March 10, 2020 Social Science Working Group Call

Attendees: Deepak Ray, Güray Hatipoğlu, Nat Springer, Jody Peters, Jaime Ashander, Kira Sullivan Wiley, Mike

Agenda/Notes:

- 1. Blog Post Updates
 - Kira/Jaime following up with folks. Have a nearly finished draft from working with Kathy. Will send near the end of the week.
 - Then after that will come Jaime's then Mike Gerst's.
 - Güray had an idea as well. He is progressing on it slowly. But there is no big rush.
 - On schedule to blog posts out, one every 4 weeks
 - O Nat is also willing to contribute on something about future ecological forecasting is overlapping with land use forecasting

2. Scope of Work Ratification Results

- 9 respondents with 100% voted in favor of the Scope of Work
- O Güray's suggestion on the Scope of Work:
 - In the last minute I came up with an idea for a medium term goal. It is related to analysis of some influential (and some not) forecasts in the world related to environment and our analysis of the reasons and obstacles for their success and dissemination.
 - Of course, it might be too late to make an addition to Scope of Work but I am still eager to hear your critiques over my comment. Besides, I accept the Scope of Work as it is.
 - Would like to do a lit review
 - This sounds related to the work Mike Gerst has been involved with. The utility of visual graphics for people making decisions. Could be good to reach out to him to get into the literature. Melissa would also be a good person to connect with.
 - Get a prototype of an example question and then see if it would be relevant to the Social Science group.
 - One of many social science questions this group can work on.
 - It would be a good thing to work at on an on-going basis.
 - Güray will work on a short description of this and an idea of what it would entail/the product
 - Deepak When making maps/figures as forecasts, there are a huge community of people used to looking at weather maps. If we want to leverage that kind of trained interpretation already existing then we can consider tailoring the maps/figures to be analogous to those weather maps.
 - There is a broad discussion on Standards. The standards are mostly focused on metadata and file formats. Nothing has been brought up on standards on

- decision support tools yet. But expect once we get the output and metadata standards, then thinking about how to
- STC can we develop Shiny tools or pallettes to lower the bar for development and to provide more uniform products. On CI side of things, having common API makes a uniform presentation and shows predictability
- Methods working on Forecasting Task View. That team would benefit from input from this team on what are the visualization tools that decision science folks use. Also want to identify where there are gaps. If there are gaps in the decision science tools then we can work to find good places for development.
- Kathy's post is about visualization and how stakeholder feedback helped to update their maps to make them more usable. Add a section that crowd sources information about list of resources available.
- The Methods section will have a Decision and Visual post.
- Jake Zwart is the point person for the Method blog post. Jody will connect Kira and Jake.
- O Now that we have developed the Scope of Work is there a way to easily convey in the Scope of Work that new ideas can be added? How do we keep the short/medium goals up to date?
 - Scope of Work is not a dead document. It can be updated as things become redundant or obsolete. Things can be added,
 - Core function is to verify the first section that says who we are.
 - Ratify now and then add Güray's medium-term goal as we push forward with more concrete plans
 - Jody will add Scope of Work to Social Science EFI page
- 3. Website: <u>This page</u> will be specifically for Social Science and will link from the <u>Working</u> <u>Groups page</u>.
 - This page has the description of the Social Science group, the schedule of meetings, Links to News posts, and PDFs of notes from the calls
- 4. Prep for the RCN meeting
 - Quinn wasn't available today, but is planning to join the next call
 - Keep thinking about what needs to be done to support the RCN meeting. The RCN pragmatic goal of launching forecasting challenge using NEON data. Need to decide what to forecast, what are the rules. Social Science/Partners want forecasts that go beyond testing ecological theory. Want to make sure the right stakeholders are present or their voices have been heard virtually or ahead of time. Which things in the NEON cateogry what things are of use? What are of most interest to this group? How can we get things out of that exercise that is useful to this group? Lessons learned from the forecasting challenge. It is a unique opportunity. This is a case, the only case in ecology, where we will have multiple models that we can compare. Uncertainty of the models and uncertainty within models is going to be a push.

- Carl Boettiger has been worked on how the different uncertainties should affect how decisions are made
- Want to give the group the chance to think about what they want to get out of the RCN/forecasting challenge. Is there anything new to learn on the Social Science side?
 - The forecasting challenge rules will be formalized. For example, the standards group will present a proposal to the community. The proposal will be fairly well fleshed out so the community can see where they will or will not work and where there needs to be adjustments. Breakout groups are a chance for revision, not for starting from scratch.
 - Forecasting challenge is open to as many groups as possible
 - Results from challenge will be trickling in until years 4-5.
 - Will have town hall at AGU. Will mention it at ESA
 - The choice of topics is still open, but consensus that we want at least 1 terrestrial C (flux thing), 1 aquatic, and 1 biodiversity. Then see if there is a push for a fourth area and what specifically we want to do in each area
 - We can iterate if we choose things that are sensor-based rather than field measurement-based. And we get more from field-based than lab-based measurements.
 - Probably will not emphasize the AOP it is non-standard compared to other options. The forecasting questions would become spatial which is harder than time-series forecasts.
 - Back and forth between rules of the games setting and products that will be advocated for from what is feasible. We want places we can compare across forecasting techniques and how they perform.
 - The other constraint is thinking about scale. Need to frame some in larger scale. Don't want just forecasts that are just for the managers on NEON sites. NEON wants their data to more broadly applied
 - Goal is for folks to produce forecasts on rolling basis.
 - Want to wrap up getting new forecasts in year 4 so things can be written in year 5. But years in between 1 and 5 is to get people involved (education year 2, year 3 early career tutorial and hackathon, boundary organizations in year 4)
 - Mike expects the first results to be presented before year 2 meeting
- 5. Next meeting on April 14
 - Güray to present his ideas
 - O Blog updates