



Biology Seminar Series

Friday, Sep 12, 2025

(12:00 - 1:00 pm) Gilmer 390

David Hembry, Ph.D.

Assistant Professor, James Madison University

Macroevolution and persistence of insect-plant mutualisms



We live in a biosphere pervaded by mutualisms, although theory suggests that mutualisms should be vulnerable to both breakdown and species loss. These problems may be especially acute for highly specialized mutualisms. Here I use both phylogenetic comparative methods and species interaction networks to examine the macroevolutionary persistence of a specialized brood pollination mutualism between leafy plants (Phyllanthaceae) and leafy moths (Lepidoptera: Gracillariidae: Epicephala), which are both pollinators and seed predators of their host plants.

Seminar Hosts:

Laura Galloway, PhD and Katja Kasimatis, PhD