

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

CITIZEN SCIENCE COMMITTEE

**The Beaufort Hotel
Beaufort, North Carolina**

December 7, 2023

Transcript

Citizen Science Committee

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Observers and Participants

Other observers and participants attached.

The Citizen Science Committee of the South Atlantic Fishery Management Council convened at The Beaufort Hotel, Beaufort, North Carolina, on Thursday, December 7, 2023, and was called to order by Chairman Kerry Marhefka.

MS. MARHEFKA: All right. Good morning, everyone. Let's see. Let's get going with Citizen Science. Looking over the agenda, does anyone have any changes, or additions, to the agenda? All right. Seeing none, the agenda is moved. Any changes to the minutes? I see no changes to the minutes, and so the minutes are approved.

Before we get into what we're going to talk about today, Carolyn and I just wanted to make sure that Julia got a little shoutout, and proper recognition, because she got a callout from Ms. Coit yesterday, which is -- You make us very proud. That's huge, and you deserve it, and so congratulations, and so very well done on that. Okay. Real quick, during Citizen Science today, we're going to look at -- Our big lift, our big task, is looking at these research priorities, which we do every December, and there are going to be some questions.

If you look on your overview, and Julia, of course, will lead us through this, but just everyone be paying attention to the following questions to consider during the CitSci priority list, and just keep in mind that it's sort of big-picture, sort of what we -- We don't need to get into the minutia of how these things are going to be developed, and the methodology and things like that. Then we're going to get an update on SciFish, and a demonstration of the platform, and then we're going to look at citizen science projects, and get a program update, all from Julia, and so, with that said, I will hand it over to you, rock star.

MS. BYRD: Thanks, guys. I was sitting outside, and all of those staff members texted me to let me know that CitSci and BFP got a shoutout, and so that was exciting, and there are lots of people behind the Citizen Science Program, and so I was really excited to get that for kind of all of our partners and participants, and so thanks for that.

Like Kerry said, we're going to be updating the citizen science research priorities. Ideally, by the end of the committee, you guys will kind of adopt the new citizen science research priorities. Before getting into things, I wanted to talk a little bit, and give you all an overview, about how kind of the citizen science research priorities are used and the process that we use to update them, kind of to give some context before we get into things.

Our citizen science research priorities basically guide the types of projects that we pursue and develop, and so, in the South Atlantic, we have all of these different data needs, and so this priority list kind of helps us narrow the focus from the many data needs to kind of tangible ideas that are important to kind of our fishermen, scientists, and managers, and so, again, they help us -- When we are going to develop a project, we make sure that it's meeting one of these research priorities, but another way that we use these research priorities is if a group, or a partner, is interested in collaborating with us, or developing a citizen science project that is of interest to the council, we can share this research priority list with them, and that kind of helps us see where we may have overlapping interests and what may be a good project for us to collaborate on.

Citizen science research priorities, we originally developed them in 2018, and we had this awesome group of kind of -- We called them A Teams, and they were action teams, or workgroups,

that kind of helped us develop the program, and our research priorities were one of the things that they helped develop, and then, as Kerry said, we kind of update these research priorities in December, every other year, and so we update these research priorities the same year that you guys update the council's overall research and monitoring plan, and so we updated them in 2019, 2021, and here we are again doing it in 2023.

The process used to update the citizen science priorities is in kind of our policies and procedures, and so it's kind of a multistep process, and so, first of all, you all update the council's overall research and monitoring plan, and you all did that in June, and that's informed by the SSC, the SEP, our APs, SEDAR stock assessments, and then you guys kind of provide your input as well.

Next, we have a meeting with our citizen science advisory panels, and so our Operations Committee and our Projects Advisory Group, and so what happens is staff looks at the updated research and monitoring plan, provide suggestions for things we might want to update to our citizen science advisory panels, and they provide feedback, and then we come to you guys, in December, to kind of look at their suggested updates, or changes, and then you guys kind of provide feedback, we make tweaks, and then, ideally, you would consider them for adoption.

There is an extra step in this, and, in this photo, it's kind of grayed out, and we're almost ready to add this extra step in, and so, the next time you update your research priorities, we'll be able to do this, but it's the addition of kind of a citizen science project idea portal. You guys approved that in June, and we're still -- Basically, what that is is it's an online tool that stakeholders, fishermen, scientists, and researchers from around the region will be able to share their citizen science project ideas with us, and that will be used to help us update our research priorities, and so you all approved that in June, and we had to go through a few hiccups and red tape, but we'll be ready to launch that portal in early 2024. We weren't able to include feedback from that in this go-round of updating the priorities, but, the next go-round, we will be able to do that.

The main document that we'll be walking through, in a few minutes, is kind of Attachment 1b, and so that's a draft of the updated citizen science research priorities. It incorporates the feedback from the citizen science advisory groups, and, when you're looking at that, any language in italics is the feedback that we got. It basically summarizes the feedback that we got from our advisory groups, and then, if you see yellow or strike-through language, that is kind of highlighting the potential kind of additions and deletions to the research priorities that were recommended by our advisory panels.

Kerry kind of alluded to this a few minutes ago, but some things that may be helpful to consider, as you guys are -- As we're all kind of walking through the research priorities, are there any priorities that you guys think should be removed or added to the list, and, again, these priorities drive what your Citizen Science Program does, and so, if you think that changes need to be made, or things need to be taken off or added, please let us know.

Under some of the priorities, there are specific target species listed, and those are driven by kind of the council's research and monitoring plan, kind of recommendations coming from stock assessments, but, if you guys have any additions or deletions to the target species, that would be wonderful to know.

As Attachment 1c, I provided the council's overall research and monitoring plan, just as a reference for you all, but, if you think that there is something in that monitoring plan, where citizen science may work well, that's not included in the list, let us know, and we can add it, and then the last thing that would be helpful is, if you guys think any of these priorities may help address kind of the most immediate needs of kind of science and management, let us know, and we can flag those in the priorities as well.

Then the last thing I will say, before kind of pulling up the document that we'll begin to walk through, is, as Kerry said, I feel like, every time I go through the research priorities, I have to remind myself that these are kind of big-picture. We want to try to identify what is the data need, what do we hope kind of the outcome of that data is, who are the target volunteers we would want for a project, but we don't -- I don't need to get down into the minutia of how would we set up a project and what would the method be to collect that data.

These are kind of big-picture priorities, and, if we were able to get funding, through a grant or something like that to develop a project, we would bring a team together to get down into that minutia and methodology development, things like that, and so just a reminder, and I know I have a hard time not getting into the weeds sometimes, and so I thought it was worth maybe mentioning that as well. Before I pull up Attachment 1a, does anyone have any questions about kind of how we use the citizen science research priorities, or kind of the process we use to update them, before we move on? All right.

All right, and so what I will plan to do is just kind of quickly walk through the research priorities, and some of the kind of feedback given by the advisory groups, and so the first one is kind of age sampling, and target volunteers for this project would be recreational. The data needed would be otoliths, or fin clips, and I will say more about that later. You can see the list of target species, and the anticipated outcome is that it would hopefully help characterize the age of catches.

Some feedback that we got from the advisory groups is they recommended keeping this as a research priority. They noted that having age data, from the rec sector especially, is a really high priority. They recommended removing some of the species from the target list, in part due to the difficulty in sampling otoliths from the jacks, and other species they felt there were higher data needs, and so removing dolphin and cobia as well. We added some species in, that are highlighted in yellow, and those are mainly based on looking through the updated research and monitoring plan.

It was noted that kind of research is being done on getting age data from fin clips, and it looks really promising, and we added kind of data needs -- We added fin clips to the data needs section, and we also noted that in-person volunteer training would be really important, if you were to develop a project like this, and, also, beta testing, and pilot testing, a project would be important, and then one of the kind of Science Center representatives on our advisory groups noted that, you know, age data are really critical to stock assessments, and they can be really influential, and so sampling design, and protocol, would be really important when developing a project under this research priority, and so now I will open it up to you guys. Do you feel like this should be kept as a research priority, and do you agree with the recommended changes from the group?

MS. MARHEFKA: Carolyn and then Tim.

DR. BELCHER: I think the age sampling is one of those thing that at least it's -- If you're doing the hard parts, archiving it, and all of that kind of stuff, for a later date is relatively easy, and my question would be, and it's just from experience, and I don't have the expertise with how fin clips are stored, but I know, in years past, when we've kind of collected in good faith, there is a little bit of degradation that happens, if you archive them. Whatever they're stored in, sometimes it breaks it down, to the point that, when you do go to hand them off to use them, they're not usable samples anymore, and so, again, if it's changed out, with the media that they're stored in, and they're more stable, and it's something that -- Again, if you're planning to archive them, that would be the only thing that I would caution, based on experience with fin clips.

MS. MARHEFKA: Go ahead, Tim.

MR. GRINER: Thank you, Madam Chair. I was going to ask something along the same lines, and so, as far as collecting otoliths and storing them, do we still have a big backlog of otoliths, either at Beaufort or anywhere else, and, I mean, how are we storing these, and, I mean, at one point, it seems like I remember that we had a big backlog of otoliths.

MS. BYRD: So I don't know that I'm the right person to be able to answer that question.

DR. WALTER: We have two main groups who are doing a lot of the ageing, South Carolina DNR and our Beaufort Lab. Florida does the ageing for a lot of other things too, and so those are the kind of -- I think those are the three labs that are providing most of the age fodder for our stock assessments.

Most of the time, what happens is one of the species gets on the docket, and they get through that backlog in time for the SEDARs, and so they're not ageing everything all the time, but it's as the SEDARs usually come up. Right now, I don't think we have a major backlog for anything that's on the docket right now. I can't speak for the other groups, because sometimes they've had some staffing shortages, and I know our age and growth lab has also experienced some of that, but I think they up-to-date on stocks on the schedule.

