## Doctoral Scholarly Seminar

## Unraveling a Complex Web — What We Know About Spiders and Disturbance

## Sarah Jane Rose

PhD Candidate Ecological Restoration



WEDNESDAY

APRIL 27, 2016

11:00 A.M.

333 KOTTMAN HALL to

117A WILLIAMS HALL

senr.osu.edu

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information: go.osu.edu/cfaesdiversity.

David Wise, a renowned ecologist that studies food-web complexity, wrote that "if the terrestrial world is a stage, then any predator as abundant and ubiquitous as the



spider must be a major character in the ensuing ecological and evolutionary dramas." Spiders are a diverse group with multifaceted methods of prey capture, each that can serve as an indicator to the habitat in which they reside. Spiders are abundant in most ecosystems, and are known to be pioneer colonizers in areas that have been recently altered or disturbed. They are sensitive and respond quickly to environmental conditions, making them a good choice as bioindicators.

Restoration ecologists need an understanding of natural systems to assist them to conceive, formulate, and evaluate their efforts. In particular, ecosystem restoration efforts that emulate natural disturbance processes, and their legacies, are more successful. Recently it has been noted that evaluating just the plant community (or one target animal) does not provide a holistic view of the impacts of disturbance on natural systems, and thus leaves a void in our understanding and ability to evaluate restoration efforts. Spiders can assist in providing insights and increase our understanding of ecosystems. In this seminar I will review the current knowledge on how spider communities change following both natural and anthropogenic disturbance, and how this information can be used to help improve ecosystem restoration efforts.

