in those areas.

5 So, what I'm going to do is go from
6 January to December almost like a movie, and
7 you'll see how their distribution, or estimated
8 distribution shifts through time. I just want you
9 to keep an eye on how that yellow cloud moves
10 through time. You'll notice that as the
11 temperature warms, you can see that yellow cloud
12 shifting a little bit further north, which makes
13 sense. A lot of us can intuitively understand the
14 relationship between a species and temperature.
15 And as it cools off, you can see that distribution
16 shift a little bit further south.

17 All right. I next want to show you one
18 more species. It's the leatherback sea turtle.
19 So, first off, I want to point out that the
20 positive catch rate for leatherback sea turtles is
21 6 percent. Remember billfish was 40 percent. So,
22 on only 6 percent of pelagic longline sets

1 encountered at least one leatherback sea turtle.
2 So, because of this low encounter rate, we end up
3 having to bring that Y axis down. You can see it
4 goes from 0 to.2. If it went from 0 to.1, you
5 wouldn't see any of the trends for any of these
6 environmental variables. So, we had to shrink it
7 down to.2 so you can actually see the curve a
8 little bit better.

9 And, again, if we focus on sea surface
10 temperature, you can see that the temperature that
11 you're most likely to encounter a leatherback sea
12 turtle would be between 18 and 20 degrees Celsius,
13 which is 60s in Fahrenheit. And I also want to
14 add that we were able to validate the leatherback
15 sea turtle model as well.

16 All right, so I'm going to show you the
17 same series of maps for leatherback as well. But
18 before I do, I want to point out the scale bar
19 only goes from 0 to 0.5. Remember for billfish it
20 went from 0 to 1. And again, that's because of
21 the low occurrence rate that we're seeing with
22 leatherback sea turtles. So, if I had to go all

1 the way to 1, you really wouldn't see any contrast
2 in colors on these maps.

3 So, again, please keep your eye on how
4 that pink area changes throughout time. And
5 again, you'll notice that as temperatures warm,
6 the more northern areas become more favorable.
7 And again, as temperatures fall again later in the
8 year that some of the more southern areas become
9 more favorable.

10 All right, so that now that you have a
11 sense of kind of what we're working with, some of
12 the outputs from our models, the next step is to
13 actually assess these closed areas. So, we can
14 ask the question does the location, size, and
15 timing of the closed areas protect bycatch
16 species' core habitat?

17 And I want to highlight core habitat
18 because a lot of these highly migratory species
19 use a lot of the northwest Atlantic, right? But
20 if we can protect the most important habitat or
21 their core habitat, that's the best. So, the four
22 bycatch species that I'm going to focus on for

1 this talk are mako shark, leatherback sea turtle,
2 loggerhead sea turtle, and that billfish species
3 group.

4 All right, so remember we start off with
5 those map outputs, right? And so the next step is
6 to reduce that area to only where 95 percent of
7 the pelagic longline fishery occurs. Because you
8 don't want to assess or look at these outputs in
9 areas where the fishery is not occurring. What we
10 can then do is find the most important or the best
11 habitat or best areas for each bycatch species.
12 And we call that our core area or core habitat.
13 And we can weight each of these core habitats
14 based on how important each bycatch species is and
15 us protecting it. We can then calculate where
16 multiple core habitats overlap between multiple
17 bycatch species because I think that -- we think
18 that if we can potentially protect an area that
19 protects multiple bycatch species' core habitat
20 the better(inaudible). And then the next step is
21 to generate closed area metrics. And I'm going to
22 talk about two of the metrics that we've come up

1 with. The first is what percent of core area or
2 that core habitat occurs within a closed area.
3 And we chose Charleston Bump as an example for our
4 closed area. And so, Charleston Bump is closed
5 between February and April to the pelagic
6 longline. But you'll notice that the percentage
7 on the left is rather small. It only goes up to 5
8 percent, which makes sense because (inaudible) do
9 think these -- the core habitat could be quite
10 large in comparison to Charleston Bump. But it's
11 thought that if Charleston Bump is doing a good
12 job at protecting the core habitat of the species,
13 the higher value the better, right? The higher
14 percentage value the better when Charleston Bump
15 is closed.

16 So, for example, if we look at this line
17 here this represents leatherback sea turtle, which
18 is LBT you see in the legend. And for example, if
19 you look at the month of March, you can see that 3
20 percent of the core habitat falls within
21 Charleston Bump. And then we can compare that
22 throughout the rest of the year as well.

1 And we can also look at where different
2 core habitats overlap among multiple species. So,
3 here we have leatherback, mako shark, and
4 loggerhead core habitat where it overlaps in
5 respect to Charleston Bump. And we can do the
6 same thing for every combination of our four
7 bycatch species. And we can use this to truly
8 assess, okay, how well is Charleston Bump doing at
9 protecting the most important habitat of these
10 bycatch species?

11 All right, a second metric that I want
12 to show you guys is what percentage of the closed
13 area or what percent of Charleston Bump is covered
14 by that core habitat. So, this is going to go
15 from 0 to 100 percent. Again, it's assumed that
16 when Charleston Bump was closed, you hope that 100
17 percent of it is covered by core habitat. So, for
18 example, if you look back again at leatherback sea
19 turtles, you can see that in the month of February
20 about 90 percent of Charleston Bump is covered
21 with leatherback sea turtle core habitat. And
22 again, you can compare this throughout the year.

1 Then do the same thing with areas that show core
2 habitat overlapping among, again, leatherback,
3 mako shark, and loggerhead. Then again, we can
4 show every combination of those four bycatch
5 species and assess, hey, how is Charleston Bump
6 doing at protecting the most important habitat for
7 these bycatch species?

8 All right, so what I just went through
9 is the main purpose of PRiSM. But there are some
10 other potential uses as well such as we can try to
11 optimize target catch to reduce bycatch similar to
12 the EcoCast example that I gave you guys earlier.
13 It can help determine specific species' hotspots.
14 It can also help in EFH designations.

15 And for the next steps for PRiSM right
16 now the modeling is ongoing and we hope to have a
17 formal review of the modeling methodology expected
18 in early 2021. We're working on a manuscript
19 right now to get peer reviewed. We hope to add
20 additional datasets from other fisheries as well
21 as expand this to areas like the Gulf of Mexico.

22 Then we hope to have a proposed rule and

1 draft environmental impact statement by mid to
2 late 2021. And then our final rule and final
3 environmental impact statement some time in 2022.

4 All right, so I want to leave you guys
5 with our point of contact for the modeling and the
6 proposed rule. And I know that that went kind of
7 quick so probably we have a good amount of time
8 discussion. But I'm totally open to any questions
9 and comments and ideas that you have about PRiSM.
10 Thank you.

11 MR. BROOKS: Great, thank you, Dan, very
12 much. You did a great job of making an especially
13 extremely complex topic quite accessible. So,
14 thanks.

15 What I want to do is open it up for
16 questions. I think it'd be great if we could --
17 and I'll always ask for this, if we could get some
18 clarifying questions first just so to make sure
19 people understand what Dan has walked through.
20 And tackle them first that would be great. And
21 then, again, open it up to get your sense of your
22 perspectives on this model. Is it useful? Are

1 there other species, other variables? That's the
2 nature of the conversation that would be
3 particularly helpful at this point. But
4 clarifying questions first. I'm going to walk
5 down the queue. If you don't have a clarifying
6 question, I'll let you just pass for right now.
7 Jason, clarifying question, Jason Adriance?

8 MR. ADRIANCE: Thanks, Bennett. It's
9 actually clarifying/overall question. So, if you
10 want to shift me in the queue until we get through
11 clarifying.

