

New Graduate Seminar Fall 2018

The Energy and Resources Group

Disturbance and resilience in terrestrial ecosystems exposed to climate change

Professor Lara Kueppers



ENERES 290 (32555) / Fridays 1 – 3 pm / 323 Barrows Hall

Natural ecosystem disturbances such as fire, insect outbreaks, drought and hurricanes are expected to change in frequency, intensity or duration with climate change. Shifts in disturbance regimes, or compounding disturbances, are likely to influence ecosystem structure and function at local to regional scales.

This course will review what is known about projected changes in drivers of major disturbance types, post-disturbance recovery trajectories, and how these are and should be represented in vegetation models used to understand and project regional- to global-scale vegetation change.

We will consider current theory related to disturbance and resilience in ecological systems, as well as interactions and feedbacks between physical and biological processes, and develop case studies from US ecosystems, with student interests influencing exact topical emphasis.