

# Research Unit Forest Dynamics - colloquium

**Date:** 08.04.2025  
**Time:** 10:30  
**Room:** Engler-Saal  
**Duration:** 25 minutes  
**Author:** Pascal Schneider, RG Ecosystem Ecology  
**Chairs:** Kerstin Treydte, Yann Vitasse

**Title:** What if the very conditions that fuel forest growth are also accelerating their decline?

## Abstract:

Across France, tree mortality is rising at an alarming rate, and our research uncovers an unexpected culprit - warm, wet springs. Analyzing over 500'000 trees across 52 species, we explore how seemingly favorable conditions may trigger excessive canopy growth, leaving trees vulnerable to hydraulic failure when summer droughts strike. Using explainable machine learning, we disentangle how climate variability, not just extreme droughts, is reshaping forest resilience. Could climate change be setting trees up for failure before stress even begins? Join me to explore this paradox and its implications for the future of Europe's forest