NSAR LTAR Meeting – 9/1/2016

Present: Shelley Pressley, Kent Keller, Erin Books, Jan Boll, Lynne Carpenter-Boggs, Dave Huggins, Kendal Kahl, Eric Russell, David Brown, Bryan Carlson, Scot Hulbert, Jeff Ritter, Brian Lamb

Phone: J.D. Wulfhorst, Dave Evans

Social assessments (JD)

Dr. Wulfhorst discussed sociological aspects of LTAR network. He outlined a framework with three areas: Population characteristics, vulnerability characteristics, and scenario modeling.

Dr. Huggins explained that one mandate of the LTAR network is to conduct research on "business as usual" systems and on "aspirational" systems. Huggins brought up the possibility of conducting a survey to determine what farmers view as "business as usual" and "aspirational". It is important to ensure that any "aspirational" research will be adopted within 5-10 years by something like 5% of the farmers.

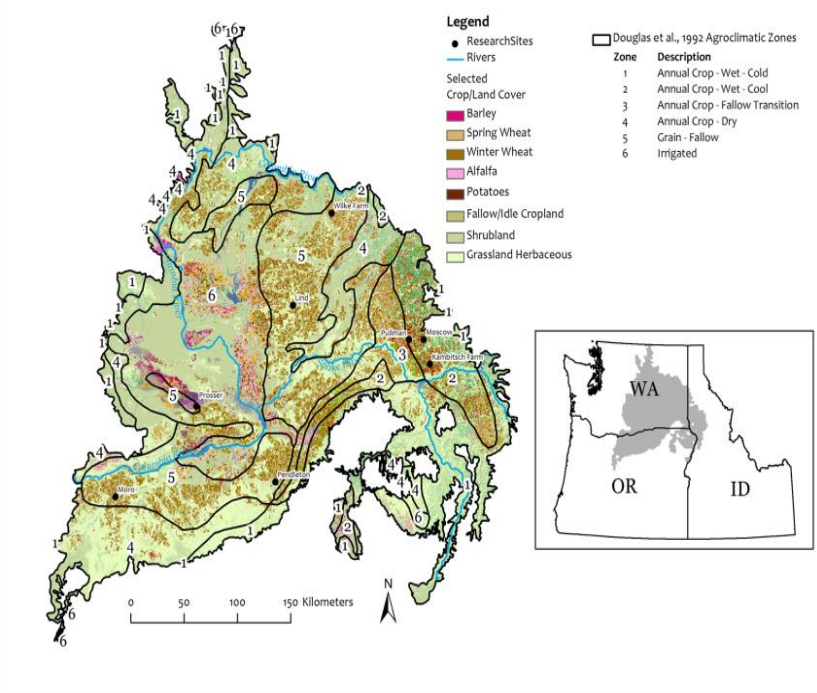
Dr. Carpenter-Boggs mentioned that it would be interesting to see what the population would like to see happen.

Dr. Brooks was interested in determining how communication is conducted among farmers and new techniques are adopted. He mentioned that in one county no-till practices were adopted rapidly, but a nearby county had very low adoption.

Dr. Keller explained that the LTAR network has a responsibility to sustain rural communities.

The LTAR footprint

Dr. Huggins explained that the Cook Agronomy Farm LTAR is a bit of a misnomer. The LTAR area is not only the Cook Farm but includes the whole REACCH area – the dryland cropping systems within OR, ID, WA. He presented the following image:



Long-term Research discussion--Business as usual versus aspirational treatments, other

Dr. Brown would like to determine the argillic layer of W Cook and possibly redo E. Cook. He along with Dr. Boll and Dr. Brooks will create a sub-committee to discuss details.

Discussion about archiving samples took place. Dr. Brown would like to see a subset of collected samples frozen. He and others also discussed archiving dried samples. Dr. Carptenter-Boggs mentioned archiving extracted DNA instead of the entire soil sample.

Dr. Brown mentioned tracking nitrifiers and denitrifier community. Dr. Huggins mentioned that GHG will be monitored so identifying areas of hotspots could be suitable locations for characterizing microbial communities and GHG monitoring.

Dr. Keller explained that we need to not only identify response variables to be collected but also ID independent variables. He mentioned that we need to think of the big picture questions of how farming can occur on the region. What perturbations mare most interesting, 50 years from now. Dr. Huggins mentioned that the time factor brings up the point of climate change and environmental factors (such as acidification) become an issue.

There was discussion about management practices – cover crops, precision agriculture, and changes in rotations.

Dr. Brown cautioned that land area in Cook E is subdivided into numerous experiments, causing problems when attempting to analyze effects of precision ag. Dr. Huggins explained that the inclusion of additional fields may help with this problem. Discussion continued with mention o f a kind of gradient approach to appointing land for studies – “aspirational” studies (5-10 years until adoption) will take up more land than “really aspirational” studies that may not be adopted until far in the future.

Future meetings

Dave opened up discussion to determine the future of these meetings. He outlined numerous long-term research and monitoring studies that can be conducted and needed to be decided upon.