While I have the mic, I will comment a bit, and I think these could be actually excellent opportunities, and I think there's a number of initiatives that could benefit from this, and I think the key here is partnering with something like the South Atlantic Red Snapper Research Program right now, if this is going to go into play, because they actually can use those fin clips for the genetic part of that project, and I think it's finding a way for this citizen initiative to be fit into existing projects, because there's probably not going to be the long-term support to age all of those independently, and it's going to have to find a way that it fits into what is already ongoing, and the labs who are already able to handle them, and so I think that's where probably getting in touch with the PI for that program, for the amberjack count, and I'm sad to see cobia dropped off, because we have such a paucity of samples from the cobia recreational fishery, and so that one is one that potentially could benefit from even a smaller number of samples that rec fishermen can collect. Then there is one red thing that seems to be missing there, and I will not say it, but it seems like that could be a -- I think maybe Jessica has some comment on where Florida could fit in. Thanks.

MS. MCCAWLEY: So a couple of things, and I'm glad that John Walter went first. On the backlog, FWRI has been working on that, including, I believe, and the last time that I talked to them about it, getting some of the otoliths from Pascagoula, because there was a backlog -- Not

Pascagoula, but Panama City, and there was a backlog there, and so I think that they are almost caught up, at FWRI, on all the various species, and so they're doing state species, and they're doing federal stuff, and then sometimes they're an additional reader on some other folks' ageing.

On that red species, the FWC's -- One of our exempted fishing permit proposals that we submitted for the red snapper funding opportunity included taking those fin clips from this hotspot area, and so say Canaveral to the Florida/Georgia line, in order to get the information that would go to Patterson, who is doing -- I still call it the Atlantic Great Red Snapper Count, but it would go to him to do that close-kin analysis, and so to do the genetic analysis, and so, as part of that proposal, we would be collecting those samples, and then they would be running it for that close-kin analysis, and so, yes, that was one of the items that we're working on, and then, in addition, a couple of the other proposals that FWC submitted is we would be taking red snapper otoliths from the hotspot area as well, and so I just wanted to put that out there.

MS. BYRD: All right, and so it sounds like there is interest in keeping this as a research priority, and I have taken notes on it may be most helpful to kind of incorporate a project like this into existing projects that are already going on, and there was talk of a red species, and I don't know if we want to add the red species to the target species listed under this project.

MS. MARHEFKA: Yes. I am seeing thumbs-up and heads nodding. Carolyn, go ahead.

DR. BELCHER: Just to go along with that, because I know we're talking about the genetics relative to the red snapper count, but what about amberjack, for that reason too, because you've got the amberjack study that is also going on, and I'm just -- If you're thinking about species on the list, cobia is one of those things that I can understand the need to -- Or why people would feel that cobia should come off, because it's no longer 100 percent managed in the South Atlantic, but I do still think that the resource would be a good resource to tap into, because it's not going to come from anywhere else, and so maybe keeping cobia on the list, or adding it back to the list, and so cobia and greater amberjack are right next to each other, and so maybe putting them back on.

MS. BYRD: I will note, just for the jacks, removing otoliths is pretty tough, and so that may be more of a fin clip -- Where a fin clip would need to be used, just because it's really -- That's a species that is really challenging.

DR. BELCHER: Sorry, and I was meaning it for the genetics part of it, and I don't know much about the ageing of it, but I was just thinking, because they were working the genetics in that project, the same that they were doing red snapper, that it might be --

MS. MARHEFKA: Laurilee.

MS. THOMPSON: That might have been a typo that they struck out cobia, because, in bullet two, they say that there is higher data needs for cobia.

MS. BYRD: They felt like there were other things that would be more helpful for cobia than this, necessarily, based on we're only managing in the Florida piece and not kind of all the way up the coast, and that's ASMFC now, but, yes, adding cobia back in, and greater amberjack, and we added red snapper, and so does that look good to you all? Are we ready to move on to the next one? Okay.

The next research priority is for kind of maturity data. Target volunteers are recreational and commercial fishermen, or tournaments, and data needed would be kind of gonad collection, and that could either be biological samples or pictures or photos, and you can see the target species listed, and the idea would be to have improved reproductive information.

Some of the feedback we got from the advisory groups is they added hogfish to the list, based on kind of the updated council research and monitoring plan, and they also noted that the kind of SERFS sampling, and so the trap and video sampling, can provide some reproductive information for our South Atlantic stock assessments, but they sample from April to October, and so having a citizen science sort of project, that collects information from species that spawn outside of their sampling season, may be especially helpful.

It was noted that storage of the biological samples is really challenging, and they can't be frozen, and they can only be on ice for a short period of time before they need to be placed in something like formalin, and so that would be a challenge to setting up a project. They noted that photos would be more useful for non-hermaphroditic species, but it could really help with things like sex ratios, and they also noted that sampling design wouldn't be as critical for kind of reproductive information as it would for age data, and they would really just like samples kind of from the whole spawning season.

It was noted that, if you're collecting kind of reproductive information, you also need to be collecting age data from those fish, because the data are typically incorporated into things like assessment, when you're looking at maturity and age or something like that, and it was also noted that this type of a citizen science project may be best suited to kind of dedicated individuals, and one of the examples that we talked about is, at some places, there are kind of fish cutters that will help kind of fillet fish at the end of trips, and perhaps that could be a group that could be tapped into for a project like that, although several people noted that there would likely need to be an incentive for them to want to participate in a project like this. Again, the question is do you guys support keeping this as a research recommendation, and are you good with the addition of hogfish under the target species?

MS. MARHEFKA: Carolyn.

DR. BELCHER: So I guess it's just I'm asking the question, because, with some of our species being under a spawning closure, technically, your fishermen wouldn't be keeping and retaining for that at least reproductive staging, right, and you would at least still be able to do male and female on the outside of that window, but, if you really wanted to be able to look at reproduction, we're kind of blocking them out of that information by having a spawning season closure.

MS. BYRD: So if -- Again, this is kind of a wish list of projects. If we were to develop a project like this, and we wanted people to be able to sample during that spawning season, you would have to look into like an EFP, or something like that, and so it would come to you guys to say yea or nay on a project like that, and so, if you wanted to focus-in on those kind of -- Like thinking of the grouper season closure, or something like that, and they would have to follow the normal process for anyone to do a project and kind of get an EFP to be able to do that sort of thing.

DR. BELCHER: Just a follow-up too, and I'm going to ask John Walter. John, how much of the data -- Like, if you're doing a macro assessment for reproduction, is that useful with the stock assessments? I mean, I know male and female, obviously, and transitional, if you're looking at hermaphrodites, but like I know we've done those just macro assessments even in-house, because, for us to do fecundity, and all those counts, it ends up having to go out-of-house, because we don't have the personnel for that, but is there a lot of that qualitative assessment that goes in, based on reproduction?

DR. WALTER: Unfortunately, the qualitative stuff is really difficult to make inferences on, and you often have to do the full histology on them, and one of the challenges that I think we're facing, as well as South Carolina, who did a lot of repro work, is that it is costly, and it's challenging to get the samples, because you have to often freeze them, or get them directly at-sea, and then you've got to process them in a fairly costly manner, and so we're actually moving away from incorporating that, and we're going to using, usually, just like spawning stock biomass measured in weight, and that's because we just don't have the resources to fully incorporate it, and I think that that's been one of the things that -- Partial sampling, or only partial inclusion of it, means that you don't have a full picture, and then, if you do like a fecundity curve, it changes when you add a handful of new samples.

Then you say has fecundity changed or not, and it takes a really high level of systematic sampling to get at whether there is changes in age-at-maturity that you might think could be related to changes due to climate, or something like that, and so, that being said, I think we're going to have some hard times fitting in a whole lot of additional data without the resources to process it, and I don't see those resources coming anytime soon.

DR. BELCHER: So maybe this would be one we could put to the bottom of the list, just for that reason. As far as if you're asking for support as keeping as a research priority, I just don't know that it --

MS. BYRD: So I guess the question would be do you all still want to keep it as a research priority, and just note that it's a lower priority, or do you want to remove it from the list, and, again, I will say that we update these every two years, and so, if you take something off, that doesn't mean that it can't come back, if that's important, and so that's kind of the question, to either kind of take it off or leave it on and note that it's a lower priority.

DR. BELCHER: I don't have a preference either way. I would think somebody could argue for keeping it as a lower priority too, but, for right now, I just see where this probably would not -- If I was directing somebody, this one would not be one that I would be directing people towards.

MS. MARHEFKA: I guess I'm just trying to understand the difference between this list and sort of our greater research priority list as a council, and it's not that it's low priority, but it's that we're being realistic about whether or not it can happen, which is sort of two different things. Like is there some utility in leaving it on here, you know, where it is, because it's important, but all of us being realistic about it happening, and that's what I'm sort of struggling with. So that doesn't help you though, does it? Maybe we can continue to go through the list, and, at the end, we can come back and be like we want to move that down, and does that make sense?

MS. BYRD: All right. The next one is gathering information on released fish, or discards, and target volunteers are recreational and commercial fishermen. Data needed, you can see that kind of listed on the screen, and you can see target species listed on the screen as well, the anticipated outcome, improved removal estimates, the ability to characterize the size composition, and then we added in that could help monitor recruitment for some species, in a kind of qualitative sense.

Just to share a little bit of information from our advisory group, they supported keeping this as a research priority, and they noted this is kind of one that our SAFMC Release project focuses on. They noted that there's a big data need for information on released fish, and they noted the data need for use of barotrauma mitigation techniques is starting to get more and more important, and they recommended adding kind of the when and where fish are released to the data needs, and then this language about could help monitor recruitment for some species, and the reason we added that is, last year, through our Release project, we began hearing, from participants, that they were seeing an unprecedented number of small gag in the estuaries that they hadn't seen in twenty years.

