NutNet Meeting Notes 8/1/2017

- (1) Add-on projects
 - a. Add-on data management
 - i. Problem: There are many versions (or sometimes no version) of add-on data circulating among NutNet members
 - ii. Goal: Be able to provide quality data to larger group.
 - iii. Proposal: Integrate add-on data to NutNet dataset at the time of data analysis. Allow an embargo, i.e., time for publication or dissertation/thesis completion. Keep data in UMN server but make Metadata available from day 1.
 - iv. Thoughts from the group:
 - 1. How to enforce embargoes?
 - a. EB: wait for go-ahead from add-on PI before adding to dropbox
 - ES: Important distinction: Dropbox does not equal database. Adding to database does not mean data access is universal.
 - 2. Even with an embargo, metadata will be helpful for group
 - a. Kim & Jen Firn are working on creating comprehensive metadata for add-on projects. Stay tuned.
 - v. Group accepts proposal.
 - b. Access to one's own site's add-on data
 - i. Problem: Someone wants to access add-on data generated at their own site. Usually add-on project PIs want to provide this – can we streamline process?
 - ii. Goal: Provide this more quickly to participants of add-on projects
 - iii. Proposal: Centralize data management within NutNet HQ (Ashley). Ask add-on project PIs whether they would like sites to access their own data when it is incorporated into database.
 - iv. Group likes this idea.
- (2) Data Publication
 - a. Problem: Publications want NutNet data available online, but "definitive" version will never exist as long as we continue to collect new data.
 - b. Thoughts & suggestions from group:
 - i. Jon Bakker: Also noticing requests for code & data
 - ii. EB & Kim La Pierre: when publishing papers we have generally provided the dataset on which the analysis was actually performed (i.e., aggregated data).
 - 1. (What has not been shared are all the observational data up to a certain time)
 - iii. Laureano Gheradi (sp): Let's limit this to observational data. EB agrees year 0 data.
 - iv. Kim La Pierre: Agrees that raw data publication should be limited to observational data. Re: experimental data, metadata/special considerations often clear to project PI are not obvious to those outside the network. Kim agrees that observational data are more straightforward.

- 1. Ellen Esch: Some "Notes" are especially helpful. What about a flow chart? Is your question about litter-> then look out for these problems.
- 2. Ashley Asmus likes this idea. Will explore this year.
- v. ES: Can use "Creative Commons" licensing/attribution style (e.g., "CCBY" license type).
- c. Decision: Core group/HQQ will formalize data publication of 3 -year rolling window for observational data

(3) \$oils

- a. Problem: Eric & Elizabeth have spent > \$100K on soils. How can we maintain this while still keeping analyses in same lab?
- b. Solutions
 - i. Kim: crowdsourcing?
 - 1. EB: Probably Too much money to ask from a crowd.
 - ii. Laura: Mail costs for non-US participants are exorbitant. International collaborators already have a high financial burden.
 - iii. Average cost around \$500/site (? EB/ES check this)
 - iv. ES: Ask for contributions at the time soils are set up. Maybe new participants will be writing grants for new projects, they could write into their proposal.
 - v. ES: Is there some other agency we could get \$ from?
 - 1. EB makes eye contact with Phil Fay.
 - 2. Phil: Well, what about LTAR (not LTER) network. Could propose to them that soil data provide ecosystem function data.
 - 3. Phil will explore options.
 - vi. Carlos: what about the old sites? New ones might kick in money, but old ones might not
 - 1. EB: We are not desperate yet, but this is not sustainable in long term.
- c. Decision
 - i. Status quo continues for now.
- (4) Website!!
 - a. Announcement: University of Minnesota has updated the website to DRUPAL! Wow! Should be online in about a month. HQ will send around an announcement to all when it is live, will ask for people to explore the website and report any bugs.
- (5) Publication practices: Things that should be in every NutNet Paper
 - a. Keywords: Nutrient Network (NutNet)
 - b. Acknowledgements text is standard (e.g. IonE at UMN)
 - c. Authorship table w/ each author's contribution.
 - d. Site Table: Contributions of Site PI (one step down from authorship)
 - i. This also takes care of when Sites have certain acknowledgement requirements, like LTER sites.
 - e. Data versions! Say in methods "Data were downloaded on DATE." This should serve as version number (date in name of .csv on dropbox)
 - i. Versioning system with minor/major updates numbered?
 - ii. We could do this...

- 1. Ashley can explore this, pending interest.
- iii. Log of changes?
 - 1. ES: Easy enough to do this with a track-change in R
 - 2. More periodic reports to group: send more periodic updates via email when data are uploaded
- f. Action Item: Ashley will update website with these requirements. Ashley will keep a log of changes to data in text form and send quarterly (ish) emails as the dataset is updated.
- (6) Code Checking & Code Repository
 - a. Electronic code scrap bin?
 - b. Checking code is a lot of work!
 - c. NutNet mailing list could be a source of analysis help
 - i. Elizabeth Borer is already wary of spamming whole group with annoying questions.
 - d. Proposal: Code checking should count as authorship contribution
 - e. Proposal: Former lead authors should perhaps compile list of to-dos that have helped move papers forward (ex., compiling the authors table takes a long time!)
- (7) NutNet 2.0
 - a. EB: This is in Progress
 - i. Kim & Elizabeth have promised to each other to write proposals this fall
 - ii. At least, network is enthusiastic about continuing the project/experiment.
 - iii. "NukeNet" -- vegetation removal w/ and w/o nutrients and cessation are two strong avenues
 - iv. Laura Y.: What about mowing? EB: This was also an option.
- (8) NutNet Grad Student Network?
 - a. No interest in leading this in the room, but always on the table.
- (9) A better way of communicating with network. What about a forum? Laura Yahdijan.
 - a. NutNet email sometimes includes only site PI. What about a more open forum within the NutNet community, more open to answering questions, eg about analysis?
 - b. Perhaps more helpful would be a table of people on the website
 - The problem with this idea is that we don't have a good accounting of all of the students, techs involved in the Network (Lauren Sullivan has a partial list).
 - c. Proposal: "personnel tab" on experimental data sheet? This will be added to current year's data sheet (Ashley, nutnet HQ)