May 28, 2020 Partners Working Group Call

Attendees: Kira Sullivan-Wiley, Jody Peters, Clifford Duke, Kathy Gerst, Mike Dietze, Güray Hatipoğlu, Chris Brown

Agenda

1. Introductions for new people from RCN
    a. Video by Kira summarizing the Partners work for the RCN: https://youtu.be/R3QCzyegD1w
    b. Introductions
        i. Thilina Surasinghe - is out on previously scheduled fieldwork today, but is very interested in joining and will participate on the next call. Associate Professor in Landscape Ecology and Conservation Bio at Bridgewater State University
    c. Kira and Chris Brown (NOAA) are the current chairs of the working group. In the fall we will work on more formally electing future chairs
2. Terms of Reference - was approved after the last call and added to the Knowledge Transfer & Partners Webpage
    a. See results of the voting here
    b. Core functions from ToR
        i. Foster a collaborative community;
        ii. Promote the co-development and use of resources and tools;
        iii. Transition forecasts from research to operations

3. Work Plan
    a. Go through this and develop ideas/plans/tasks further with follow up to the RCN Workshop
        i. On the Social Science call we talked about ways to link up partners/stakeholders to teams participating on the RCN Forecasting Challenges.
        ii. Matchmaking discussion - Jake had suggested creating a list of people who have created forecasts for stakeholders to peruse to see if there is anything that could be useful for what they are interested in. On the flip side we could give people who have needs advertise what they need and then see if the people who forecast see if they have the skills/expertise to create the forecasts that those users would need
        iii. How do we break it down to make connections between people who make forecasts and people who might be end users. How do we find those end users, who are they, and how do we bring them in?
        iv. Some decision-makers will know what they want and can ask for it, while others will be able to develop ideas about what can be useful to forecast when they see what is possible to forecast
        v. Mike - when starting EFI the focus was on the organization of the research community rather than on outreach to partners. Relative to the

other efforts in EFI we are early in the process of reaching out to stakeholders

vi. Mike - agrees that part of this needs to be demand-driven, but not wholly demand-driven. Building a better horse in 1905 idea - if you don't know what technology is capable of you might not ask for what is doable. You might ask for a hammer when we can give you a Mazarati

vii. Chris - the Users may not know the capabilities. They know their problems, but they may not be aware of what can be done. Or on the flipside their expectations may be more than what can realistically be done.

viii. It really needs to be a dialogue and approached from both ends.

ix. Kathy - Paint broad brush strokes on topic areas. The Partners group should focus on the needs of users. If we provide a framework where we provide examples across subject areas, this could be another way to connect people who worry about similar problems even if they can't pinpoint their solutions.

x. Relevant question for people in the research community - what skills do you have and what systems do you work in? For example, knowing who the folks are that have quantitative skills and understand aquatic biogeochemistry would be able to build a chl a model even if they do not have a forecast ready for chl a yet. On the other hand, these people would not be able to provide the technical expertise in land carbon because they do not study that system. All of this is interdisciplinary so our goal is to help build teams.

xi. It also depends on who is doing the forecasts and what you are trying to achieve. Grad Student/Post-doc are doing research to answer a research question. This is different than what a commercial vendor would do and be expected to work on.

xii. Alot of environmental characteristics will be similar (temp, wind, currents, etc) no matter the system. If these are available for everyone then we won't have people recreating/recompiling this information.

xiii. Sharing of resources/centralizing of resources - is this something the Methods and Tools groups are working on?

1. They haven't been focused on the data resources, but have focused on the tools

xiv. Chris from NOAA can help point to where the met data can be found for forecasts

xv. These types of data will be collected for the RCN forecast challenge and will be compiled in a location with code for retrieving data

b. Core Function 1

i. Data sources -

1. This is not something anyone else is doing in EFI and falls in the purview of the Partners group.

2. This is something we can put on the EFI website under Resources.
3. We'll create a database of data sources and code for processing (e.g., met data, satellite/radar, etc) as part of the RCN Forecasting Challenge.
4. There are federal agencies that collect data and do nothing with them. We can work with those agencies to compile the data
5. We can set up something for others to share their databases similar to the Google Form the Methods group uses with the Task Views
6. Criteria for the Databases
    a. Be clear that we want data resources that are broadly usable by potentially numerous forecasts (don't get to the level of data used by individual grad students)
    b. Links to seasonal to sub-seasonal weather forecasts
    c. Satellite or radar data
    d. Basic GIS layers, DEMS
    e. NPN's post processing of weather into growing degree day
    f. If partners identify data they want to forecast - this is linked to a partner request. Discourage having people post data because they want someone to help make a forecast from them
    g. Include large databases with rolling updates. Live resources that are continually being updated
    h. One criteria for the Google form when people suggest data to be added - prefer them to be dynamic and current (e.g., Mike wouldn't enter his lab's forest plot data, but would put in the Forest Service plots)
    i. Useful legacy datatsets. These may not be dynamic and current, but it is also important to have Long Term datasets that are good for calibrating/validating forecasts.
    j. Link to other existing databases such as DataOne. EFI's current partners lists are almost all large Databases
7. Develop a small subset to figure out how to progress on the Databases?
    a. Establish criteria - what are the attributes of good datasets
    b. Maybe the student group? Post a message on Slack to them?
8. The database is an important bullet on the Work Plan, but may not be the highest priority for work related to the RCN
9. A higher priority goal is to work to engage partners on designing the RCN forecast challenge
    a. Does NEON have people who can help reach out/knows partners? NEON nominated the Science leads. They are

not the domain managers and they are not the people responsible for the higher level connections/networking. Don't think NEON has done alot of engagement on the data user side of things

   b. People we want to connect with for the RCN: Folks that make decisions related to RCN challenge topic at national scale (agency folks), folks that make decisions at local NEON sites, folks that could use forecasts that could be generalizable
   c. RCN Topics (and potential leads): Ticks (John Foster/Shannon LaDeau), Phenology (not sure the point person), Aquatic Instruments (chl a in streams and lakes; Cayelan Carey), Terrestrial Ecosystems (soil moisture, and expand to latent water flux between land and atmosphere and, carbon flux between land and atmosphere; Quinn Thomas/Mike Dietze), Population/Community (Carl Boettiger)
   d. Want to get Partners input early in the process
   e. Would be good to have our group reach out to the potential forecast challenge lead

4. On April 30 call we talked about compiling a Bibliography/Library of papers and images. We will put material in this Google folder [link removed]

5. Kira's Survey is live!
   a. bit.ly/EFIpartnerssurvey
   b. Share it with anyone who themselves, or through an organization/ lab/ group/ office: collects, stores or manages ecological data (or ecologically relevant data); builds or deploys ecological models, forecasts, or decision tools; makes ecological decisions using any of the above; and/or works to connect or coordinate among the actors doing any of the above.
   c. Send it to Marie Colton (AMS/EFI coordinator), Knowledge Transfer colleagues on the STC, anyone else?