When we looked at the data that came in, you could see that there was a bump in the size composition of smaller fish, and so, again, it wouldn't be used as kind of necessarily a quantitative measure of recruitment, but I think of it more of a kind of traffic light, and so red, yellow, and green, and, kind of last year, gag seemed to have a good year for recruitment, based on information we were gathering, and so, again, that's their kind of feedback. You can see what they suggested to incorporate in yellow, and, again, the same kind of question, and do you guys want to keep this in? Do you support keeping it in, and are you comfortable with the recommended language additions?

MS. MARHEFKA: Well, based on our discussions earlier in the week, in my mind, it's incredibly important, and I would really, really love to focus on the bullet point -- That final bullet point about commercial and for-hire already report the number of discards, and at least we know, for the commercial sector, that it's questionable how those are being reported, and so, you know, personally, it would be really important for me -- I would love to see a sort of cooperative research citizen science research project that worked on improving, or completely remodeling, how commercial fishermen report their discards, some sort of at-sea program. We did it years ago, and there was a cooperative research program, years ago, between the council, and I forget who the other party was, where they actually had like a machine type of thing, like a computer type of thing, on the boat that collected it in real-time.

MS. BYRD: Amber and Scott Baker did a Sea-Grant-funded project like that.

MS. MARHEFKA: Okay. I know that someone came on our boat and did it, but, you know, for me, to the extent that we can improve sort of even the mandatory -- To work on a citizen science project to create what could then maybe possibly become the mandatory way we report our discards commercially would be important. Spud.

MR. WOODWARD: This is, I guess, flirting with minutia, but I think, in terms of data needed, it would be good also to add the terminal gear used, because, you know, we're dealing with natural baits, versus artificial, and, you know, the more we understand about what people are using, I think the better off we'll be.

MS. MARHEFKA: Andy.

MR. STRELCHECK: To add to that, disposition of the fish, right, at least dead or alive, you know, to get some information about the mortality.

MS. MARHEFKA: I would say, if we're doing these in order, I think Carolyn and I were both sort of saying, on the side, that like this, in my mind, would pop up above the maturity one, if not completely to the top, because it's one of our decisions that we're having to make here this week. Anyone else on the discards? Okay.

MS. BYRD: The next is genetic sampling, and I think this was kind of hit on a little bit already, in some of the discussion we had under age sampling, and so genetic sampling is -- You can see the target volunteers, and the data needed would be fin clips. The target species, you can see those on the list. Based on some of the earlier discussions, it seems like greater amberjack and red snapper may -- You all may be interested in adding those to the list.

The groups supported keeping this as a research priority, and they recommended adding a number of species, due to the updated research and monitoring plan, and they also suggested adding another anticipated outcome and added some species, thinking that getting genetic samples could help with species identification for some of the species that that can be tough between, things like determining between black and gag grouper, or scamp and yellowmouth grouper, as needed.

They also noted that kind of genetics are an increasingly powerful tool, and it seems like more and more can be done with fin clips over time, and as we move into the future, and so they also noted that fin clip sampling is less complex than a lot of the other biological samples, like removing otoliths, or removing gonads, things like that, and you can do it without killing a fish, and so they recommended keeping this one in there, and so they recommended kind of the yellow additions, and so we're interested in feedback from you guys.

MS. MARHEFKA: All right. Go ahead, Tom.

MR. ROLLER: Just from a practicality standpoint -- I mean, I have participated in a lot of fin clip studies, right, from individual researchers, and universities, and the biggest issue they seem to have, as researchers, is trying to find a conduit to get the fishermen for these projects, and so that's kind of one way that I view this, right, because this isn't as simple as -- You've got to get equipment to people, even if it's just vials and a pair of scissors, right, and so like that's one of the ways that I look at this sort of project, is we have this as a way in which to expand something like that.

MS. MARHEFKA: Very good point.

DR. BELCHER: Just whatever comments we had in the previous I think carries down to that.

MS. MARHEFKA: So, as you all see, they had recommended adding wahoo, black grouper, gag, scamp, and yellowmouth, and is everyone good on those additions of species? I'm seeing heads nodding yes.

MS. BYRD: Then, based on Carolyn's comments, I added red snapper and greater amberjack into the target species too, due to the counts that were mentioned earlier. Okay. The next one is fishing infrastructure, and so data needed is kind of GPS location of existing or kind of closed fishing-

related infrastructures, and the group added some language into the anticipated outcome, and this was driven some by some input from Christina, and she kind of noted that having better kind of baseline information on fishing infrastructure could help define communities, and kind of help better understand kind of the key fishing hubs for some of the social analyses that are done for the FMP amendments, and so we added that language in there.

The group noted that this was especially important for the commercial and for-hire sectors, and it's increasingly important for, you know, as the kind of loss of working waterfronts is kind of underway, and it was noted that many states have done some work, and so, before you develop a project, it would be really important to see what data already exist, prior to developing a project, and they also noted that a project like this could be better suited to a specific group of individuals, like a group of grad students or something like that, but you could potentially combine something like that with a citizen science approach as well, and so they recommended keeping it as a priority and adding this additional language under anticipated outcome.

MS. MARHEFKA: This is, obviously, a topic near-and-dear to my heart, and I was -- It struck me that maybe, even during like the scanning events, as part of FISHstory, would be like asking individuals to even name fish houses that used to be in their area that aren't there anymore, and so, for me, I guess -- Again, I don't want to get into the minutia, and I feel like I was about to, but what I'm trying to say is not just what infrastructure exists now, but how can we talk to people that still have that long-time knowledge, that we might not have around longer, about where they used to be, so we could map the loss of it. Carolyn.

DR. BELCHER: At the risk of going into the weeds, I think it would be good to see -- I know that Jennifer Sweeney-Tookes and Bryan Fluech have been working on a couple of projects right now too that involve the grad students, and it would be kind of interesting to see what their recommendations could be, carrying over into CitiSci as well, I mean, and so just as a tapped resource.

MS. BYRD: Christina and I actually have a call with them next week to chat infrastructure things.

MS. MARHEFKA: Tom.

MR. ROLLER: So this is an issue that is kind of like the foundation for a lot of fishermen, and people don't think about it in the terms that we do as a council, right, and, you know, in my industry, people are constantly being creative and moving around, and I also think this is a way to understand how fishermen are changing their behaviors and patterns, which would be helpful for our state agencies as well, is things like boat ramps and whatnot, and so I think that we should also look at it as a way to look forward and see how people are changing their behaviors.

MS. MARHEFKA: That's an excellent point. As someone who has changed their behaviors and morphed many times, twice this week, and forgive me, because this isn't necessarily exactly CitSci, but I don't want to lose this thought, but maybe if we could make a little note, and I would love to add a question to our overall fishery performance reports that we ask the advisory panels to do about what infrastructure exists in their community now and what infrastructure has been lost, every time they look at the fishery performance report, and, again, I'm sorry, and I know that's creeping into CitSci, and it doesn't necessarily fit there, but I don't want to forget. Anything else? Trish.

MS. MURPHEY: I was just going to add, and this may be minutia too, but, you know, looking at -- A way to get at some of these stories is the oral histories, and I know that, you know, we had -- Barbara Garrity-Blake did a big project of oral histories on the menhaden fishery, and it was -- You know, it was -- It told the story of the infrastructure, and, you know, the loss of that fishery, and, anyway, that just may be another way of getting at that, some sort of oral history.

MS. MARHEFKA: Andy.

MR. STRELCHECK: I guess, for the target volunteers, and I'm not sure that you call them volunteers, but it seems like there may be a lot of information that either county or state governments would have, right, and so I think being able to reach out, and someone mentioned that maybe there's already, you know, this inventory that exists in some places, and the reason I say this is because we were just up in Rhode Island last week, and the state has a major role in kind of some of their working waterfront infrastructure.

The other question would be, you know, there is plans, by state or county governments, to kind of maintain working waterfront, right, because there are communities that have seen loss over time, and what we're hearing now is that they're prioritizing working waterfront to maintain those communities, which is fantastic, but hearing that, and what they're doing, obviously, can go a long way to see how that might be changing over time.

MS. MARHEFKA: That's an excellent point. I mean, just in our case alone, and you Charlestonians, and I don't even know if you know that the town of Mount Pleasant bought a dock, and the town now owns the dock and leases it out to us commercial boats, a different one, and not the one that was built for it, and I hear people, all the time, not even know that the town did that, and so I think that Andy is right. I think there's a lot of little projects happening at municipalities that, you know, even we're not aware of. Clearly, we're all passionate about infrastructure, and that's really exciting. Okay. Moving on from infrastructure, I think.

MS. BYRD: All right. Next up is historical fishing photos. This is similar to our FISHstory project, and I know that you guys are familiar with that, and so I won't walk through kind of all the details listed in the priority here, but kind of the feedback from folks on the advisory groups is they recommend adding the language here that's highlighted in yellow under anticipated outcome for a potential for index development.

We added that language because, as we got our kind of second year of funding for FISHstory, we're working with folks at NC State, and at the Beaufort Lab, and they actually came to us and said, I think, if we can get enough photos throughout the South Atlantic region, through the 1980s, and so the information collected with the photos would overlap that of kind of the headboat survey that's done, and there's the potential to develop a kind of index of abundance, and so that's one of the things that we're kind of exploring in kind of this year of our FISHstory grant, and we're very excited that we got another year of funding, and so we're working with the folks at State and the Beaufort Lab on this kind of piece of index development, and so we recommended adding that into the anticipated outcome.

DR. BELCHER: I guess the only thing, and the question that I float out to the ether on this, is the index only accounts for positive trips, unless we're weaving it in with some logbooks, because nobody is taking pictures of empty boards.

MS. BYRD: It's only harvested catch.

DR. BELCHER: So, you know, again, just thinking about how the index would tie back to abundance.

