

## August 19, 2020 Education Working Group Call

Attendees: Anna Sjodin, Alyssa, Willson, Olivia Tabares, Shannon LaDeau, Jason McLachlan, Jody Peters, Mike Dietze

### Agenda/Notes:

1. RCN Education Efforts (Jason) -
  - a. From the RCN proposal we proposed:
    - i. Coordinate education best efforts
    - ii. Produce online courseware focused on NEON-themed ecological forecasts
    - iii. Identify topics and skills
    - iv. Identify existing tools
    - v. Develop plan for building open set of modular online tools
    - vi. Develop initial set of tools and courseware
  - b. Where are the big gaps so we can enable people interested in forecasting but haven't done so yet? Have these interested people test out what is developed.
  - c. Want this working group to provide input since the RCN education goals overlap with the larger goals of this group, but also don't want to take away from other efforts/interests of this group.
  - d. Are we thinking about instructional videos at different levels (introductory/advanced/manager/end-user)?
    - i. The RCN is scoped to focus on helping people participate in the challenge rather than end-users or early undergrads
    - ii. But want to design something that won't need to be redone for other groups.
    - iii. What is out there already, what gaps are there? Then think about someone with grad level stats training, but hasn't integrated data and models yet.
    - iv. Most exciting interaction seems to be at targeting the grad level. There are a bunch of tutorials to get people up to speed on R (data carpentry) we don't need to repeat that. But do want to help people take the next step to do a state-based forecast. By having these resources we can then find out who breaks it and who takes the resource and does something we hadn't thought of. A good place to start is to get something basic available to be a foundation for people to get creative with.
    - v. With all the different teams working on the forecast challenge - can we define challenges within the overall challenge. Have prizes for teams that go beyond the skill of their forecasts. E.g., who has the best explanation of their forecast, the best metadata, the best documentation.
    - vi. It would be good to target advanced ecology undergrads/masters students so they can incorporate that knowledge into their grad proposals.

- vii. We are coalescing around targeting lower grad/upper undergrad level. This level will also apply to end-users in that we show how all the pieces work together. Demonstrate the process.
    - If we target this level, it will reach a broader audience as compared to focusing on the upper grad level
  - e. Homework for RCN - define the entire process, identify resources and gaps, and then come up with timeline for filling in the gaps and concrete tasks
    - i. Jason will pitch to the RCN group on Friday
2. Update from Alyssa - grad student efforts to compile resources for undergrad education
- a. Alyssa has been working with Whitney and Ben from the EFISA and have a list of ~20 resources/website. They are working with Jody to get the list on the EFI website. The webpage will also include a link to the form to submit more resources
  - b. Most of the resources have come from Alyssa or Whitney so want to reach more people to get input on what resources are available
  - c. Once we have the website set up, then put out a tweet telling people about it and asking people to contribute resources
  - d. Think about **organizing the resources around the essential concepts of forecasting** and then figure out how to pitch those concepts.
    - i. Pitch concept of iterative forecast cycle without code/modeling at one level, then at another level pitch the gory coding details.
  - e. Shannon and Olivia will look at the form and see if they have anything to contribute. Olivia might have some resources for Spanish-speaking individuals
3. Update from Anna and Gretchen about the forecasting vs prediction survey/manuscript
- a. They have been working with this group, EFISA members, and the Theory group on a manuscript to define what is a forecast, prediction, projection
  - b. Abby Lewis has been working on a panel to include other vocab words that Theory group has been working on
  - c. For the wedding cake conceptual figure - it would be good to figure out how to work in the essential concepts of forecasting (point 2d above)
  - d. Anna and Gretchen have a rough draft of the Intro written
  - e. Grad student group are working through how other disciplines think about forecasting
  - f. Jody/Anna/Gretchen will work on Methods/Results
  - g. On next call will have Intro/Methods/Results - then will bring it back to the group for input