

Population dynamics through broken windows:

New approaches to understanding trajectories in insect dynamics in the Anthropocene

Science and Mathematics
Colloquium Series

Wed., Oct. 21, 3 p.m.

Zoom link: <https://asu.zoom.us/j/99112840824>

Understanding global phenomena is inherently complicated, and often lead to scientific controversy. A recent example is the ongoing debate about global insect decline: several high profile reviews have reduced vast, complicated literature to simplified patterns, quickly followed by other scientists pointing out flaws and nuances that render the latter's claims untrue or unsupported.

The reality is, they're all right (or all wrong?): while we are undoubtedly in a time of unprecedented biodiversity loss, actual patterns of insect species loss driven by anthropogenic change are idiosyncratic, and often data and analytical tools are collected and applied at inappropriate scales to capture meaningful patterns. In this talk, I will examine some of the approaches that have been taken to understanding this phenomenon, and explore some ways forward and new tools for understanding change and trajectory in populations.

Questions? Contact Steven.Saul@asu.edu



Christie Bahlai

Assistant Professor of
Computational Ecology
Kent State University

Christie Bahlai specializes in population ecology of insects in human-managed ecosystems. With her students, her lab examines the intersection of population ecology, and information and data science, including examining how patterns vary when populations are captured using classical and "high tech" methodologies, large scale data integration from disparate sources and scales, and developing new tools for analyzing spatio-temporal data

Bahlai is also an associate scientist of the Kellogg Biological Station Longterm Ecological Research Site, where she did her postdoc and also spent a year as a Mozilla Fellow. She completed a PhD in environmental biology and a BSc in physics at the University of Guelph. She currently resides in a suburban home office in Silver Lake, Ohio.

Faculty and practitioners discuss their current research and field projects in the Science and Mathematics Colloquium Series, held throughout the academic year at ASU's Polytechnic campus. All seminars are free and open to the public.