12 MR. BROOKS: Okay, yeah, we'll come back
13 to you. David Schalit, clarifying question?

14 MR. SCHALIT: Sure. Dan, thanks very
15 much for that presentation. Did I get you
16 correctly when you said that this data that you're
17 collecting informs the EFH shapefiles?

18 MR. CREAR: It potentially may be
19 eventually. It hasn't yet.

20 MR. SCHALIT: Okay, I have a couple more
21 questions. My next question, have you considered
22 whether the altimetry is one of the predictor

1 variables?

2 MR. CREAR: I haven't yet. That's not a
3 bad idea, though. I have not, though. Thank you.

4 MR. SCHALIT: Yeah, you really should.
5 And then my last question is, has to do with how
6 do you anticipate being able to capture data from
7 fishing by several thousand HMS permits that don't
8 carry VMS units?

9 MR. CREAR: I'm trying to think of --
10 it's quite better if Karyl, Steve, or Tobey can
11 tackle that one.

12 MR. DURKEE: Yeah, so, we're looking at
13 -- we're using observer data specific for the
14 pelagic longline program. So, for this case, they
15 don't have VMS. But there's also observers
16 onboard that are -- we're very confident with
17 their species ID, with their locations for the
18 species' presence. So, that's one of the reasons
19 we started this specific data test. So, no, we
20 don't have information from other fisheries who
21 don't have VMS requirements.

22 MR. SCHALIT: Thank you.

1 MR. BROOKS: Thanks. Marty, do you have
2 any -- Marty Scanlon, do you have any clarifying
3 questions?

4 MR. SCANLON: I kind of just -- I didn't
5 see -- did you show a chart where it showed what
6 the potential of swordfish itself would be in that
7 area?

8 MR. CREAR: Yeah, I did not, no. I just
9 picked two bycatch species examples. But
10 eventually down the line we hope to do this with
11 swordfish as well.

12 MR. SCANLON: So, just kind of, you
13 know, like I said, like I mentioned to Chris
14 Oliver, this already just starting off here it
15 looks like, you know, we're looking for reasons
16 not to get us in there as opposed to reasons to
17 give us access to that, just by the way that
18 presentation is on. So, I want to point that out
19 to you right there.

20 You know, we should all remember this.
21 Those areas were closed on logbook data and now it
22 seems like we want to have to reinvent the wheel

1 to get us access to those areas. So, I mean, I'm
2 really already very skeptical about what's going
3 on here.

4 MR. BROOKS: Okay. Thanks, Marty.
5 Again, we'll come back around to folks if there's
6 more broader comments you want to come with. But
7 clarifying questions, Marcos Hanke, any clarifying
8 questions? Your line's open.

9 MR. HANKE: I don't know if it's a
10 clarifying question or not. But it's about the
11 leatherback turtles the way you are showing on the
12 graphic doesn't make sense to me because on the
13 summertime we have the leatherback turtles coming
14 to Puerto Rico to nest. For example, Luquillo,
15 450 nests in 2009. And my question is this data
16 is when they are doing something that will
17 interact with the gear or something on that line
18 why or why the nesting grounds are areas where we
19 know where they are are not included on that
20 graphic or it doesn't show?

21 MR. CREAR: Yeah, so I'm assuming the
22 reason why is because -- so these data are fully

1 driven by the fisheries, right? So, if there's
2 not a lot of sets that take place in areas
3 potentially where the hatching areas are, then
4 that may be impacted. And so, I know the
5 distribution of the fisheries occurs a lot less
6 for the south down there. So, that may also play
7 a role.

8 MR. HANKE: Thank you.

9 MR. CREAR: You're welcome. And we
10 really wanted to have this be reflected of the
11 fisheries more so.

12 MR. HANKE: Thank you.

13 MR. BROOKS: Okay. Mike Pierdinock, do
14 you have a clarifying question?

15 MR. PIERDINOCK: Yes, I do. Yes, I do,
16 thank you. Let's get back to the leatherback
17 turtle example. If I go to page two and it shows
18 the different pelagic longline areas and so on and
19 closures, are you basically taking information
20 that the turtles you track where they go in
21 between these areas and expect to harvest within
22 that area? I'm trying to understand if you're

1 looking at the spatial distribution and extent of
2 the leatherback turtle and whether you have that
3 kind of information that you put in this model.
4 Or is it just specific to the longline areas?

5 MR. CREAR: Yes, so, what happens is
6 from the longline information, right, I have the
7 leatherback sea turtle catch, right? And then
8 from that, I also am able to match all those
9 environmental variables, right? And so from that
10 the model figures out the relationships between
11 leatherback sea turtles and the environment and
12 then so when you plug that -- when you want to try
13 to predict over a given time period, you're then
14 plugging the environmental information back to the
15 model, right? And so, again, that's why you have
16 a continuous smooth surface that you see in the
17 maps. So, it's only from the pelagic longline.

18 MR. PIERDINOCK: Yeah, because I was,
19 you know, our gray seal population's gone from
20 1,500 to 50,000 plus in Massachusetts and now
21 they're migrating beyond and they're being seen as
22 far south as Virginia. And I was trying to

1 consider whether that model did such and whether
2 it could be applied to that. But it doesn't sound
3 like that's the case.

4 MR. CREAR: Yeah, so, there is potential
5 -- like they've had been discussions potentially
6 using satellite tagging data as well, which has
7 been done on marine mammal and sea turtles and
8 shark species, as well as many fish species as
9 well. And that would -- it'd be difficult to
10 incorporate them all into one model. But what can
11 be useful potentially in the future is to compare
12 the two having a model that's developed from
13 satellite tagging information. Which may give you
14 different answers or a different outlook compared
15 to if you base it off of just from the pelagic
16 longline. And we decided to go with the pelagic
17 longline routes for now because we want this to
18 obviously directly impact or assess the closed
19 areas for the fisheries.

20 MR. BROOKS: We'll take two more
21 clarifying questions and then let's open this up
22 more generally. Tim Pickett, did you have any

1 clarifying questions?

2 MR. PICKETT: It's kind of more of a --
3 I don't know if it's a question or a comment. I'd
4 be a little skeptical --

5 MR. BROOKS: Just (inaudible).

6 MR. PICKETT: Well, you know, I'll just
7 say. I see there's so many variables in the
8 pelagic longline business that I feel as though
9 aren't being accounted for with these closed, you
10 know, gear restrictions, the use of circle hooks,
11 leader length, things like that. You know, weak
12 hooks, stuff like that.

13 You know, I just get skeptical of a
14 model being used to assess a closed area when
15 we're extremely data lacking with the new style
16 and the new look of the fishery. You know, I just
17 get very, you know, antsy. We keep on walking
18 around the issue of not having any data in these
19 closed areas. And any new data with the new
20 regulations, you know, the use of circle hooks,
21 weak hooks, things like that. You know, it seems
22 like we're just kicking the lack of data ball down

1 the -- real data, you know, real physical fishing
2 data that we have to get sweeping down the court.

3 I get very concerned about that, you
4 know. That, you know, we're going to become
5 reliant on more and more computer models, you
6 know. The shark thing, you know, is -- it keeps
7 coming. I can't get away from it right now.
8 It's, you know, a computer model would say that
9 sandbar sharks aren't supposed to be rebuilt
10 until, you know, 2070. Well, a guy in the
11 research fishery had 40 head on 150 hooks the
12 other day.

13 You know, there's -- I think there needs
14 to be more emphasis on ground truthing it. And
15 I'm not sure if this is the time or the place to
16 comment on that. But, you know, real physical
17 research needs to, I think, be a priority. That's
18 it.

