

Community Convergence or Divergence in Resource Manipulation Experiments

| Organizers: Kimberly La Pierre (KNZ & SGS), Sally Koerner (KNZ), and Kevin Wilcox (KNZ & SGS)

Our working group focused on addressing the mechanisms that cause convergent and/or divergent communities in multiple global change manipulation experiments. To address our question, we began the working group with a short presentation summarizing the evidence for convergent and divergent communities in global change experiments and proposing potential mechanisms driving this trend. We then opened the discussion up to all participants for the remainder of the session.

Nineteen people attended the working group, representing 11 LTER sites and one non-LTER site. The main goal of the working group was to identify usable datasets for testing potential mechanisms that lead to convergent or divergent communities. With the help of the working group participants, 22 datasets were identified for possible data analysis. Additionally, we discussed mechanisms that might be driving the patterns of convergence or divergence we see in communities. Such ideas included propagule availability, the spatial scale of the experiment, a trigger of the change (i.e., drought, herbivory, flood storm, etc.), environmental stress, and stochasticity. We also discussed a couple methodological issues related to the datasets, including the availability of pre-treatment data and examining experiments where treatments have ended or been reversed.

The goal of the working group was to identify datasets to analyze, which we accomplished. We also have a list of participants who would be interested in exploring this idea further. Toward this end, we will be submitting a proposal to the LNO for future working group meetings to discuss this issue.