## Working group report

Long-term population dynamics of exotic species: a cross-site multi-species investigation

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*Summary:* Between the morning and afternoon session, we had 32 participants attend the working group. In the morning session, the organizer gave a talk summarizing some early analyses of a cross-site database compiled in the spring. The initial analysis focused on clustering time series of species abundance for 17 non-native species, in order to estimate the relative frequencies of lags, crashes, cycles, stability, or irregularity in population dynamics. Then, the group discussed some of the challenges that required solutions in order to make the initial analysis more robust and to use the dataset to answer additional questions. We split into breakout groups charged with discussing solutions to those problems. The breakout groups focused on: 1) identifying native species within LTER data that could be appropriately compared to non-native species, and discussing approaches for making this comparison; 2) identifying additional sources of data within and beyond LTER, and discussing new analysis techniques; and 3) discussing the challenges associated with merging LTER’s extensive terrestrial vegetation data into our dataset, and brainstorming potential solutions. In the afternoon session, we reconvened into the same breakout groups, with several new participants to bring up to speed. Later, each breakout group gave a brief summary of their discussion to the entire group. Significant contributions were made in each group, helping us move toward a bigger and better dataset and some concrete ideas for publications. Most participants were very interested in the topic, with about 67% of participants indicating an interest in remaining involved with the group in a follow-up working group and manuscript preparation.

*Outcome/Future plans:* Given the interest and engagement of our participants, we are applying for funding for a 2013 working group to follow up on the discussions we had at ASM. If funded, we will fully assemble datasets prior to our meeting, and use the meeting to conduct analyses and begin writing at least 2 manuscripts, and identify additional paper ideas in which our dataset could be utilized.