MS. BYRD: Yes, and I will say that Jie, who is on our SSC, and is at NC State, and then Kyle Shertzer, who was here talking with you all about scamp yesterday, are the two folks who are kind of working with us on this project, and I have the utmost confidence in them. You know, they're the ones who will be able to figure out how the index can be developed and how it could apply to kind of a stock assessment, and that's their expertise, and we're so excited to have them involved in the project, and so we're really relying on them for that kind of level of expertise on index development, but, yes, it's just harvested catch, and the headboat survey that it would be compared to, in the early years, they didn't report discards either, and so that may be more apples-to-apples, I guess, a little bit.

DR. BELCHER: Yes, and I think knowing that -- I was not aware that Kyle and them had weighed-in, and that was the only thing that I saw was a drawback with that, is that we don't have that offset with how many trips were not as successful as what was there.

MS. BYRD: Yes. All right, and the next is one that we had as two separate research priorities that we felt, or that the advisory groups felt, would be better kind of together, and that's kind of this fishing oral histories and then historical personal fishing logbooks and diaries, and so the idea would be to work with for-hire and commercial captains, through kind of interviews, or, if you're talking about logbooks, potentially translating kind of historic logbooks into digitized data, and you could potentially pair this type of thing together, and, when the group provided feedback, they noted that there's a lot of examples in other regions where oral history information has been super informative.

The group discussed potentially removing the kind of personal fishing logbooks and diaries, noting that that kind of information can be really sensitive, but they felt that, you know, some people may be willing to share kind of that historic information, and so they wanted to kind of leave it on the list and combine it with oral histories. The group talked a little bit about whether this type of information could inform things like catchability, and so when changes happened in things like technology and things like that, when you're putting together an index for a stock assessment, and our kind of representative from the Science Center noted that would be probably really challenging, but you could still get a lot of informative information that could kind of provide context, as you're kind of gathering information together, but it would be challenging to directly kind of apply that sort of information. They recommended kind of keeping it in, combining oral histories with logbooks and diaries, and then you can see the other kind of yellow kind of highlighted information.

DR. BELCHER: Since you said you were talking with Jennifer, Jennifer will give you some good insight on that, too.

MS. BYRD: Yes. All right, and next is oceanographic weather and environmental conditions, and you can see there are a lot of kind of data needs here, and they're not recommending -- The group recommended keeping this as a research priority, and they didn't make any changes to the language. They noted that collecting this information could be feasible during normal fishing activities, and you could potentially collect it passively, if you put a data logger, and there's a project in the Northeast that puts data loggers on commercial gear, and they collect environmental information. They noted that it could provide more kind of micro-scale environmental conditions than some other information that's available.

They also talked a little bit about people may have a trust issue with people like data loggers and things like that on their boat and gear, and so there's another kind of opportunity, and you could potentially develop a project in our kind of SciFish app to collect more sort of general information, and then we talked a little bit about the idea that, if you developed a project about the presence and absence of sargassum, as that has become a bigger issue in some areas, you need to make sure you kind of -- If you develop a project with volunteers, you need to develop a scale, where they would be consistently able to kind of denote presence and absence in the same sort of way, but everyone kind of recommended keeping this and didn't have any changes.

MS. MARHEFKA: Anyone have any thoughts on that? All right. Seeing none -- Andy. Sorry.

MR. STRELCHECK: I don't know how beneficial collection of information on sargassum would be, and, I mean, we have a lot of satellite technology now that's able to readily detect sargassum presence and absence and distribution and how it's changing on a daily, if not hourly, basis, and so collecting that information would probably not give us a lot of new information that we don't already have.

MS. MARHEFKA: All right. Noted.

MS. BYRD: All right. Noted. I removed that from the data needed. I'm going to keep moving on. Next is a priority that we originally had as one priority, and we split it into two, and so one of the new kind of priorities that came from that is shifting species and rare-event observations, and so the idea here is to collect kind of point observations on usual or rarely-encountered species for areas along the Atlantic coast. Gathering information from folks who are on the water a lot could help us have an early kind of warning signal for when some species are being seen in areas, where they haven't traditionally been seen.

The group noted this idea of shifting species is a topic that seems to be of great interest to the council, and this was kind of recommended and included within the overall research and monitoring plan. Folks noted that things like social media could be useful to kind of track, to look for kind of changes, or shifting species, and so what we did is we kind of made -- We split data-limited species observations, and shifting species and rare-event observations into two categories. We added kind of target species in there, and we listed -- You know, this is important for all managed species, but particularly in the research and monitoring plan, and the species that we listed out here were ones that the council noted that they were really interested in species shift information, because it seems like some of these species have already been noticed to be moving northward, and so any feedback on this one?

DR. BELCHER: This and the data-limited -- I almost feel like, in some ways, this is probably closest to Rick's work with the ornithology, because it's that of -- Like I think back to when we were at the meeting and saw that the red snapper had been caught up in Rhode Island, you know, and the different things, like the manatees shifting up into the Mid-Atlantic, and so, I mean, I think the good news is that it's all out there, but I just would hate for us to kind of -- If you could build it so that people are populating it, you could somehow delve out what's important or not, as opposed to making it more specific, because then it's like, oh, we missed an opportunity, you know, that kind of thing, but, yes, I think this is one of those really, really solid ones for CitSci for sure.

MS. MARHEFKA: I agree with exactly what you said, Carolyn, because I think that Mark lately has been catching a lot of -- Like, in his mind, tropical fish that he's never seen before, and I know like he's not even doing it for scientific reasons, but, every time he catches one, he takes a picture, and he sends it to me when he gets home, and I suspect that probably a lot of guys are out there doing that, because they're just as interested in seeing that change, and so I don't think it would be that hard to do, you know, and I say that because, you know, they're not any of those target species, and they're -- You know, sometimes he doesn't even know what they are, but it certainly can show a change, and so I think it is easy, Carolyn.

DR. BELCHER: If you think about it, it's kind of analogous to what they've done with the offshore listening arrays. You have people set up for a specific project, but yet they've set up this network that interacts, and they share data across, and so, even though a species may not necessarily be of interest to us, they could be of interest to someone else. I mean, I think about -- My husband has a coworker whose son loves to cast net, and he was down fishing off of a dock and caught a small snook, and so, of course, I get the picture, because they're like, well, what can they do with it, and can they keep it, and it's like, well, we don't regulate it, and so I guess yes, but the idea that snook is now coming into regional regulatory management in Florida -- They may be interested in knowing that there are these fish that are moving up that way, and so I think, yes, the bigger feedback, from a project like this, is -- Yes, it goes far beyond just the South Atlantic.

MS. MARHEFKA: Exactly. Go ahead, Tom.

MR. ROLLER: So, you know, I was going to make this comment on the discard information, but, also, something like this is -- I think there's an opportunity for us to partner with other data collection things, and, you know, like I've worked on the development of a private app called Got One, which is doing some really interesting stuff with AI to capture more data within the picture, right, and so there is opportunities for us, because that's going to be -- That application is being used more up and down the coast, and so I think there is some opportunities here, as well as with discards, for us to work with other partners who are collecting information in different ways. They may not collect all the information that we want, particularly when you look at discards, but it is a way to get more information.

MS. BYRD: Then the next one is just kind of a new priority, since we broke it out of the rare events, and it's just gathering information on rare data-limited species observations, and so an example of a project like this is our SMILE project, where we're working with recreational divers to use a handheld stereo camera to gather length information from some species that we have really limited length information, and so it's all highlighted in yellow, since this is the first time it's been

its own research priority, but it is essentially like supporting a project that's similar to our SMILE project.

DR. BELCHER: So I'm going to be that one person that's going to say why can't we collapse them back, and just kind of what's -- Because I think about the main difference being you're talking about divers, as opposed to commercial and recreational, as your targeted audience, but yet the idea is still the same. People are going to report things that are new and obviously -- You're going to report more rare occurrences, you know, in a sense, and somebody might not see it, and, well, you know, it's rarer than you think it is, and, you know, they don't have a context for it, but it's new for them, and so I almost feel like it does belong together, and it's just there's -- I kind of get that there's a little bit more focus on we need information on this particular species, I guess, but it kind of feels like the same thing.

MS. BYRD: So, to give a little bit more context on why they broke them out, they felt like the shifting species one, the one above that we just went over, was important not just for rare events, but for species that you may see a lot, like Spanish mackerel, that seem to be found further and further north, or, you know, you're starting to see grouper that aren't considered rare events, or black sea bass, that aren't rare events, but you're starting to see them shifting north, and so that's why they broke it out, because they felt that kind of shifting species was more than just kind of rare or data-limited species, and it was more kind of following distribution, and this one was more honing-in on species that had very data-limited information on things like length, or things like that, but I think you could mush them back together, too.

DR. BELCHER: So I guess, and, again, I apologize for getting in the weeds of it, but is there a numerical component, because I just think, again, back to the shifting, and like the red snapper. The red snapper was a rare occurrence in Rhode Island, but it's also indicating a shift, and so I would assume that, if there's kind of -- You know, back to gag, and people are fishing in an area, and now gag is becoming more popular, or they haven't seen them, and, hey, I caught this really weird fish, and what is this, inshore, and you're kind of getting that, but I guess it's just how you're -- Like how do you define what shifting -- You know, to me, it's like somebody gets it, and it's like outside of their normal range, and so it's an indication that, hey, it popped up here, and it's not normally here, and I guess I'm just trying to figure out what the difference would be.

MS. BYRD: Again, they used to be together, and the group felt like, when you're talking about data-limited species, and talking about shifting species, they felt that there was a distinction between the two, and we can certainly put these back together, if that's what you all are most comfortable with, because I think there are a lot of similarities between the two, and so it's really up to you all's discretion on what you think would be kind of most appropriate.

MS. MARHEFKA: It sounds like maybe mashing them back together, but sort of articulating, you know, a bullet point for shifting species, a bullet point for rare species, a bullet point for -- There was one for data-limited, or we're not even putting that in, I guess.

MS. BYRD: I will put it back together, and you all can look at them in the report and see if you're comfortable with it at Full Council.

MS. MARHEFKA: Are you good with that? Cool.

