

Notes from MCM LTER All PI Webconference 01 July 2015

Attendees: Gooseff, Howkins, Adams, Doran

MCM4 -

- 5 minutes of awesome (everyone chime in with good news updates)
 - Byron – Berry has worked up paper on Beardmore GI data (habitat suitability during and prior to LGM); most places were not optimal for life even back then. Difficult to find the happy spots across the ANT continent in the past. Berry sets a clock for wetting (supply of liquid water to landscapes) in this paper. Should be good.

- MCM station re-design meeting @ NSF 13-16 July - aside from Frosty Boy, what's important? (Mike)
 - going: Mike, Amy, Byron; Jeb? Kathy?
 - what's important?
 - Academic schedules dictate our availability, need to accommodate that (PI and student schedules)
 - Reduce impact to our students' schedule, etc.
 - Can we improve bandwidth? (science vs. community bandwidths?)
 - Labs and office improvement... (Diana's email comments)
 - Indoor staging space
 - Use re-design to reinforce that this is all about science. This is a science base. This is not really about personal comforts. Everyone is there to support science, right? (remember?!?)

- field season updates (soils group)
 - Ross not deploying this season... Jess and Ruth will come from Dartmouth
 - Tandra (CSU) will be coming down as well

- MCM Grad Student Rep - can we codify this a bit? (Mike)
 - could get some coordination out of this that takes responsibility off of PIs.

- MCM science meeting - (Mike)
 - what to accomplish on day 1?
 - Need to include students – posters or short orals? 5 min/3 slide format?
 - Students presenting important parts of the work of a group perhaps beyond their own work. PI request for student to give longer presentation if they are presenting on behalf of a 'group'.
 - Student oral benefits include everyone's attention and contribution
 - Need to balance individual work (PI) and integrate across groups and project
 - Make sure to schedule time for integration.
 - Break out groups to achieve this? (recall that this was done before and helped us decide to pick up Miers and drop Hoare) Break up by MCM4 subhypotheses? By LTER core area?

→ logistics understood? **BOOK YOUR ROOMS at both ASM and in Boulder**

- ASM notes (Mike)
 - joint meetings on Monday afternoon of ASM with PAL group
- Bioscience paper updates (JP, Byron, Andrew)
 - no news...

MCM5 -

- If we choose to discuss how the MCM ecosystems are resilient or resistant to change in some way, we need to be careful how we define and use the term ‘resilience’ (for example).
 - need to evolve a conceptual diagram that shows responses to disturbance.
 - Is ‘resilience’ to change the same as ‘stability’ (i.e., functional stability)? Need to make sure our terminology and meaning is in line with the current literature.
 - open question: is there a correlation between taxonomic stability and functional stability/resilience?
 - follow up question to this – Do the LICE experiments show some non-linear responses? We proposed in June discussions that responses might be non-linear. Is that true?
 - In the soils the combinations of water and nutrients have big (i.e., non-linear) effects, but not so much by themselves. Are there strong functional responses to these combined inputs?
 - With respect to water in soils, when (or how much) is water ‘flushing’ salts and when is it a subsidy to the soil ecosystem? Threshold? Transition from wetting to flushing?
- Relating back to the human impact in the valleys –
 - chronological pulses of people have occurred in the valleys, but is the impact of #s of people offset by the evolution of environmental regulations in the valleys?
 - We have pulses and presses of human impact (spike camps vs. permanent camps)
 - What is the cumulative impact of humans? We have presses and pulses of human impact to which these ecosystems (mostly soils) respond.
- Nature of the disturbance is important and the legacy of the past environment is important too. How do these two combine to generate a quantifiable impact? How does this then impact response?
- Legacy of past has an influence on how the system responds to NEW disturbances; a few examples:
 - West Lobe vs. East Lobe Bonney
 - relict channel vs more consistently active channels
 - Worm Herder Creek has both flushed soils and those that are not.

NEXT WEBCONF will be Thursday, 23 July at 2 pm mountain – Note that we are skipping next week due to Goa meeting and NSF meeting