

Entomology in Antarctica: Adaptations facilitating survival on Earth's coldest continent

Nicholas M. Teets

University of Kentucky, USA

Insects are the most diverse and abundant land animals on Earth, but Antarctica is the exception to that rule. The extreme environmental conditions and short growing seasons make life challenging for ectotherms, and only one insect, the midge *Belgica antarctica*, is endemic to Antarctica. Our group has investigated adaptations in this species from the molecular to ecological scale, with the goal of identifying key processes that facilitate survival in extreme environments. In this talk, I will discuss how *B. antarctica* copes with multiple stressors through rapid cross-tolerance, and I will present recent work on physiological responses to fine-scale environmental heterogeneity and winter warming.



Wednesday, August 17th, 14.00 Zoophysiology Seminar Room (1131-127)