BayCEER Kolloquium

Lectures in Ecology and Environmental Research

WS 2016/17

UNIVERSITÄT BAYREUTH

Donnerstag/Thursday
1.12.2016
12:00 in H6, GEO

Dr. Peter Wilfahrt

Disturbance Ecology, BayCEER,
University of Bayreuth

Initial plant diversity, soil resource supply, and enemy access drive different ecological tradeoffs during old-field succession

Community succession is the process of species turning over through time following a disturbance. The time since disturbance influences which assembly processes are strongest in determining the current composition of communities. Examining the functional identity of species across environments which are heterogeneous in space or time during succession can reveal the multiple processes driving community dynamics. Specifically, extant plant communities following disturbance may alter colonization dynamics indicated by newly arrived species' seed mass; soil resource supply may alter competition outcomes by selecting for species with higher height potential as light becomes an important limiting resource; and pressure from herbivores and pathogens may alter competition outcomes by selecting for species with better defended tissue. I examine these co-occurring processes in an experimental old field across a four-year sequence where I expect dominant processes to differ. I manipulated initial plant diversity following artificial disturbance, soil resource supply via nutrient addition, and enemy access via pesticide spraying. Results are shown and discussed in this talk.

Bayreuth Center of Ecology and Environmental Research

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The lectures are an inter-disciplinary platform for students, junior and senior scientists. Abstracts and further information: www.bayceer.uni-bayreuth.de/kolloquium/