**Final Report**

**Invertebrate Impacts on Ecosystem Services under Climate Change: A Synthesis Using Insights from the LTER Network**

April 2, 2010 – April 5, 2010

Harvard Forest

# Workshop Leaders:

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# Workshop Participants: Chuan-Kai Ho, Anthony Joern, John Kominoski, Angela Laws, Scott Newbold, Sheena Parsons, Shannon Pelini, Chelse Prather, Emily Rivest, Israel Del Toro, and Megan Woltz

**Workshop Summary:**

 This follow-up workshop was held at Harvard Forest from April 2 – April 5, following our 2009 ASM Working Group: “Invertebrate impacts to ecosystem services under climate change”. Ten of the 11 participants are early career ecologists- either post-docs or graduate students.

Invertebrates are important components of most ecosystems, filling a variety of niches. As such, invertebrates should play crucial roles in structuring ecosystem services in many systems. However, the role of invertebrates in providing ecosystem services is often ignored, and comprehensive reviews are surprisingly lacking. Furthermore, because insects are highly sensitive to abiotic conditions, the effects of insects on ecosystem services are likely to vary with climate change. Our goal was to prepare a manuscript highlighting the importance of invertebrates to ecosystem services and the likely effects of climate change on invertebrate control of ecosystem services

**Products:**

*Manuscripts:*

Chelse M. Prather, Shannon Pelini, Angela Laws, Emily Rivest, Megan Woltz, Christopher P. Bloch, Israel Del Toro, Chuan-Kai Ho, John Kominoski, T. A. Scott Newbold, Sheena Parsons, A. Joern (*In Press*). Invertebrates, ecosystem services and climate change. Biological Reviews. (Published online Dec. 2012.

*Poster Presentations:*

Chelse M. Prather, Angela Laws, and Shannon Pelini (2012). The little things that run the world revisited: Invertebrates, ecosystem services, and climate change. LTER All Scientists Meeting. Estes Park, CO.