Global Change and Sustainability Center
Fall Seminar Series

“It's all connected: Linking above- and below-ground ecosystem responses to global change”

Sasha Reed
U.S. Geological Survey Research Ecologist

Tuesday, October 23, 2012
4:00 to 5:00 p.m.
FASB 295
Abstract

Understanding how terrestrial ecosystems will respond to global changes - such as increased nutrient deposition and climate change - has many implications for picturing our future world. This talk will focus on considering how such changes could concurrently affect different aspects of ecosystems (for example, plant growth, belowground biogeochemical cycling, and plant and soil community composition). I will focus on (1) linking nutrient limitation and nutrient deposition effects on above- and belowground carbon cycling across a 4 million year soil age gradient in Hawai‘i and (2) investigating climate change effects on plant and soil community structure and function on the Colorado Plateau. Using these datasets, we will consider how ecosystem responses to these perturbations could feedback to affect the pace and direction of future global change.

Bio
Sasha Reed is a research ecologist with the U.S. Geological Survey and is part of the Canyonlands Field Station in Moab, UT. Sasha received her Ph.D. from the University of Colorado, Boulder in 2008 and her research interests are centered within the fields of biogeochemistry and ecosystem ecology. Currently, Sasha has research studies in Utah, Arizona, New Mexico, Hawai‘i, Bolivia, and Costa Rica. While the study sites and methods Sasha uses are diverse, with each of her projects she strives to determine the dynamic controls over fundamental ecosystem processes. Sasha was recently honored with the Presidential Early Career Award for Scientists and Engineers (PECASE) giving her the opportunity to meet President Obama.