MS. BYRD: All right. The next one is observations in managed areas, and so this is kind of gathering information in different managed areas, and I won't read through everything, and you all can see it on the screen. The group discussed that projects, and kind of this priority, could be more kind of cooperative research than citizen science, but one thing we did discuss is having this on our citizen science research priorities list has led to some of the work that The Nature Conservancy is doing with Will Heyman to gather information on some of our spawning SMZs.

The Nature Conservancy approached us, and they're interested in citizen science. We showed them this list, and this is one of the topics they were interested in, and so the group felt that it was worthwhile keeping this on the list, and they suggested that it would be good to add, under data needed, having information on what kind of effort, fishing effort, there might be in closed areas, because that is something that is important to know. Under anticipated outcome, we added occurrence of spawning, since that's a lot of what kind of some of Will Heyman's work is trying to capture in some of these zones, and then getting information on compliance would also be useful.

MS. MARHEFKA: This is one of my favorite things, and so I support keeping this in here, and I might also add sort of observation on edge effect. I know our areas are little, and that's kind of hard, but I have heard, anecdotally, that people are fishing, you know, just on the edges, and so that wouldn't necessarily have to be a cooperative research program, and that could be more citizen science, since there wouldn't need to be any extra regulatory intervention to, you know, sort of have a project that talks about are you catching more fish at the edge of this. Anyone else? So keep it in.

MS. BYRD: The next one is movement and migration, and so this is a data need that the group supported keeping as a research priority, but they noted that the emphasis on this is supporting existing tagging programs. We don't want to start our own tagging program. By adding kind of movement and migration to our research priorities, that may be able to help us support, or help others support, working with existing kind of tagging programs to focus on tagging species that we're interested in, and so, again, the group supported keeping this in kind of as-is, and, again, emphasizing that we want to support existing tagging programs, and we're not talking about starting a new tagging program.

MS. MARHEFKA: Go ahead, Tom.

MR. ROLLER: I'm just curious how we would do that, and so like how do we -- How do we work with existing tagging programs?

MS. BYRD: So I can -- We can kind of -- If there was a tagging program that was doing work that we supported, we could certainly write them a letter of endorsement, or something from our Citizen Science Program, saying, hey, as they're trying to get -- Like if they're trying to write a grant, or get money, or get donations, stuff like that, and we would say, hey, we support the work you're doing, and it's really going to help with the council's citizen science research need, that sort of thing, and does that make sense?

MR. ROLLER: Yes, absolutely, and I would also point out that this is a great opportunity to work with outside recreational and commercial groups to help with existing, or even create -- Maybe us not creating programs, but, if there is a need to create a program, we can help assist in that.

MS. MARHEFKA: John.

DR. WALTER: I think that's exactly probably the way that things like that need to happen, and, I mean, there are so many things here, and there's no way for this council, or really anyone, to get these done, and I'm just wondering. Because it's going to require partners like Gray's tagging program, the NMFS cooperative tagging program, for a lot of the pelagics, and is there going to be a like list of where those key potential collaborators are, so that someone could say, oh, if I want to get into tagging, I could go to NMFS and say, hey, I want to tag pelagics, and go for our program, or Gray's for a lot of inshore, and, for all the other projects that need key partners, is there going to be like a document that says, okay, here's where there is other groups working on this that could be partnered with?

MS. BYRD: So we don't have kind of -- We have an inventory of some citizen science projects, and it's certainly not exhaustive. It's something that I try to keep up, just so that I kind of know what's going on, and, as we launch our citizen science projects idea portal next year, one of the suggestions, and I think it was from Spud, is that it would be great to have kind of an inventory of citizen science projects, and so, if someone has a project idea, and comes to us, and there's already a group doing it, we can say, great, here's contact information for this person, if you want to get involved in that.

I don't have a comprehensive tagging list, and I know Laura Oremland, who is NOAA Fisheries - A citizen science coordinator, and she helped connect me to the Southeast Fisheries Science Center kind of taggers, and it sounds like they may be interested in getting involved in some of the mackerel species, things like that, and so I'm trying to help connect them to Christina, and our AP, and that's the kind of partnering that I've done so far.

MR. ROLLER: So thank you for that, and that was actually going to be my next comment. I've had some preliminary discussions with groups that I've worked with, and I know there's been some outreach looking at trying to add Spanish mackerel, or doing Spanish mackerel tags, and would it be pertinent to add them as a target species here?

MS. MARHEFKA: All right. Moving on.

MS. BYRD: Next is shark and marine mammal depredation, and so I know we've been -- The council has heard a lot of concerns about shark depredation, and it sounds like there is also more concern about marine mammal depredation as well, and so, when we talked about this as a group, folks recommended adding photos, and DNA swabs, to potential data needed.

The DNA swabs were added to the list because there is a shark depredation project that has been conducted showing that, if you kind of swab the fish that was bit, you can tell what kind of shark was the taxman for that particular fish, and so there is some work being done now on a citizen science project that's working with charter captains in Florida that is kind of testing that out with captains, and so the group felt like it was good to keep this on the research priority list and to add the kind of yellow language as well.

MS. MARHEFKA: Any thoughts on this item? Is everyone good with keeping it on the list? That's what I'm seeing.

MS. BYRD: We're getting close, guys. The next two are new ones that the advisory groups suggested adding to the list. The first one falls under kind of a general habitat characterization category, with the idea that fishermen, or divers, may be able to help groundtruth some bathymetry data. They can take videos, and they can take photos at different locations, and, again, this is kind of a new one that one of our Habitat AP members suggested, and so the question is whether you guys are interested in adding it to the research priority list now.

MS. MARHEFKA: All right. Since this is a new one, I guess does anyone have any strong feelings about this, one way or the other? Carolyn.

DR. BELCHER: I don't have strong feelings, but I just know that it's not easy to do it. There's a lot of groups that are doing it, and states are going out and augmenting what BOEM and all of that are doing, and so there are -- Like I've gone back and seen where we've had archives when our outer continental shelf group was around, and there's a lot of open areas that have not been mapped over the years, and so I can see where that might be the case, especially if there's a live bottom that's kind of out there, and it's an outcropping that nobody knows about, but, yes, and, I mean, like I said, I think there might be some benefit to helping fill voids, but I don't know how much overlap, like I said, there is between state and federal agencies on what's being done out there now.

MS. MURPHEY: I wonder if you need to just add to concentrate on EFH habitats. I think there is something out there for SAV, and I think it's more global, but, you know, getting as much SAV information is always important, and, you know, same with oysters, which oysters is an EFH, right?

MS. BYRD: Yes.

MS. MURPHEY: Okay. Just making sure, and so I think maybe if you could maybe narrow it down to the EFH habitats that's important to the South Atlantic Council, that might be helpful.

MS. MARHEFKA: All right, and so I think that's a yes for leaving it in.

MS. BYRD: Okay, and then the last one -- This is another new one, and we had one of our Spiny Lobster Advisory Panel members who fishes off the Carolinas, and he dives for spiny lobster, and he noted that there is really limited information on the fishery from Georgia north, and so he was interested in either developing kind of a separate spiny-lobster-specific research priority, or incorporating it into some of the other priorities, and I didn't know a lot about data needs for the spiny lobster fishery, and so I chatted with some folks at FWC, and talked to them about kind of data needs, and if there were specific data needs for spiny lobster for Georgia north.

What they told me is that it would actually be helpful to have more information to characterize the spiny lobster fishery, not just Georgia north, but in Florida too, and the majority of the fishery is in Florida, and there's still a lot of information that they would like to have to characterize kind of that major portion of the fishery as well, and so I developed this research priority, and ran it by the folks at FWC, to see if they thought that it would be helpful, and they kind of supported kind of adding this into the research priorities, and so it's basically trying to get information on catch, effort, carapace length, sex, presence of eggs, that sort of thing, and so, again, this is a new priority,

and so we're looking for feedback on whether you feel like it should be incorporated now within our priorities.

MS. MARHEFKA: Jessica and then Tim.

MS. MCCAWLEY: So a couple of things, and what does it mean target volunteers, recreational commercial, and can you explain that.

MS. BYRD: Yes, and so target volunteers for this project would be recreational and commercial fishermen.

MS. MCCAWLEY: I don't know if you want to indicate that this would be focused on Florida and Georgia north, you know, as two different groups, and that I think that the characterization of the fishery, Georgia north, is even less data than what we have for Florida, because we have an entire spiny lobster program in Florida, and so maybe we could indicate to pay particular attention to the stock that is Georgia and north.

MS. MARHEFKA: Tim.

MR. GRINER: Thank you, Madam Chair. Yes, and I was going to say the same thing. I think it's very important to -- I think this is great, and I want to see this, you know, continue, but I really think we need to concentrate on that Georgia north. You know, in North Carolina, we are experiencing an explosion of spiny lobster. I mean, we're catching them -- You know, the entire fleet is catching them hook-and-line now, and so they are thick, and we don't have any data to know why they're there, or where they're coming from or anything, but they are definitely there, and it would be great to collect some data on them.

MS. MARHEFKA: Yes, and I agree, and, I mean, they've always been there, but there's more, you know? Carolyn.

DR. BELCHER: Is it possible, or is it worthwhile, to add to that the potential of divers in that area, because I just think about we may not have people fishing, but maybe there's something to what they're seeing for spiny lobster on different reefs or whatever, and, I mean, like I said, I don't know of anybody in Georgia that is fishing for spiny, but it might be interesting to note, at least, if it's because there is a lack of critters or it's just not a viable fishery.

MS. MARHEFKA: Tim and then Judy and then Tom.

MR. GRINER: Well, part of the problem is it's two per diver per trip, and so, you know, we talked about this, and I remember, you know, trying to push forward an amendment to increase that, to actually try to not necessarily develop a fishery for them, but to make the divers -- To make it worth their while, so to speak, but, right now, it's just two per person, and so it's not -- You know, it will never be targeted at that, but there are -- There is a great group of divers out of North Carolina that would love to get involved in data collection, and they're a wealth of knowledge, and, you know, they dive all the time, but, you know, as far as, you know, targeting them -- Until we develop an amendment to allow them to keep some spiny lobsters, then that's not going to happen.