19 MR. BROOKS: Thanks. Thanks, Tim. At
20 this point, let's just open it up, and, you know,
21 not just limit this to clarifying questions. I
22 think we're sort of moving into that space. I

1 want to get in a couple of folks who we haven't
2 heard from much. But, Jason Adriance, I think I
3 promised you to get in first. Then we'll go to
4 Dave Kerstetter and then to Alan Weiss. So,
5 Jason.

6 MR. ADRIANCE: Thank you, Bennett. And
7 thanks for that presentation. Marcos and Tim kind
8 of hit on where I was wanting to go. And that's
9 the idea of ground truthing given that this is
10 based on the fishery. And I've seen cases in the
11 past where there's habitat suitability models.
12 And the results coming out of those are head
13 scratchers, to say the least, when you're looking
14 at the life history of the species, but it's
15 supposed to be indicating habitats for it.

16 And so, given all those regulatory and
17 market dynamics that happened in the fishery in
18 the past, I'd actually like to see some
19 non-fishery sea dependent data go into this and
20 some actual ground truthing just on some of the
21 life history characteristics of these species that
22 you're modeling. Because, you know, that model's

1 only as good as the data you put in it. And as I
2 said, I've seen some habitat suitability models
3 that make you want to scratch your head. Thank
4 you.

5 MR. BROOKS: Thanks, Jason. David
6 Kerstetter.

7 MR. KERSTETTER: All right, can you hear
8 me now?

9 MR. BROOKS: Yeah, yeah.

10 MR. KERSTETTER: All right, thank you.
11 Thanks, Dan. I really appreciate the framework
12 that you all have developed on this. I think it's
13 got some interesting applicability. As Jason was
14 saying, there's a issue of the habitat utilization
15 data going in. So, I see a lot of opportunities
16 for electronic tagging and other data beyond just
17 the fishery dependent data that can be used to
18 flesh out this model.

19 There are a couple of specific model
20 components that I was kind of curious whether you
21 all had been planning on factoring in such as
22 three-dimensional depth distributions. Not all

1 two-dimensional habitat is the same, obviously.
2 Especially for pelagic fishes. And also,
3 ontogenic changes in habitat utilization,
4 including differences in depth distributions. So,
5 I think adding those are going to add a lot of
6 information about overall predictability within
7 this model.

8 So, ultimately, I think that you're
9 getting -- we're kind of dancing around the
10 question that Tim Pickett raised, which is what
11 we're really trying to address here is the
12 question of catchability. And just because a
13 given species is in a particular area, especially
14 two-dimensional distribution, doesn't mean that
15 it's necessarily going to be encountered by the
16 gear and caught and/or mortality. So, I'm curious
17 if you have any thoughts on how to address those
18 issues. Thank you.

19 MR. BROOKS: Dan.

20 MR. CREAR: Yeah, so I think I'll be
21 able to take some of that. So, to answer your
22 second question. We tried to incorporate -- so,

1 initially we had just put the environmental
2 variables in and then we decided to add those gear
3 variables to try to address some of that
4 catchability. So, we hope to capture that the
5 best we can with those inputs, right? So, I had
6 the hook configuration, as well as bait type and
7 the time the set occurred throughout the day, and
8 then as well as the depth of the -- the deepest
9 depth of the hooks. So, we tried to incorporate
10 those gear characteristics a little bit to get
11 that catchability.

12 And in regards to the 3D modeling. So,
13 unfortunately, a lot of environmental variables
14 are not provided at that level of detail. So,
15 often with a lot of these types of models, the
16 surface variables are what is available. And we
17 understand the limitations for sure. Obviously,
18 species are using a 3D habitat, right? So, there
19 are limitations there. But we do try to validate
20 this information through different validation
21 procedures. And we look at the uncertainty around
22 these outputs and if they don't meet the certain

1 criteria, then we don't include them. Or we say
2 we can't -- this will not work for this species.

3 So, we do do a rigorous validation
4 procedure to try to -- not ground truth, but so
5 that the model is not doing a terrible job. And
6 potentially in the future, if we came with ground
7 truthing with hooks in the water that would be
8 even better.

9 MR. KERSTETTER: Right, if I could just
10 follow-up quickly. You know, and it's going to be
11 -- I appreciate the efforts that you're making in
12 terms of ground truthing. But as commenter after
13 commenter said, unless you actually have some
14 hooks in the water, there's going to be no way to
15 ground truth within these time area closures. So,
16 at some point, that's going to have to be back on
17 the table. So, thank you for your comments.

18 MR. DURKEE: Kind of one more thing with
19 (inaudible) catchability. Just as Dan said a
20 little bit. You know, Dave, you mentioned using
21 other sources of data such as tagging data, et
22 cetera, (inaudible) the species exist at a certain

1 location doesn't mean they're caught (inaudible).
2 But that could be (inaudible) on using
3 specifically only pelagic longline data because
4 these are fish that have been identified as caught
5 on pelagic longline where locations where we're
6 not catching them. So, it could be de minimis to
7 eliminating (inaudible) for that catchability.

8 MR. BROOKS: Thanks. I want to go to
9 Scott Taylor for a clarifying question, and then
10 Alan Weiss. Scott?

11 MR. TAYLOR: Yeah, part of what I was
12 going to ask David actually answered. But I want
13 to commend you guys. I guess I have a little
14 different perspective than Tim and Marty and I
15 want to share that with you very quickly.

16 The challenges that we've had in
17 accessing these areas have had nothing to do with
18 science or fact up to this point. It's been that
19 perception. And everyday when we go offshore,
20 this is the type of data that we use to target
21 these species. I see absolutely no issue
22 whatsoever and you have my unbridled support in

1 helping you to develop these types of models
2 because in the absence of it, the only thing that
3 we have to use is J-hook data that exists for
4 from, you know, from pre-closure timeframe. And
5 when we give you environmental impact statements
6 and everything else in trying to get the hooks in
7 the water, it was really the only source of
8 perception that we had out there.

9 And so, what we don't know is that by
10 simply making an assumption that you're going to
11 have, you know, a certain amount of leatherback
12 turtle interactions or swordfish interactions in
13 an area, we don't know how that's going to relate
14 to the CPUE of the target species. So, if you're
15 catching three times the amount of swordfish for
16 the same number of leatherback interactions in
17 there, you know, then you're justified to be in
18 this because at the end of the day, isn't that not
19 what we're trying to accomplish here? Which is to
20 keep the bycatch down to as minimal of a
21 percentage of the catch as we possibly can. And
22 as Dave pointed out, I don't know how you're ever

1 going to get that confirmed data without actually
2 putting hooks in the water.

3 MR. BROOKS: Thanks, Scott. Let's bring
4 Alan Weiss in and then over to Kristin Foss.
5 Alan.

6 MR. WEISS: Thank you. I have some
7 questions to ask. One is, you present a number of
8 slides of the Charleston Bump area showing the
9 distribution of catches of certain species where
10 the projected presence of certain species during
11 the course of the year. But I think for purposes
12 of what we're talking about, wouldn't it be more
13 appropriate to look at a comparison during any
14 given time period of the distribution of the
15 species in the closed area versus in the
16 surrounding areas where fishing is taking place?

17 So, I guess it depends what question you
18 try to answer. Do you start with the presumption
19 that you're closing Charleston Bump, what part of
20 the year is best to close? You look at the charts
21 that you present. But if you approach it from the
22 standpoint of what areas should be open and what

1 areas should be closed, or what areas have the
2 more or less bycatch species in (inaudible), then
3 wouldn't you want to look at different surrounding
4 areas rather than just look at the time series
5 within the closed area?

