SALAMANDER CANNIBALISM



Photo 1. Paedomorphic adult tiger salamanders (*Ambystoma tigrinum nebulosum*) in a subalpine pond in the Rocky Mountains. (Photo credit: Howard Whiteman)

Time series data (1989–2009) reveal decade-long fluctuations in the population size of tiger salamanders (*Ambystoma tigrinum nebulosum*) in remote subalpine ponds in Colorado that are protected by The Nature Conservancy and Rocky Mountain Biological Laboratory. Monitoring data also reveal a negative correlation between the number of paedomorphic adults in the population and young-of-the-year (YOY) survival. Experiments indicate that cannibalism by paedomorphs can modulate YOY recruitment, suggesting fluctuations are largely driven by intrinsic rather than extrinsic (climate, couple biotic interactions) factors. The study emphasizes the importance of combining long-term monitoring with short-term experiments for understanding the causes of population fluctuations.



Photo 2. A subalpine pond near the Rocky Mountain Biological laboratory in central Colorado that shelters the tiger salamanders. (Photo credit: Scott Wissinger)

These photographs illustrate the article "Consumptive and nonconsumptive effects of cannibalism in fluctuating age-structured populations , by Scott A. Wissinger, Howard H. Whiteman, Mathieu Denoël, Miranda L. Mumford, and Catherine B. Aubee, tentatively scheduled to appear in *Ecology* 91(2), February 2010.