MS. MARHEFKA: Judy.

MS. HELMEY: Well, we do have a few off our coast, but the divers do go get them, but they're the biggest lobsters that I've ever seen in my whole entire life, and I'm talking about one lobster feeding four people. They will just go and dive, but they're in a hundred and -- Anywhere from ninety-five to 115 foot of water. They are absolutely huge, and they do go diving for them in the summertime, and so we do have them. They're not accessible.

MS. MARHEFKA: Tom and then Trish.

MR. ROLLER: So I was just going to point out -- I mean, obviously, including the diving community is important here, and it's also a much smaller community than the fishing community, and I think they would probably be pretty easy to reach, because people are pretty dependent on their dive shops, and we have that community here. I would also point out that there's definitely an increased abundance of them. We've always had larval drift, in the sense that you can find them around the docks and stuff right here in Beaufort, but we're starting to see some that clearly have survived over the winter, which is interesting, and I personally am enjoying the increased abundance.

MS. MURPHEY: Really, I've just got -- Tim and Tom kind of said things that I was going to say too, but I definitely support this. I know, in North Carolina, we're seeing more and more, and, if this can give us data to better inform us on how to manage, you know, manage this fishery as it moves north, and, I mean, yes, we are seeing -- I mean, when I used to work for NOAA, I would get larval spiny in our samples and stuff, and so it's been going on for a while that they've been up here, and so --

DR. BELCHER: The only thing that I was thinking was, with the data needed, those are specific to the fishery-dependent, and so I was thinking divers more in the situation of potentially fishery-independent, and they're diving a reef, and how many do you see, and so presence/absence, and just a generalized idea of what abundance is there, and that's what I was thinking more with the divers too, and I forget that there's a commercial component to that.

MS. MARHEFKA: Excellent, and so we're leaving spiny on.

MS. BYRD: Spiny is on. Okay. The last thing I just wanted to say is some other feedback that was more kind of general, that I just wanted to share with you that we got from our advisory groups, is they really supported the exploration of study fleets, particularly in the recreational sector, and said something like that could be used to address a number of the priorities that are kind of on this list, and then, also, they made sure to kind of let us know to look at some of the priorities coming out of the climate scenario planning workshop, to see if there may be areas that kind of overlap with our research priorities, and some of the priorities coming out of that, and so the last thing that we need to revisit this for this is reproductive maturity data. In or out?

MS. MARHEFKA: I am seeing out, and I'm seeing heads nodding, and so -- We love you, reproductive maturity data, but you're not right for this situation.

MS. BYRD: And we can always revisit you in two years.

MS. MARHEFKA: There you go.

MS. BYRD: There we go. Okay, and so that's great. Thank you, guys, and I know it takes a little while to walk through these, but it really helps focus, so I'm spending time to try to develop, and support, projects that you all want to see within the Citizen Science Program. All right, and then I think we're good to move on to Number 2.

MS. MARHEFKA: Go for it.

MS. BYRD: All right, and so the next thing I wanted to do is give you guys an update on kind of a project that we've been working on with the North Carolina Division of Marine Fisheries and the Atlantic Coastal Cooperative Statistics Program, or ACCSP, and it's the development of kind of the SciFish platform.

As you guys know, a few years ago, we developed the first citizen science project, SAFMC Release, that was interested in collecting information on kind of released snapper and grouper species. Well, we were chatting with people from North Carolina DMF, and they said that we're interested in doing a project like that too, to collect information on recreationally-released flounder, and so we were both thinking about developing our own separate apps, and it seemed silly to develop two separate apps, when we were collecting a lot of the same information, and so kind of the idea to develop the SciFish platform kind of came to fruition.

The idea is that SciFish acts as kind of an umbrella app that can house multiple citizen science projects, and so, right now, it houses our Release project, and North Carolina DMF's Catch You Later project, and we've been working on this project over the past few years, to develop kind of a project builder, so that many other organizations along the Atlantic coast will be able to develop a citizen science project within SciFish, using an easy online project builder, where they would be able to develop a project from a computer, push it out to the SciFish app, in a very short amount of time at no cost, and so we've been working on this project for the past three years.

We're getting ready to wrap it up, and SciFish will soon be available to partners along the Atlantic coast, through ACCSP, and so I just wanted to kind of give you guys an update on the platform itself and then some resources that we put together to support kind of people developing projects within the platform, and so, before I get into things, there -- Although this project has been led by kind of the council and North Carolina DMF and ACCSP, we've been really lucky to have a ton of different people, from a number of different agencies, contributing to this project, several of which are kind of sitting around the room today.

I think that we are going to have a really cool, useful tool that a lot of people will be able to use to develop citizen science projects, and I think the reason it's going to be such a useful tool is because of all of these folks who have kind of dedicated their time over the past three years to the dedication of this project, and so I just wanted to give all of them a shoutout before kind of getting into things.

I already kind of gave a little bit of background, and you guys know there is this growing interest in citizen science, and so we got together with North Carolina and ACCSP, with the idea to create kind of SciFish as a kind of citizen science mobile app and projects builder that would support the capture and sharing of information about fish all along the Atlantic coast, and so the long-term goal of the project is really to build this citizen science mobile app in a menu-driven kind of project

builder that would allow individuals to easily create a customizable project, by selecting from data fields, and so you wouldn't have to develop a standalone new app every time you wanted to do a new project or a new kind of data need, or you had a new data need.

The way we kind of explain what SciFish is is we use like a gaming console analogy, and so SciFish is like your Atari, or your Gameboy, or PlayStation, and then the individual projects are like the Donkey Kongs and the Froggers, the games underneath it.

MS. MARHEFKA: Those are some dated references at this point.

MS. BYRD: You can tell my age. Mario Kart? So the reason we were interested in developing SciFish is we really wanted to try to reduce costs and reduce the time it would take for folks to develop kind of separate applications, and then one of the most important things was we wanted to make sure that we were increasing consistency in the data fields, and the data structure, used for different citizen science projects, and so, if one project was collecting length information, another project would be collecting length information in that kind of same way.

I've kind of already talked about the vision. The mission is we really wanted to kind of help standardize citizen science data collection along the coast, and we wanted to be able to provide this flexible platform for partners, and then provide and support projects that are supporting kind of assessment and management, and so administration of SciFish is through ACCSP, and so we've been developing SciFish over the past three years, and then, early next year, we'll be handing this over to ACCSP.

That's really exciting and awesome. They're our data management partner, and they will be taking over kind of maintenance and oversight of this app, and one thing that I will note is, when we were originally -- So we started developing SciFish back in 2020, and we held scoping meetings with folks all along the Atlantic coast, and we had a series of scoping meetings that was in the spring of 2021, and we had folks from twenty-three organizations, over fifteen states, kind of give us information on what they would want out of this app, so that we knew what we were going to build would fit their needs.

One of the things that became clear in what we heard from them is we don't people to just go into SciFish and kind of be able to create projects willy-nilly, so to speak, and we wanted to make sure that SciFish would support successful citizen science projects, and so we've developed kind of policies that, in many ways, mimic some of our policies for the council's Citizen Science Program that are in place, that I will kind of share with you really quickly, for SciFish.

Again, at the beginning of next year, SciFish will be handed off to ACCSP. The primary administration and oversight of SciFish will happen through a new committee that ACCSP will be forming, called the SciFish Advisory Panel, or SAP, and that group will be responsible for kind of drafting and recommending policy changes, overseeing and implementing kind of SciFish application projects, and kind of helping support people who want to build projects within the app, and then coordinating, and reviewing, SciFish project updates.

Their kind of overall approach for project development in SciFish is very similar to our approach within the council's Citizen Science Program. They want to really focus on data collection for marine species. They want to make sure they're filling identified data gaps, or data deficiencies,

and they want to make sure that they are able to clearly articulate how data collected through a project will be used in an assessment, or in management, and they really want to encourage scientist and fishermen collaboration.

To develop a project in SciFish, you have to fill out an application. There is a two-step application process. Then, once you get through the application process, you're able to get access to the project builder, and you can build an application in SciFish for free, and so this application process isn't tied to funding, but it's just tied to kind of availability and use of the app and the project builder, and so there's kind of a preapplication process that happens four times a year, and so folks will submit a preapplication. If they kind of check all the boxes on that, they'll then be asked to submit a full application. To be able to submit applications, you either must be an ACCSP partner or sponsored by a partner.

Just to go into a little bit about the applications, the applications are all online, in Survey Monkey, and so folks just have to provide, in the preapplication, a little bit of information on the things kind of in blue, in the blue boxes here, and, in the full application, we ask for a little bit more detailed information. I'm happy to go into more details on this, but I'm going to go ahead and kind of move through things fairly quickly on the application process.

As far as kind of the review criteria for the preapplication, we're just wanting to make sure that people completed all of the sections that were in the application, that they've clearly addressed how the data will be used in assessment and management, and that they can articulate why that project is a good fit for citizen science. Citizen science is a great tool, but it's not a great tool for all the research questions that are out there, and so we want to make sure that they're kind of selecting a project that makes sense for a citizen science approach.

In the full application, the review criteria are a little more extensive, and they will be reviewed by this new group called the SAP, and, you know, one of the things that we're really -- Some of the things that we're really looking for in the full application are kind of outlined here in the kind of teal screen, but one of the things that I just wanted to kind of highlight here is that we want to make sure that people are developing projects -- That they're thinking about, and talking to, the data end user. If they're hoping the data is going to be used in an assessment, they need to be talking to the assessment analyst upfront, so that the project that they develop will -- Hopefully kind of the data collected will meet that intended use.