6 MR. BROOKS: Thanks, Alan.

7 MR. CREAR: Thank you. So, one of the
8 metrics I didn't talk about today was -- which is
9 kind of like what you're suggesting -- is at the
10 when you say the mean or the median habitat
11 suitability value inside Charleston Bump and
12 compare it to the occurrence rate outside and see
13 how they compare. So, that is a metric that we're
14 using that I didn't have a chance to talk about
15 today. But I'm not sure if Karyl or Steve would
16 want to add anymore to that, but.

17 MS. BREWSTER-GEISZ: Yeah, no, Dan, I
18 think you did a -- can you guys hear me?

19 MR. BROOKS: Yes.

20 MS. BREWSTER-GEISZ: Yeah, okay. I
21 think you did a great job answering that. We will
22 be comparing those inside and outside. But also

1 keep in mind that part of why we're doing this is
2 to try to get a sense of what's happening inside
3 the closed areas, and if we are still meeting the
4 goals that those areas were closed to meet. And
5 so, we do need to take a close look at what's
6 happening inside along with comparing to what's
7 happening outside, so. Yes, we will be getting
8 there, Alan. It's just taking us a while.

9 MR. BROOKS: It does sound like there's
10 a framing question here in terms of how this is
11 perceived, so. I think, you know, I think Marty
12 talked to that initially, and now Alan. So,
13 appreciate those comments.

14 MR. WEISS: The other comment, if I may
15 quickly, is there were a few slides where you
16 indicated that the model was validated. But,
17 obviously, the area's not open to pelagic longline
18 fishing, so how was it validated?

19 MR. CREAR: So, I won't get into the
20 boring details of how the model -- how we validate
21 models. But it's within the model itself. We
22 see, well, it's basically we break the data up

1 into multiple pieces (inaudible). And we see how
2 well it's acting based off of the real data. So,
3 we know what the real data is or we know what the
4 truth is from the observer data, right? And we
5 see how well the model is at predicting the truth.
6 So, that's how we validate it. There's
7 (inaudible) techniques that we need to do that.

8 MR. WEISS: But for the part of the year
9 that the area is closed, there's no observer data
10 at least -- unless you go back to before the
11 closure went in place. That's a long time ago.

12 MR. CREAR: Correct. And so the
13 assumption is that environmental conditions within
14 Charleston Bump occur elsewhere throughout the
15 northwest Atlantic, right? So, if Species A shows
16 a specific relationship with each environmental
17 variable, it's assumed that they're going to show
18 that same relationship inside Charleston Bump.

19 MR. BROOKS: Okay. I'm going to push us
20 forward. Thanks, Alan, for the questions and
21 observations. I've got a few folks to get in
22 here. We have just under 15 minutes. We'll go to

1 Kristin Foss and then Rick Weber then Jeff Oden.
2 Kristin.

3 MS. FOSS: Thanks for the presentation,
4 Dan. So, just to clarify that the intent is to
5 apply this PRiSM model to all the closed areas in
6 the Atlantic and the Gulf to evaluate species
7 occurrences. And then would the results of this
8 models be presented or the information available
9 to the AP before the proposed rule?

10 MR. CREAR: Karyl or Steve or Tobey
11 might be able to give a better answer than me.

12 MR. DURKEE: Yeah, of course. You know,
13 we're still in the initial stages of developing
14 this tool and using it to assess. But absolutely,
15 everything we find any kind of results we have,
16 will be publicly accessible. And, more
17 specifically, (inaudible) to you, the AP, and
18 discussing this. That's forward in the future so
19 exactly what form that takes, I can't speak to you
20 right this second. But, yeah, absolutely we'll
21 have that information available.

22 MS. FOSS: Okay, thank you.

1 MR. BROOKS: Thanks. Rick Weber.

2 MR. WEBER: It's a little a bit like
3 that Progressive ad that says that you can't make
4 -- they can't keep you from becoming your parents
5 because I'm feeling like one. In a world where
6 observations of a waterman are discarded as
7 anecdotal, but a prediction of a computer is
8 immediately a fact.

9 So, let's look at the billfish screen,
10 if you would. You put up one sample and let's
11 look and talk about it. Billfish from January.

12 MR. CREAR: We are there, go.

13 MR. WEBER: Bill, fishermen that I would
14 know and respect I think would disagree with that
15 big wide swath of rich billfish territory that's
16 all yellow as far as being -- I guess when I watch
17 the model come together, Dan, there was a
18 (inaudible) percentage of the habitat is within
19 the closed zone. But that is only as true as my
20 agreeing what the rest of the habitat is. And
21 when I look at that, I think you're still missing
22 -- let me help because I'm somewhere between Tim

1 and Scott. It could be a really great tool. But
2 in order for it to be a really great tool, I have
3 to believe that the underlying predictions are in
4 the ballpark.

5 I think you're missing what I guess I'll
6 term for you thermal rugosity. The amount of
7 temperature change within a region. Because what
8 we frequently fish is thermal breaks. When we're
9 looking for marlin and billfishes, we're fishing
10 thermal breaks. And so, we always fish the warm
11 side of the thermal break. So, you would find the
12 fish on the warm side, but normally there is some
13 colder water not so far off of that, which would
14 totally blow this Sargasso Sea prediction just as
15 one potential factor.

16 MR. CREAR: So, I will add that we do
17 consider sea surface temperature standard
18 deviation, which again is that variability within
19 an area of temperature. So, you do get those sea
20 surface temperature fronts a little bit from that.
21 Maybe not at the detail -- probably not the detail
22 that you're suggesting that you got fish on. But

1 we do try to incorporate that the best we can.
2 I'm trying to think of any other environmental
3 products that I could think of that could capture
4 that. We tried to consider as many variables as
5 possible that we know that could potentially drive
6 these species to these regions as well as what
7 fishermen use. So, I can't think of -- I'm not
8 sure if I can get at that. Off the top of my head
9 I --

10 MR. WEBER: I'm really not trying to put
11 you on the spot immediately, Dan. I'm talking
12 really from a bigger picture in that I want to
13 feel good about your model. And I want to feel
14 good that when you are predicting, you know, what
15 you're predicting in the bycatch is my target.
16 And so, the question that I'm asking myself is, if
17 Dan predicted that this area would be rich in
18 marlin, is that where I would go? And I'm not
19 sure I'm agreeing with your prediction right now.

20 And once I don't -- once I disagree with
21 that prediction, it puts the whole habitat
22 utilization in question. But you get where I'm

1 going. It's a really great start. I'm really
2 interested in seeing where it goes. But taking
3 what you've got here and immediately building it
4 into a how can we judge this closed zone or that
5 closed zone?

6 MR. CREAR: (Inaudible).

7 MR. WEBER: On this, others you're going
8 to have to bring us along a little bit that your
9 data is -- your prediction is something that we
10 would endorse.

11 MR. BROOKS: Thanks. Thanks, Rick. I
12 want to go to Jeff Oden in a second. Karyl, a
13 question for you. There's a comment in the chat
14 from Wally Jenkins saying it's my recollection the
15 Charleston Bump was originally closed to protect
16 nursery habitat for swordfish, which were
17 overfished -- with overfishing occurring at the
18 time and has since fully recovered. Closure was
19 not, as far as I know, related to any concerns any
20 of these bycatch species. Can you comment on
21 that?

22 MS. BREWSTER-GEISZ: Sure. So, a lot of

1 these pelagic longline closed areas were
2 implemented in order to reduce bycatch of all
3 bycatch across the PLL fishery. Billfish in
4 particular was looked at and that's where we ended
5 up not so much with the closed areas for billfish
6 as with the live bait restrictions in the Gulf of
7 Mexico. But all these other species, the
8 leatherback, the loggerhead, if you remember it
9 was in part because of the closed areas that we
10 ended up with a jeopardy for sea turtles in the
11 pelagic longline fishery.

