

SEMINAR SERIES ENVIRONMENT & BIODIVERSITY

Umwelt & Biodiversität

Guest Lecture

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Host: Assoz. Prof. Dr. Jana Petermann

The heartbeat of the forest: ecological drivers and consequences of mast-seeding

In temperate forests, tree populations tend to show highly synchronized variation in annual seed production, so-called mast-seeding. The resulting bumper crops or years of crop failure, in turn, determine population dynamics of seed predators and dispersers, their predators, and parasites. This hearbeat of the forest even drives tick densities and the rate of zoonotic disease transmission to humans. In this talk, I will describe our search for the internal (resource dynamics, size) and external (weather, competition) drivers of seed production in trees and what we have learned about the effects of masting on seed fate and recruitment in old-growth forests. Finally, I will describe the ongoing breakdown in reproductive synchrony of beech and oaks, and how we try to use forecasting and other tools to help practitioners to use the forest's heartbeat to their advantage.

Friday, November 29, 2 PM NLW-Faculty, Room C-3.006, 3rd floor