Then we developed a ton of other kind of policies, and all the different topics we developed policies on are kind of on the screen. Attachment 2b is the full policy document, if you're interested in checking it out, and I'm happy to answer any questions on these, if you have questions, but the next thing that I wanted to do is kind of quickly walk through a little bit of a demonstration on the SciFish project builder.

We've been working with Harbor Light Software to develop this tool, and, in your briefing book, in the corner up here, there's a link to a demo video that Fran Karp, with Harbor Light, put together, and that kind of walks through how to build a project in SciFish. It's kind of five or six minutes, and I'm not going to play that today, but what I wanted to quickly do is kind of walk through some screenshots that I took of that video, to show you how kind of easy it is to build a project in SciFish, and so, for the next couple of screens, what you will see on kind of the left-hand side of the screen

is what the project builder would look like on your computer, and what's on the right-hand side of the screen is what the project would look like on your phone, in the app.

When you build a project in SciFish, there are kind of five areas that you will kind of use to build your project. The home section is what you will put what the person will see when they first kind of open your app, and so there are a lot of command buttons on the top, with things that you will want your kind of participant to do, whether it's take a picture or log data, and the records section is where you're actually defining the data fields that you want your participants to enter.

The about section just allows you to put descriptive information about your project, and contact information for folks leading your project, and the navigation menu allows you to configure social media links, and then also to add a link to your kind of project webpage, if you have one, and then the last section is branding, and what that allows you to do is kind of change the colors or the look of your project, and so every project in the app doesn't look the same, and they can have different looks and feels, since there will be projects from many different organizations, and so different organizations can brand their project to look a certain way.

I just want to dive in, a little bit, to the records section, and so this is an example when you hit kind of the records section, if I wanted to add species to the project, and this is just an example of how we're using standard ACCSP data standards, when they exist, and so, if you wanted to add a specific species to your project, you're adding from a list that ACCSP uses for species, and so, if one project collects information on greater amberjack in Project A, they're collecting it the same way in Project B.

Next, I wanted to just mention kind of the branding, and this is a really cool part that Harbor Light developed. In the video, which I encourage you to check out, Fran Karp builds a project called "What the Fluke", and she decided to give it Barbie coloration, and so you can see that she made it pink and purple, but you're able to choose the different colors, and so, if you wanted to choose colors that go with your organization, or your agency, you're able to do that.

Then, last, I just wanted to quickly walk through how easy it is to push a project from your computer in the project builder to your phone, and you simply click the "publish" button, and then this screen will come up, and you're able to publish it in different channels, and so there's a developer channel, which only allows the person who developed the project to see it. If you want to beta test it, you can use the alpha or the beta channel, and so, if I wanted to test a project with a small group of fishermen that I'm working with, I can use one of those channels and easily share it with them.

All you do is you write down the number you see on the screen here, and you go to your cellphone, and you click the hamburger menu and choose "access preview project", and you type the code in there, and then it pops up on your phone, and so, if you know the data fields that you want to collect, you can build a project in SciFish in like ten minutes, and it's really incredible. I think it's going to be a tool that a lot of people are going to want to use on the Atlantic coast, and, you know, I can't -- Harbor Light did a great job, and so I have it up on my computer, if folks want to kind of check it out, and you're welcome to kind of come by, and I can walk you through it, and we can create a project and pop it on my phone.

One thing I will say is that, right now, the projects are limited to these fields within this table that are on the screen right now. When we held the scoping meetings back in 2021, these were the fields that folks felt were the most important to collect, in order to meet the data gaps that they identified as kind of appropriate for kind of a citizen-science-type project, and so, initially, folks are going to be limited to these data fields, but people will be able to request new data fields kind of into the future, as the SciFish grows.

Then the last thing that I will mention here, just quickly, is we're currently working on kind of account creation in SciFish. Right now, currently, PIs have to create accounts, and so, for our Release project, we have an online form that people sign up for, and then Meg, or myself, will kind of create a SAFIS account, and that SAFIS account is created within ACCSP, and that allows you, that person -- So, if someone has a SAFIS account, and so it's a for-hire fisherman, and he is also using eTRIPS to report logbook data, you will be able to link the records together, and so that's one of the benefits of a SAFIS account.

However, it creates an extra step to create a project account for your volunteers, and so some of our organizing committee, as we were developing kind of SciFish, said we really need something that's easier for folks to be able to create an account immediately within the app, and so we're interested in kind of an auto-approval non-SAFIS kind of account that people can create, and so, right now, what ACCSP is working on is kind of a combination of the two. At the start of a project, a PI would say that I either want to create SAFIS accounts or I want this auto-approval, and they will choose, at the beginning of the project, which one will be used, but that is currently under development, and hopefully will be online sometime next year.

Again, these are just some highlights, and project PIs have to be kind of an ACCSP partner, or sponsored by a partner, and we're really focused on supporting citizen science projects across the Atlantic coast. Projects are initially limited to that table of data fields. When you go through the application process successfully, you're able to develop a project in SciFish, and it doesn't require funding, but it does require some ACCSP resources. There's going to be this new kind of group that ACCSP will be developing to provide oversight for SciFish, and then information on the account creation that I just shared with you all.

So, as we've been going through this, since this app, and platform, is going to be run through ACCSP, we've been going back and forth with their different committees to help review it, and so, back in August, we shared kind of information on the policy, and on the platform, with their coordinating council. We shared information with their kind of operations and advisory committees, and they approved it in September. The ACCSP Coordinating Council approved kind of SciFish in October, and so kind of here's the rollout timeline for SciFish to be available to other folks.

We're hoping kind of the project builder beta testing will be done, and all of our outreach documentation will be done, in December, and there will be a call to kind of recruit for the SciFish Advisory Panel in January. They will meet in February, and we'll be accepting the first round of preapplications in April, and so that was a quick run-through of a project that we've been working on for the past three years, but I think it's going to be an awesome tool for us to use, in our program, but it will also support folks doing citizen science along kind of the Atlantic coast as well, and so I'm happy to take any questions, if anyone has any.

MS. MARHEFKA: That's amazing. It's so, so -- I mean, building an app is so hard, and the way it's just been able to be simplified for -- This is amazing, and I'm incredibly impressed with you all. Does anyone have any questions, or comments, for Julia on this? John.

DR. WALTER: I think, as we've often debated a lot of things about like descender device utilization, getting numbers on that, and depth fished for the fishery, so that we can apply a discard mortality rate, and these things have direct on-ramps to the management advice and the stock assessment, and so I'm wondering what's the next step, in terms of projects, and are there projects in the works that are going to get that, and then also get it with the level of representativeness that it could be applied fleet-wide, and I think that's a little bit of the challenge, and I have some ideas on that, but I just want to know what, if any, projects like that are in the works.

MS. BYRD: So we have our SAFMC Release project that works with recreational and commercial fishermen to gather information on released shallow-water grouper species and red snapper, and depth fished and descending device usage are two fields that are in that project, and so that project is underway now, and so some of that information will be available, and then, as far as kind of other projects that are going to be developed in SciFish, we'll see what happens. Kind of the first round of applications will be in April, and so there's an opportunity for any ACCSP partner, or anyone working with an ACCSP partner, to put together a preapplication for the kind of SAP to review.

What I can tell you is we've been developing SciFish, and there's been a lot of interest, from a lot of different states, in developing a variety of projects, and we've talked to folks, and Kathy has been very involved, in Georgia, in the development of SciFish, but I think they have interest in potentially developing something in SciFish, and we've talked to folks from New Jersey and Maryland and Massachusetts, and so, you know, I think I'll be better able to answer that sort of question when we get through the first round of preapplications and see kind of what projects people are interested in developing.

DR. WALTER: Is there actual funding available for those projects?

MS. BYRD: So no, and, I mean, I guess, through your normal funding sources, and so, when you develop something in SciFish, the application process you go through is just for the use of the tool, and so we're allowing you to develop a project in an app for free, and so, when you are developing a project, instead of spending \$50,000 to develop an app, you can put that money on things like you can do for recruitment and retention of volunteers, or things like that, and, you know, citizen science projects take a lot of effort, and time, and building of relationships, and so having a tool that you can use, at very limited to low cost, allows you to put funding that you could get through another grant, or opportunity, towards things like recruitment and retention, and does that answer your question?

DR. WALTER: Yes, and I think the opportunity that's out now, that's being reviewed for the pilot projects that -- If the applicants are needing something like that, it seems like this is a great opportunity for them, and probably we should promote using something that's already there, as a cost savings, and the challenge, and what I've noted on trying to actually get representative coverage, is it seems, to me, that there's also the opportunity to kind of pair this with some existing surveys, in some sort of like mark-recapture.

So you've got these fishermen who have got the app, and they are the marked population, and you recapture them when they get back to the dock, which allows you maybe to extrapolate up to the total effort that occurs, because, you know, a lot of people won't have that, but that kind of thing is going to be the -- Those creative solutions are going to kind of be the thing that needs to happen to be able to say that this depth fished, this average depth fished, applies to the entire fishery and not just the people who use the app, because that's what we've struggled with, in terms of getting something like that, or descender device utilization, and the people with the app probably are more likely to use descender devices, because they probably are part of a project that is a release project, but what is everyone else doing, and that's the information we need. Thanks.

DR. COLLIER: I just want to build on potentially two other real benefits of this project. One is, when you're going and developing a citizen science project, you often don't know how long it takes to develop an app, and so you have to get with an app developer, and sometimes that timeline is unknown. This provides that timeline, and it's pretty much immediate. I mean, you complete that application, and it's ready to go. It's awesome.

The other thing is it consolidates all of this information into one database, and you don't have to go to each of these individual researchers and try to dig out their data. Their data is available, and you just need to figure out their methods, and the design of their projects, in order to make sure it is matching what you want to do with the data that's potentially becoming available, and so those are other aspects of this project, and, you know, I just see the tremendous utility of it, and I really commend Julia for seeing the benefit, the big-picture benefit, of this, and, without Julia's leadership, you know, this would not be available to the rest of the states, and I think that is one of the best parts about it.