12 So, yeah, these bycatch models were
13 important then. Some of the ones we're looking at
14 now including dusky and shortfin mako whereas back
15 then we didn't have the data physically of those
16 species. We know we need to look at them now.
17 So, we're going to keep looking at it. But these
18 closed areas were not just about swordfish. They
19 were about all bycatch and so we need to look at
20 all bycatch in order to --

21 MR. BROOKS: Thanks.

22 MS. BREWSTER-GEISZ: -- connect it to

1 what we're going to do in the future.

2 I also wanted to point out from what
3 Rick was saying just to keep in mind that one --
4 what Dan was showing was sort of in an amalgam of
5 pelagic longline of the fish species across the
6 entire month of January. If you notice, it
7 doesn't get a real bright yellow in any of those
8 areas of that chart. I think, Rick, you would put
9 more of a recreational perspective to it and not
10 just that that pelagic longline. Although I think
11 we definitely need the buy-in from the AP that
12 these predictions work, so.

13 MR. BROOKS: Thanks, Karyl.

14 MS. BREWSTER-GEISZ: Just wanted to make
15 sure you're looking at it broader.

16 MR. BROOKS: And to that point, I will
17 note in the chat that Marcos says that the blue
18 marlin season in Puerto Rico doesn't match with
19 the map presented for billfish.

20 We've got a couple more people who are
21 wanting to get in. We have about six minutes left
22 and then we will need to move to public comment.

1 And we'll need to do that on time. Jeff Oden,
2 you've been in the queue for a bit here.

3 MR. ODEN: Thank you. First off, I'm
4 starting to wonder if fishermen are even in
5 (inaudible) future. I'm really starting to
6 wonder. But secondly, my understanding was it was
7 juvenile swordfish was the reason for the closure.
8 Thirdly, as a fisherman of 40 some-odd years, I
9 can't even count them anymore, there's one thing
10 it's awful easy to get complacent thinking you
11 know something. And in my case, I've often in the
12 past, you know, thought I learned something and
13 then watched a greenhorn come in right behind me
14 and do what I knew better than to do. And show me
15 -- teach me a lesson, school me.

16 Without hooks in these areas, you're
17 wasting your time. And I think from what we've
18 seen with the sharks, modeling is not the way to
19 go. Right now, you heard everybody call in about
20 shark depredation. And, of course, we're still
21 dealing with models that -- anyhow. I've said my
22 peace. I'll be brief.

1 MR. BROOKS: Thanks, Jeff.

2 MR. ODEN: Anyway.

3 MR. BROOKS: Thank you. Mike
4 Pierdinock, I wasn't sure if your hand was left
5 over. I know you just asked a clarifying question
6 before. But do you have a perspective on this?

7 MR. PIERDINOCK: I'm sorry, I didn't put
8 my hand down.

9 MR. BROOKS: Okay.

10 MR. PIERDINOCK: There you go. Thank
11 you.

12 MR. BROOKS: Okay, no problem. Dave
13 Kerstetter is your hand back up or is that left
14 over as well?

15 MR. KERSTETTER: Negative. That was my
16 fault.

17 MR. BROOKS: Okay, no worries. Marty
18 Scanlon, same question to you.

19 MR. SCANLON: Yeah, no, I have something
20 else to say there.

21 MR. BROOKS: Okay, please go ahead.

22 MR. SCANLON: You know, just like

1 everybody else seems to be saying there. Without
2 putting hooks in the water, you really can't
3 verify any of the science here, you know?
4 Sometimes, you know, like Rick Weber points out
5 there, these fish are primarily caught on the
6 edges of that. You know, (inaudible) doesn't mean
7 that's where they're feeding. So, until you put
8 -- let the, you know, you're closing our
9 fisherman's data, the only way to get access to it
10 is to do it by fisherman's data. I mean, this is
11 nothing but a bunch of hocus pocus as far as I'm
12 concerned.

13 And to add something else to the
14 conversation is we basically as fishermen have a
15 lot of this information in your -- it overlapping
16 here at our disposal through different programs
17 that we pay for to help us fish. And it helps us
18 identify and that's one of the reasons why we've
19 been able to reduce our bycatch levels in this
20 fishery because the fishermen have been able to,
21 you know, through science and technology, we've
22 been able to reduce our bycatch with the

1 information that we garner and we pay for
2 ourselves in order to avoid these species.

3 So, you need to, you know, we've already
4 demonstrated in the areas in the, you know, Gulf
5 of Mexico by opening those areas and opening those
6 areas up there in the northeast here in the
7 bluefin tuna closed areas that we're more than
8 capable of spotting like, you know, mitigating our
9 bycatch issues here. And, you know, it's time for
10 the Agency to, you know, stop dancing around the
11 issue and find a way to put hooks in the water
12 here so we can get real science. Either that or
13 just go back to our logbook data.

14 I mean, but, you know, don't put these
15 observers on our boat. I mean, you know, we have
16 to have the observers for these data. We're the
17 research platforms. And now you're trying to
18 figure out every way possible not to allow us to
19 get access to this (inaudible). And it's just
20 almost insulting to even be, you know,
21 participating in this.

22 MR. BROOKS: Thanks, Marty. Scott, I

1 see your hand up. Is that left over or are you
2 wanting to jump in here?

3 MR. TAYLOR: No, I'm going to jump in
4 (inaudible) risks of (inaudible).

5 MR. BROOKS: Scott, just to note, you've
6 got -- we got two minutes and then we're going to
7 jump to public comment.

8 MR. TAYLOR: So, (inaudible) right
9 question. This modeling being (inaudible), as
10 pretty active to refine it once we get hooks in
11 the water as a predictive model moving forward
12 much in the way that I had my initial impression
13 was that this is about perception moving forward
14 as a tool to try to develop and close this gap
15 between the having zero data in there and having
16 some reasonable assumption about what the
17 predictability is. Then come in and be able to
18 refine it through hooks in the water. Is that the
19 intention here of the Agency? I mean, obviously,
20 you spent a lot of time on putting this thing
21 together. I don't think that's an unreasonable
22 question.

1 MR. DURKEE: (Inaudible) --

2 MR. BROOKS: I want to make sure you
3 have time for an answer.

4 MR. DURKEE: Yeah, so, this is a tool to
5 assess the closed areas and see what's being
6 caught in these areas predicting (inaudible) will
7 be caught. As far as what happens on next steps,
8 I don't know. Let just test these areas and see
9 (inaudible). I wouldn't predict too much on what
10 these results will show and how we go forward with
11 the modeling. But I think right now we're kind of
12 more focused on trying to make the best model
13 possible that's doing the best predictions range
14 in a species in of the areas including closed
15 areas.

16 MR. BROOKS: Thanks, Steve. Thanks, Dan
17 and Karyl and team. I think the question you
18 asked was is this useful, you know, and could
19 there be changes? I think the on there is useful.
20 I see some eyebrows raised to varying degrees.
21 Some are thinking, yeah, this could be useful.
22 Some maybe more skeptical. The other big messages

1 are I think you've got a number of suggestions on
2 variables you might consider. I won't review them
3 now, but I think you got a good half-dozen. And
4 then, obviously, a strong call from several that
5 at the end of the day you got to get real data.
6 So, I think I'll leave it at that unless Karyl or
7 team have any final comments here.

