We have two PhD positions available to start January 2015 or September 2015 in the area of Experimental Population Ecology. One position will emphasize experimental-based approaches at Queen's University, and the other will emphasize mathematical biology-based approaches at Penn State University. The overall project is an international collaboration between Dr. Nelson (Queen's University, Canada), Dr. Bjornstad (Penn State, USA), Dr. Tobin (USDA, USA) and Dr. Yamanaka (NIAES, Japan) looking at the role that temperature plays in generating insect outbreak cycles. Using the tea tortrix moth as a model experimental organism, the project scales from individual-scale life-history to population-scale dynamics to study how temperature generates outbreak cycles. As such, it offers students the opportunity to study a fundamental question in the context of an applied problem.

Students in both projects will collaborate regularly to foster the interdisciplinary aspect of project.

The project is funded by the National Science Foundation (USA). Applicants for this position should have a strong academic record and demonstrated ability for independent research. We encourage applicants with a background in either mathematics or experimental biology. Please send your CV, a copy of academic transcripts and a cover letter to Bill Nelson (nelsonw@queensu.ca) and Ottar Bjornstad (onb1@psu.edu). Queen's University and Penn State are research intensive institutions with a strong graduate programs in Ecology & Evolution and Mathematical Biology. Plus, the atmosphere at both institutes is collegial, and a heck of a lot of fun!