August 17, 2023 Recreational Demand Model (RDM) Decision Support Tool (DST) Working Group (WG) Meeting Summary

The RDM DST Working Group for Summer Flounder, Black Sea Bass, and Scup met for the third time on August 17, 2023, via webinar to discuss: (1) enhancements made to the draft DST design template based on feedback from the July 20 DST WG meeting; and (2) to provide a progress update on moving the DST to the cloud to better support the processing needs of the RDM and to take advantage of cloud computing scalability.

Attending

Working Group Members

Tracey Bauer
Julia Beaty
Scott Steinback
Kimberly Bastille
Andrew (Lou) Carr-Harris
Kiley Dancy
Steve Doctor
Hannah Hart
Alexa Galván
Mark Grant
Corinne Truesdale
Samuel Truesdell

Chelsea Tuohy
Gregory Wojcik
Tony Wood

Others

Joe Grist
Jesse Hornstein
Raymond Kane
David Records
Michael Waine

Discussion

Scott Steinback: Since our last meeting, Kim has mostly been working on finding a host site and running it in the cloud.

Kim Bastille: Not a ton of change on the front page. Added a button for NC. Still just a place holder though. Model still just built for NJ. New results page – kept and released by species and mode. Total angler welfare and total number of trips also shown. Added a results table to show measures that were selected. Also showing percent of runs meeting a desired outcome. There's a placeholder for all results in weight. The model is still calculating only numbers for now.

Scott Steinback: Can you clarify if the releases are accounting for the discard mortality rates?

Kim Bastille: Not yet, but will.

Steve Doctor: Are the percentages shown in weight?

Kim Bastille: Not yet, but will. Don't focus too much on the values shown right now, just the format, because the numbers shown are not accurate yet.

Alexa Galván: How would we use this for regional options? Can you enter different measures on the first page and get regional results? Could regional results then be broken out by state? Or would we enter inputs for each state and then add them up in a separate sheet to find the regional reduction?

Kim Bastille: Right now, results are just for NJ. In the future, the results will be broken out by state. Will be able to enter specific measures for each individual state.

Steve Doctor: Will this work for liberalizations too or just reductions?

Kim Bastille: Will work either way. Will just need to know what the desired outcome is to calculate the percent of runs that meet that outcome.

Scott Steinback: Alexa wants to be able to see if all the sets of measures that are proposed under the different states will get to whatever the target is. You have to enter each of the state regs separately if they vary and run that all at once. Then if a state decides they want to tweak theirs a little bit, would you have to go back and enter all those again to run them?

Kim Bastille: If you're looking at how changing a few states will affect the whole, don't need to enter all of them. Because status quo are fixed values for comparison. But if you do want to make a small adjustment to one state, you would need to run the model again with all those selections that have changed.

Alexa Galván: Once NJ is ready, before you scale up to all the states, maybe add in just one or two other states for one of these meetings so we can see how it looks. For example, New Jersey and Delaware.

Kim Bastille: I was planning to do alphabetical, but can start with something like all the southern states first.

Alexa Galván: Specific states don't matter so much for the purpose of this work group. Just want to see how the inputs and outputs will look.

Kim Bastille: Updates on how the DST will be accessible. Working with Azure folks. Cloud computing space for Microsoft. NOAA headquarters has an Azure contract we can use. Plan is to get NJ finalized, get the model performing the way we want it to. Then migrate it over to that space to make sure it's running correctly and everything looks good. Then go from there. Has the capabilities for the scaling we need, 100 model runs. Working with the Azure team to figure out what the front end will look like. It has that capability for our needs.

Scott Steinback: We think everyone on the working group will have the ability to access the website. You'll have the option of having the results emailed to you. This is good news. There is a cost associated with this. Still trying to figure out the specific costs. We think we can support that at least for 2024. We'll see how it goes for future years. This is a huge step forward. Once Kim is able to transfer this over there, we can really start looking at the details of the DST in a realistic way. Should make a lot of progress once we get this up and running in the Cloud. We have about 3 months to make this work to be able to use it for 2024 measures. But we are in good shape.