8 MR. BLANKINSHIP: I do have a couple of
9 comments. So, I'm going to let (inaudible) if he
10 has any.

11 MS. BREWSTER-GEISZ: I just wanted to
12 thank everybody for the comments and to note that
13 we are listening. I think Dan is -- Dan, Steve,
14 and Tobey are doing a great job trying to pull
15 together the model so it works. We will have
16 something for the AP to look at in terms of maps.
17 There's going to be a lot of them because there
18 are a lot of species and a lot of months. So, we
19 may not present all of them, but we'll have
20 something for the AP to look at. And as Steve
21 said, where exactly we go with this and what
22 options we propose, we're still working on all of

1 that. So, keep an open mind and we'll be back.

2 MR. BROOKS: Thanks, Karyl. Over to
3 you, Randy.

4 MR. BLANKINSHIP: Yes, right. And so,
5 thanks, Karyl. Something right down the road that
6 I was going to go with this and that is that the
7 intent here was to put this before you all. Get
8 some initial reactions about it. Start asking
9 questions and that's what's happened.

10 Also, we've gotten a lot of really good
11 feedback on this. Specifically, loud and clear
12 one of the things we've heard is that the model
13 would benefit from actual data from within the
14 areas that it's trying to predict. And so that's,
15 you know, I think is a very logical thing. And to
16 reiterate what Karyl was saying is that exactly
17 how this tool is used in the -- you know, within
18 our further development of how to conduct data
19 collection and research in support of spatial
20 management is still what we're framing. And still
21 what we're working on. And we'll continue to do
22 that over the coming months and into when we're

1 able to put this, you know, out later in 2021.
2 And so, the discussion's been very helpful I think
3 for helping us down that road. Thank you very
4 much.

5 MR. BROOKS: Thanks, Randy. And for the
6 folks who still have hands raised, which I think
7 are just leftovers, Dave Kerstetter, Rick Weber,
8 Scott Taylor, and Marty Scanlon, Jeff Oden, if you
9 would lower them that would be great. And we want
10 to shift public comment. And let me just first
11 say to any members of the public that are on, if
12 you want to be getting in the queue, if you can be
13 raising your virtual hand that would be very
14 helpful as well. Then we'll know who wants to get
15 in. I see one hand raised already, or a couple.
16 But keep raising them and we will get you in. And
17 let me just introduce you. We've got about a half
18 hour for public comment here. And so, obviously
19 invite everyone and ask everyone to be very
20 focused in their comments so others in the public
21 can weigh in.

22 Fully recognized as these meetings

1 always show that there are inevitably a diversity
2 of viewpoints and perspectives. We want to hear
3 all of them. And obviously encourage everyone to
4 do so in as collaborative a manner as possible.
5 And to reiterate what I said right before lunch in
6 case folks were not on the phone, this is really
7 an opportunity for public comment. It's not an
8 opportunity for a back and forth with the panel.
9 So, we'll just take comments and we won't be
10 getting in a dialogue. But that's really to make
11 sure that it's the opportunity for the public to
12 be heard.

13 So, with that, I've got four, five folks
14 in the queue so far. Art Sapp, I will start with
15 you. And if the folks in the public are
16 commenting, if you could just start with your name
17 and any affiliation that you'd like us to know.
18 Art, to you. You're open there.

19 MR. SAPP: Yes, my name's Art Sapp,
20 south Florida charter fisherman, tournament
21 fisherman. Used to be a commercial fisherman.
22 (Inaudible) lately, but also a member of the South

1 Atlantic Fisheries Management Council. So, I
2 understand entirely the efforts you all are
3 putting forth and how difficult they are. I'm
4 here to talk about the sharks, guys. It's not
5 only become very difficult for me to make a living
6 down here, as (inaudible) charter anglers are not
7 the best anglers in the world, and even if they
8 were, you can't outrun these things. The sandbars
9 are our primary issue, though we do have
10 occasional issues with the dusky and (inaudible)
11 bull sharks. I implore you guys to put extreme
12 pressure on these -- on the HMS panel there to get
13 something accomplished. The most recent email we
14 got back was sandbars weren't proved to be fully
15 recovered until 2070. Well, in 2015 it was bad
16 enough that we couldn't successfully run charters
17 without having multiple shark encounters. And it
18 has fully exploded since then. It got so bad this
19 year, it was -- you get sick of apologizing for
20 sorry, that really nice fish you got on there got
21 eaten again. You know, it just gets excessive.

22 And again, being a part of that South

1 Atlantic Fishery Management Council, you know,
2 it's because you're always talking getting
3 discards. Well, I'm open to getting discards.
4 I'm not worried about overfishing. I'm worried
5 about sharks eating their catch. And these fish
6 are being counted.

7 (Inaudible) is a hard enough deal
8 to try to count recreational effort
9 and catches and to add the shark
10 depredation to that, you know, it
11 feels like we're spinning our
12 wheels at the council right now, in
13 my opinion. Not the opinion of the
14 entire council for sure.

15 But when these guys just speak out to
16 me, and all of their personal experiences and put
17 some pressure on those guys, please.

18 MR. BROOKS: Thanks very much, Art,
19 appreciate it. Next up, Bob Zales.

20 MR. ZALES: I'm from the National
21 Association of Charter Boat Operators --

22 MR. BROOKS: Sorry, Bob. Could you

1 start that again? You weren't quite on when you
2 started. And if you can get closer to whatever
3 your source of mic is. Your voice is pretty
4 small.

5 MR. ZALES: Bob Zales the second.
6 President of the National Association of Charter
7 Boat Operators. Also, the fishery management
8 consultant for the southern (inaudible)
9 fisherman's association, which is a commercial
10 group for longline fishermen in the Gulf of
11 Mexico. I used to be on the AP with this when you
12 all first got started years ago. So, several of
13 them on there know me, some of them don't.

14 My comments are for the shark predation
15 issue. Karyl and Randy both were at the Gulf of
16 Mexico Fishery Management Council meeting this
17 past January where this was brought to their
18 attention for fishermen in the Gulf. It's nice to
19 see so many sectors now. Just about every sector
20 getting involved in not only the shark predation
21 issue, but the marine mammal predation. And for
22 those that's been involved in fishery management,

1 don't waste your time. I've been involved with it
2 now over 30 years. I've been in the charter
3 business for 55 years.

4 You've got two moments in fishery
5 management history where you have every sector,
6 commercial, charter, private recs, all on the same
7 page with two different issues. And to my
8 knowledge, this never happened before. So, that
9 should tell you that the comments coming from all
10 those sectors about these problems are real
11 because everybody's standing on the same page.
12 They all see the same problems. They all want the
13 problem addressed. So, we're all looking for that
14 to be worked on. Apparently, you are trying to
15 get to it. So, the sooner the better. I want to
16 thank Rusty Hudson for comments earlier,
17 especially about bringing members of the Gulf in
18 there. So, thank you all very much. And we'll
19 probably be sending additional comments.

20 MR. BROOKS: Thanks very much, Bob. Go
21 over to next, Ross. Ross Boucek, and I apologize
22 if I'm mispronouncing the last name. Ross.

1 MR. BOUCEK: Can you hear me okay?

2 MR. BROOKS: Yes, perfectly.

3 MR. BOUCEK: Thank you. You nailed by
4 pronunciation, so I appreciate that. My name is
5 Ross Boucek. I'm with Bonefish and Tarpon Trust.
6 I'd like to touch a little bit on the shark issue
7 myself. I understand this is a highly complicated
8 and multifaceted issue that's not going to have
9 one single solution that can solve it. But I'd
10 like to draw attention to the connection between
11 spawning aggregation fishing and depredation. As
12 you guys probably know, spawning aggregations
13 count for about nearly all the reproduction for
14 some marine species. And because of the elevated
15 biomass of fish that are actually spawning
16 aggregations sites easily shark abundances and
17 consequently depredation is much higher.