We jumped out there with a Citizen Science Program, and now we're starting to reap some of the benefits, with a project like this that everybody can use, and so it's really exciting, and I also do want to point out that there was an indication of a preapplication, and items like that, in this. She is turning it over to ACCSP, and so it is not the South Atlantic Council that is collecting that information, and it is ACCSP.

MS. MARHEFKA: Julia, I'm wondering -- Do you suspect that, once this is sort of rolled out, and more people know about it, and the applications start rolling in in April, that you will hear from other regions that don't have access to it and wanting to -- You know, it's off-the-shelf, you know, and it could be shared amongst other regions as well?

MS. BYRD: Yes, and, I mean, I think we've been really excited. Just as we've been doing it, as folks have been hearing about it along the Atlantic coast, and myself, and I know folks from North Carolina, and folks from ACCSP -- A lot of different people have been interested in it, and I know we've been able to share a little bit of information about it at kind of national meetings, through like the American Fisheries Society and things like that, and so there's been interest from other areas. I think, now that we have something, or next year we'll have something, that people can see, I would imagine that interest would grow for something like this, and so, yes, it's really exciting to see it, you know, finally be here and see how cool, and useful, it can be.

MS. MARHEFKA: It's incredibly forward-thinking, and so well done. Any other questions for Julia on that, before we dive into our last item? So we're now going to hear an update on other citizen science projects and programs, also from Julia.

MS. BYRD: All right. You all are going to be sick of hearing my voice.

MS. MARHEFKA: Never.

MS. BYRD: What I just wanted to do is we've talked about a lot of things that have been going on in the Citizen Science Program, but I just wanted to give you an update on a couple other things that have been happening since you all's September meeting, and so I will kind of walk through them on a project-by-project level.

The first one is this citizen science projects idea portal, and, again, this is something that I mentioned when we were going through the research priorities. This is the online tool where we'll gather kind of citizen science project ideas from stakeholders. We've built the online tool, and I think we'll be ready to launch it in January, or February, of 2024, and so we're really excited to get that kicked off. We've already had a couple of people who have heard that we are doing this, and I think are interested in submitting ideas, and so I'm really excited that word has already started to spread a little bit about it, and we're excited to implement this.

Next, I just wanted to give you a quick update on some of the work that we have been partnering on with Rick Bonney, and then a research team of Jennifer Sweeney-Tookes, Tracy Yandle, and Bryan Fluech, and they are helping us get information, kind of base-level information, on fishermen, scientists, and managers kind of knowledge about, confidence in, and trust in the citizen science kind of process of collecting data to be used in fisheries management, and so Rick is gathering information from a broader group of scientists and managers, via an online survey, and we're hopeful that that survey will go out early next year, and then Jennifer, and her team, have been working to gather information from a broader group of fishermen, and they are doing that by conducting interviews.

They're focusing on kind of four geographic areas within the South Atlantic, and they've finished interviews in kind of the Keys, and the Miami to Canaveral area, and then they will be sampling in the kind of Georgia and Carolinas area this month and next month, and so we are still on track to kind of get results from this project in June of next year that we would be able to share with you all.

Next, just a quick update on our SMILE project, and I mentioned it earlier, but this is a project that's being led by kind of the REEF program, partnering with recreational divers to collect length information on data-limited species, using kind of a handheld stereo camera, and so they've been developing kind of the handheld stereo camera, and so what they have done, and field tested this fall, was, using an Olympus underwater camera, that a lot of their divers already have, and then mounting a laser on top of it, and calibrating it, and so divers have been using the SMILE cameras in August and September, and I think they had some work, field work, this November, and the cameras seem to be working pretty well. In doing this, they're collecting information with the SMILE camera and then also kind of typical stereo cameras that are used, to be able to compare the two to one another, and so that project is moving really well, and big kudos go to REEF, who is kind of leading the charge on that project.

Next, just a quick update on FISHstory, and I kind of already mentioned this, but we are working to kind of expand the project from a pilot to a full-scale project, and kind of the first piece of this

is getting more photos from around our region that go from the 1950s through the 1980s, and we're really excited that we got funding from a grant for ACCSP this year for the project.

We just found out that we got funding for next year, for an additional year for the project, and so we're really excited about that, and so we've been doing these scanning events. You've seen me sitting outside with scanners at council meetings, and advisory panel meetings, and so we've done scanning events at kind of the September and December council meetings, and all of our fall AP meetings, and we've been able to gather some photos this way, but we still have a ways to go to be able to have enough photos from across the region, through all of those decades, in order to make the data the most useful it could be.

Just a reminder, for the types of photos we're looking for in analyses, just in case you know anyone who may have old, historic photos, to be used for analyses, photos have to be taken at the end of fishing trips, where the harvested catch is displayed, and the angler who caught those fish are in the photos. We need to have at least a year. If it's a ballpark year, you know, if it's plus or minus five years, that's okay. We need some information on location, and the minimum we need is state, and then we like to gather information, from kind of photo providers, on their contact information, just so we can let them know what's going on with their pictures and keep them up-to-date on the project.

What makes a photo even better is if the fish are hanging on the leaderboard. If they're hanging on the leaderboard, then we can estimate the size of the fish. Having more specific date information helps us look at seasonal things, and then more specific kind of information on location, and the vessel and captain name is awesome, too.

In addition to doing these scanning nights, we've started kind of reaching out to other organizations, like libraries, like historical societies, to gather more historic photos, and so I was really excited, and we had the director from the Carteret County Historical Society come by yesterday, and so we started talking to them about potentially collaborating with them to get some photos, and then one of our kind of Florida Sea Grant folks, who is on our Outreach and Communications Committee, hooked me up with a historian at the Key West library, and so I talked to him last week, and they have tons of photos that are already digitized that will be perfect for this project, and so we're pursuing lots of other avenues to try to get these photos, and, if anyone has any ideas, or ins, with people who might have photos, please let me know.

Just to give you an idea, for this year, we're going to be trying to gather photos, for the foreseeable future, and we're also working to redesign our project in Zooniverse. If you guys remember, we're using Zooniverse as a tool where folks from all over the world can be trained to help us count, and identify, fish in these photos, and so we've been really lucky to be working with a grad student at NC State, and he's helping us refine the project in Zooniverse, and we're hoping that will launch, and go live again, and it will probably be more like springtime of next year.

We also are working to continue measuring king mackerel that come in in new photos, but we're also measuring red snappers in these photos, and so we have an awesome team of volunteers from -- We have volunteers from folks in the headboat survey, and from folks who work with MARMAP, to help us measure the lengths of these fish in photos, and so we're really excited that things are underway.

Then the last thing is just a quick update on our SAFMC Release project, and a big shoutout to Meg Withers. She wasn't able to be here this week, but she's the one that's really leading the charge on this project, and so what I'm going to tell you about this is, in large part, due to her hard work, and so we're still kind of -- Participants are still kind of recording information on released shallow-water grouper and red snapper in SciFish, and she's been continuing to do outreach, and, as David and Ashley told you all earlier this week, we're doing a lot of collaboration on outreach with the best fishing practices initiative.

Meg has been working really hard with those guys, going out to tackle shops, doing seminars, kind of getting out and sharing information about the project, and that has been a really successful kind of collaboration, and we're continuing to kind of work on that and continue that kind of work together in the upcoming year, and then she's also starting to work on our kind of annual data summary.

Again, I think David and Ashley really told you a lot about the outreach we've done, and so I'm not going to go into too many details, other than they've been really busy, and really hitting the road, and we have lots of things going on, starting in January of next year, and I did want to give a shoutout that, in November, in *Florida Sportsman*, their "Call to Action" column that month highlighted a couple of our projects, and SAFMC Release and FISHstory were highlighted in there, and so that was really, really awesome, and we were really excited to see that.

Meg kind of constantly is in communication with our participants, and she puts together monthly newsletters that go out each month, sending thank you emails, and she launched our kind of participant recognition program for this project in April of this year, and so we'll be giving our first kind of awards at the end of this year, and, like I said, she's putting together -- She's working to put together our 2023 annual data summary.

The last thing that I just wanted to leave you with is I know we've shared this with you before, but we included a link on here to our kind of 2022 data summary, for you guys to check out again, and, if there's anything else that you don't see in that summary, that you would like to see in the 2023 data summary that will come out in January, let us know, and we'll work to incorporate that in, and so that's a quick run-through of kind of what else has been going on in the Citizen Science Program, and so I'm happy to take any questions.

MS. MARHEFKA: We're so lucky. I think we're so lucky to have this program, and I just -- Every time we do this, I'm amazed at how forward-thinking this council has been, how staff and leadership have been, and it's just excellent every time. It just gives me goosebumps. Does anyone have any questions about any of these for Julia? Okay. I don't see any. You did awesome for two hours.

MS. BYRD: I promise I won't talk again.

MS. MARHEFKA: No, no, no. Any other business to come before this committee? Seeing none, I yield it back to you, with let me note that five extra minutes.

(Whereupon, the meeting adjourned on December 7, 2023.)

- - -

Certified By: _____ Date: _____

Transcribed By
Amanda Thomas
February 12, 2024

Dec. 7, 2023

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2023 - 2024 COMMITTEE MEMBERS

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- ✓ Mel Bell *online*
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- ✓ Tim Griner
- ✓ Judy Helmey
- ✓ Jessica McCawley
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- David Hugo
- John Walter
- Martha Guyas
- Shep Grimes

Attendee Report: SAFMC December 2023 Council Meeting (12/4/23 - 12/8/23)

Report Generated:

12/07/2023 04:58 PM EST

Webinar ID

379-228-259

Actual Start Date/Time

12/07/2023 07:12 AM EST

Duration

9 hours 41 minutes

Registered

227

Attended

131

Staff Details

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Yes Interest Rating Not applicable for staff Last Name Council First Name South Atlantic Email Address administrator@safmc.net

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