Julia Beaty: How to deal with NC? For summer flounder the measures apply to the whole state, but for scup and black sea bass they are only for north of Hatteras.

Lou Carr-Harris: Splitting the MRIP data north of Hatteras is tricky. Right now pulling for all of NC. We have not figured out a way to deal with that. I'm worried about breaking down the MRIP data. Already sparse for NC for those species.

Scott Steinback: Trying to build it so we can minimize the number of tweaks that need to be made each year for mgmt. purposes. But we may have to tweak it for NC. Just need to be aware of the limitations when we do that.

Alexa Galván: There are also certain species where NC would be calculated with the southern region and certain species where they are not. They are treated separately for summer flounder. Southern region doesn't get credit for their reductions.

Julia Beaty: In the past we haven't split NC north and south of Hatteras for scup since there's so little scup catch in NC anyway. Maybe we could adjust the NC output for black sea bass based on recent percentages north and south of Hatteras or some other approach.

Lou Carr-Harris: Looking at past data, almost no summer flounder and scup catch in NC.

Non-work group members

Mike Waine: I'm assuming you've all heard about the MRIP announcement regarding the order of the FES questions resulting in different responses. I know there's no fix, they're still studying it. Do the modelers see opportunity to try to incorporate some uncertainty in the catch data through this process to try to account for the fact that these models are calibrated on MRIP data? If the MRIP data are in flux, how do the modelers plan to deal with that?

Lou Carr-Harris: We're not taking action based on the preliminary results of the MRIP question order study. They're doing a full study next year. Will have more conclusive results based on that. Will use the new data when it comes out. Right now we'll use the current data. That study is related to effort, which impacts catch. In terms of the uncertainty of the MRIP directed trip estimates used in the RDM, I showed an example in May of a very uncertain Maryland estimate that was affecting the model outputs. Last year when we ran the model, we used MRIP directed trip point estimates. That resulted in some unusually high estimates in May in MD. The model now incorporates uncertainty in those point estimates. Each time we run the model, 100 times, we're drawing from the distribution of the directed trip estimates, so we're accounting for the current uncertainty.

Scott Steinback: There's a CI associated with those effort estimates from MRIP. Now the model randomly draws from that entire distribution, rather than a single point estimate. Thus, now we are at least accounting for the current uncertainty associated with those MRIP effort estimates.

Mike Waine: Trying to figure out how that would impact the use of this tool. States are making some pretty minor changes. At some point this uncertainty is overlapping so much that we can't

get a signal from that noise. Struggling to understand how that will all play out. Is there a statistical difference between these mgmt. alternatives? There are significant consequences to these mgmt. actions to the user groups. Managers are expecting catch to be reflective of the changes that are implemented.

Scott Steinback: All we can do is present as much statistical info as possible. There's no clear black and white approach to decide which alternative is absolutely different than another one. We will provide info on things like percent of model runs that meet the goal. But other info can also be considered by managers.

Mike Waine: The percent of runs seems to be the best mechanism. This is also an issue for accountability measures (AMs). Maybe there's a way to incorporate these considerations into the AMs. The historical performance of achieving our specific intended percentage liberalization or reduction has not been great. I'm not sure the model will help with that, especially given the upcoming MRIP changes. Our expectation of changes in measures does not match the ability of the data. This is something that needs to be considered through this process.

Scott Steinback: We can also consider that through the ongoing Recreational Measures Setting Process Framework/Addenda. These meetings are primarily focused on building out the DST. For our next meeting, we are hoping to be able to show what the model looks like in the cloud. Our next meeting is September 21st. I will send draft meeting notes around early next week and post the final notes on the website. I'll also send out an announcement for the next meeting shortly.