18 Our organization, we funded a study
19 through University of Massachusetts to compare
20 depredation at spawning aggregations and
21 depredation outside spawning aggregations for our
22 coastal marine species and permit makeup our

1 sportfish fishery in the Florida Keys and it's
2 part of about a half billion dollar a year
3 industry. And the results they showed that at the
4 spawning aggregation sites on the reef track about
5 two in five permit were lost to sharks. But if
6 you look at outside the reef where they live in
7 the shallow waters, depredation is basically
8 indetectable by our study.

9 So, given the importance of spawning
10 aggregations as a whole for, you know,
11 replenishing the stock every year, I ask that our
12 organization has to be better prepared (inaudible)
13 for this spawning aggregation fishing as an avenue
14 to help sustain fisheries under these new
15 stretches. And I appreciate your time in what you
16 all are doing. So, thank you so much.

17 MR. BROOKS: Thanks very much, Ross.
18 Kelly Ralston, let's bring you into this
19 conversation.

20 MS. RALSTON: Hi. Thank you for the
21 opportunity to address the group today. I am
22 Kelly Ralston. I'm southeast fisheries policy

1 director for the American Sportfishing
2 Association. And I also wanted to speak on the
3 shark/dolphin depredation issue that you all
4 discussed earlier today. This is definitely an
5 important issue for the sportfishing industry.
6 We've been hearing increasing issues and
7 encounters, not only from anglers but also at the
8 Gulf and South Atlantic Fishery Management Council
9 level.

10 We also have concerns about depredation
11 on their impacts on recreational fisheries. And
12 we would ask the Agency to continue to make this a
13 high priority and elevate it. In addition to kind
14 of center the information issues that were
15 discussed earlier during the presentation, I also
16 wanted to highlight the formation of a national
17 seafood council, which I know is under
18 consideration with the secretary as a potential
19 avenue to address consumer demands. And with
20 that, I'll close and thank you for the
21 opportunity.

22 MR. BROOKS: Thanks so much. Patrick

1 Price, if you would join in here. Your line is
2 now open, Patrick. You might need to unmute
3 yourself on maybe a phone or a computer as well.
4 We're not hearing you yet. I would try to mute
5 and unmute again. Patrick, are you able to jump
6 in here? All right, can you maybe if you throw
7 your comment in the chat, we can try to bring it
8 in that way. I'm not sure why we're not hearing
9 you. Again, if you can just make sure you're not
10 somehow double muted between your phone and your
11 computer both. That can happen depending on how
12 you patched in.

13 Okay, in the meantime, I want to see if
14 there's any other members of the public who would
15 like to offer comments at this point. I'm not
16 seeing any other hands raised. Yeah, a suggestion
17 here, Patrick, you might also try *6. So, Matt,
18 if you would unmute Patrick again and Patrick, try
19 to *6 if you are talking into your phone.

20 MR. VANKLUENEN: Bennett, it doesn't
21 appear on the phone, but on his computer he may
22 need to try pressing control F4 to unmute his mic.

1 MR. BROOKS: Control F4?

2 MR. VANKLUENEN: Function F4 or
3 something like that.

4 MR. BROOKS: Okay. Patrick, can you try
5 that? It's function 4 or control function 4.
6 Okay, I'm not sure what's happening here and our
7 apologies that we can't open up your line. Again,
8 let me encourage you to write a comment into the
9 chat and we'll try to bring it in that way even if
10 it's just a quick -- if it's something that was
11 said, you could do a quick ditto to some -- to one
12 of the commenters already.

13 Again, I just want to see if there's any
14 other public that want to weigh in here. Okay, if
15 not, I think we can move to wrap up. Randy, we
16 have a little bit of time left. I just wonder if
17 there's any --

18 MR. DU: Bennett, I apologize.

19 (Inaudible) --

20 MR. BROOKS: Okay, do you have
21 (inaudible) to see that?

22 MR. DU: Yes.

1 MR. BROOKS: Okay. Casey, you don't
2 need to worry about raising your hand anymore. We
3 see you. So, we'll bring you in to the public
4 comment. And let me just say to anyone else, if
5 you're finding trouble raising your hand, members
6 of the public that want public comment, if you
7 just type chat as Casey just did we can see you
8 that way. So, Casey, we're going unmute you so
9 you can weigh in. And, again, if you could start
10 with your name and affiliation. Casey, your line
11 is now open.

12 Pete, I'm wondering if you could have
13 quick chat with Casey or Matt and see if maybe you
14 can do a little bit of troubleshooting with Matt
15 and Patrick through the chat.

16 MR. COOPER: Sure, I'll go to chat.

17 MR. BROOKS: Okay. In the meantime,
18 Randy, while we're waiting to see if we can bring
19 either of those two folks in, is there any other
20 topics you want to be covering? We do have about
21 15 minutes or 10 or so.

22 MR. BLANKINSHIP: I don't have any new

1 topics to cover per se.

2 MR. BROOKS: Or follow-up questions from
3 any of the earlier conversations you think we're
4 okay there?

5 MR. BLANKINSHIP: I think we're okay at
6 this point.

7 MR. BROOKS: Okay. All right, well,
8 while we're waiting to see if we can do any kind
9 of trouble -- oh, Tim Pickett has Pat's comment.
10 Could you open up Tim, please? Tim Pickett. Tim,
11 your line is open.

12 MR. PICKETT: Okay. I have Pat's
13 comment if he's having trouble getting in here.

14 MR. BROOKS: Yeah.

15 MR. PICKETT: He had sent to me an
16 email. So, these are his words, not mine.

17 MR. BROOKS: Please. That'd be helpful.

18 MR. PICKETT: But I agree with them.

19 Okay? He says, "My name is Patrick Price. I'm a
20 41-year-old native of Stuart, Florida. I have an
21 active 26-year professional fishing career, which
22 has included commercial fishing traveling on

1 private boats worldwide, charter fishing, and
2 currently own my own charter business since 2009.
3 In the last four to five years, I have started to
4 see an increase in shark encounters with my
5 business. The first interactions were unique as a
6 lost fish were still rare. Rare enough that it
7 actually was exciting.

8 For example, the first and only sailfish
9 I had attacked by a shark knowingly was January of
10 2013. I had eight eaten in 20 days of fishing
11 from Stuart to Boynton, and I was able to verify
12 that I was able to verify and that was in a
13 three-month stretch this winter. Shark encounters
14 used to have a wow factor for me and my clients.
15 However, the wow factor is 1,000 percent gone.
16 And I can say this firmly, there are tens of
17 thousands of anglers, captains, and mates that
18 agree with me.

19 As time has progressed to our current
20 date, the VHF chatter, cell phone calls, texts,
21 and Facebook posts continue to light up with
22 stories of a rapidly increasing shark depredation.

1 This is 100 percent not an isolated issue. Having
2 a 26-year career on the water, I feel like my
3 network is pretty strong and stretches thousands
4 of miles. And the reality is within my network, I
5 consider commercial fishermen, divers, as well as
6 charter and sportfishing captains and crews
7 excellent barometers.

8 What I mean by this is when someone
9 tells me what is going on in their region, it's
10 the reality. The cold hard reality that was once
11 a rare occurrence became a couple times a month
12 and progressed to a weekly and now almost daily
13 occurrence and sometimes multiple times a day. It
14 is not uncommon to lose double digits of bottom
15 fish in a day on my boat of multispecies over 20
16 miles from 30 to 300 feet. It is heartbreaking
17 and aggravating beyond belief. In talking with
18 peers, it is going on up and down the coast.

19 The current cold hard truth is that in
20 the southeast Atlantic and Gulf there's a major
21 mismanagement of sharks. Specific to my area
22 would be sandbars and bull sharks. As the wow

1 factor is gone as I said and has reached its
2 boiling point for me and for others. As a steward
3 of the sea who wants to protect his resources for
4 future business, I am fearful that the implemented
5 mismanagement of so many other species is now
6 taking a backwards turn. Stocks have been
7 rebuilding because of great work by agencies
8 through the years. Do I agree with the
9 regulations and assessments? Of course not.
10 However, I have seen a difference.

11 But the fact of the matter is everything
12 that has been accomplished over regulatory
13 management by size, bag limit in closed season is
14 in jeopardy in my area because of the current
15 state and abundance of apex predators. A perfect
16 example, in the last three days of charter
17 fishing, we have caught 57 mutton snapper in 12
18 hours of trying. We kept 16, but had 14 eaten by
19 sharks. This was over a 25 miles in area from 65
20 to 130 feet. The stock is in great shape. So
21 many fish in the 16 1/2 to 17 3/4" range. The
22 unknown is how many made it back to the bottom

1 without being eaten.

2 These are not numbers I want to think or
3 try and calculate, but I'm highly concerned, which
4 has led me to start the Facebook page now titled,
5 Sportsmen Fighting for Marine Balance. This page,
6 along with letters have received support from
7 every genre of waterman there is. Conservation
8 groups, commercial fishermen, charter,
9 recreational, private fishermen, and divers are
10 all aligned on this issue. The over abundance of
11 sandbar and bull sharks needs emergency attention.
12 An increase in commercial harvest is needed, as
13 well as an open season on sandbars.

14 As I said, the anger meter has shattered
15 on almost everybody. The attitude of the shark
16 has changed from lingering and debating to no
17 hesitation and panic feeding. The attitude of the
18 victim is changing as well. People are sick of
19 losing potential earnings. People are sick of
20 losing tackle. People are sick of losing repeat
21 clientele because all the quality fish are lost to
22 sharks in a day. People are sick of spending

1 money to lose their dinner on the one day a month
2 they get to fish. This is a major problem
3 recognized by everyone. Everyone agrees and it
4 demands immediate attention."

5 That was a letter from Pat. I'm sure he
6 would have liked to have read it himself. But I
7 think he's having trouble.

8 MR. BROOKS: Thank you so much for doing
9 that, Tim, that's very helpful. I also want to
10 fold in there's a comment in the chat from another
11 member of the public. And since I don't think
12 everyone necessarily has access to the chat, I'll
13 read that.

14 This is from someone names Shara
15 (phonetic) Teeter (phonetic). It says, "Hi, thank
16 you for the presentations today. As a member of
17 the public in south Florida and at least in my
18 experience there is an extensive amount of
19 recreational fishers that understand that these
20 sharks are important to maintaining healthy
21 ecosystems and healthy fish populations. And
22 while depredation and habituation are happening,

1 you know, it's part of the deal. And are open to
2 a comprehensive data driven approach to the
3 issues. And in general, I think we all understand
4 the necessity and importance of stock assessments
5 and data regarding fisheries. Thank you."

6 That again is from a member of the
7 public named Shara Teeter from South Florida.

8 MR. COOPER: All right, Bennett, let's
9 give Casey another try here.

10 MR. BROOKS: All right good, let's see.
11 Casey, are you there? Matt, can you take Casey
12 Vermillion off of mute? Okay, Casey, you're now
13 off mute. See if we can hear you. You're back on
14 mute. Okay, now you're off again.

15 All right, Pete, I'm afraid despite your
16 best efforts, that did not work.

17 MR. COOPER: We'll see if we can get
18 something in the comments here in the chat.

19 MR. BROOKS: Okay. All right, let's see
20 if we can do that. All right, so I think at this
21 point we have worked our way through the agenda.
22 Moving to meeting wrap-up, I'll just first of all

1 thank everyone for all the focus and attention
2 over the last two days. I actually think this has
3 been a very focused conversation with a lot of
4 good feedback. And it, you know, certainly never
5 felt like anyone ever walked out of the virtual
6 room here. I think we've really focused
7 conversation. So, thank you.

8 I'm going to add my thanks to Randy
9 Gregory that Randy mentioned at the outset for his
10 long service here since he's going to be moving
11 towards retirement. So, thank you, Randy. And
12 then Randy Blankinship, I want to hand it off to
13 you so you can just talk about what kind of
14 summary and by when you'll anticipate providing.
15 And then I'm seeing in the chat that Randy Gregory
16 would also like 30 seconds to talk. So, Randy
17 Blankinship, I'll hand it to you and then Randy
18 Gregory, I think I'll give you the mic last there.

19 MR. BLANKINSHIP: Okay. So, yeah, I
20 just want to say thanks to everyone once again for
21 your time, for your thoughts, and for your typing
22 in the chat, and every which way that you were

1 able to share your thoughts and contributions.
2 They were very helpful. This has been a busy two
3 days. And I think a very good one. We heard a
4 lot, which was our intent.

5 And we appreciate everything you had to
6 say. I want to thank Chris and Sam for being with
7 us earlier today for their words and their time.
8 I also want to send out a big thank you to all of
9 the folks working in HMS management division for
10 all of the work that they did in preparing
11 presentations in the data analysis that went into
12 those, in the reviews, and for the presentations
13 themselves and for the work behind the scenes in
14 putting this on. And especially to Pete and Matt
15 and Nick for their work making the actual
16 operations happen with this Webex.

17 And the wrap up presentation that we
18 usually do that summarizes at least at a very high
19 level some of the things that we've heard, we
20 anticipate that that would be posted to our HMS
21 advisory panel webpage associated with this
22 meeting. Also where the agenda is, we'll have

1 that presentation up I would say probably in a
2 couple of weeks. It's usually been about two to
3 three weeks before we get that up on there after
4 it goes through review and we augment that with
5 everybody's notes and all of that.

6 So, be on the lookout for that and
7 thanks a bunch everybody. We'll talk with you
8 again soon.

9 MR. BROOKS: Thanks, Randy. And Randy
10 Gregory, give you a final word here. Matt, if you
11 could take Randy Gregory off mute that'd be great,
12 thanks.

13 MR. GREGORY: Am I on?

14 MR. BROOKS: You got it. We just heard
15 you. Randy? We had you briefly. Matt, can you
16 take him off again? There you go. Randy, try it
17 again. Nope, okay, we got to Randy, you there?
18 Don't touch the --

19 MR. GREGORY: Yeah, can you hear me now?

20 MR. BROOKS: We can hear you. Don't
21 touch anything just talk.

22 MR. GREGORY: Hey, just real quick guys.

1 I want to thank you all for the years. Thanks to
2 the HMS staff, HMS staff that I've worked with.
3 We've got through some fun things. I got some
4 good conversations and I will admit that for the
5 time being. I might be like Pat Augustine or
6 maybe coming back at some point, who knows? But
7 thanks to the staff and thanks to the fellow AP
8 members, especially my folks from North Carolina
9 and we'll see you soon and around the bend.

10 MR. BROOKS: Sounds great. Thanks so
11 much, Randy. And again, thanks to everyone for a
12 very good and two-day meeting and we will look
13 forward to seeing you in the spring in some
14 fashion. Randy, you look like you want to get
15 clicking.

16 MR. BLANKINSHIP: I do. And this was
17 just to add on thank you, Bennett, for once again,
18 a great job of moderating this meeting. Thanks a
19 bunch.

20 MR. BROOKS: All right, well thanks
21 everybody. I wish you well. Stay healthy and
22 safe. And we'll be in touch soon. Thanks

1 everybody. Take care.

2 (Whereupon, at 3:15 p.m., the

3 PROCEEDINGS were adjourned.)

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