



2 PhD Students in Ecophysiology & Tree Ecology

100% / spring 2022

The Physiological Plant Ecology group of the University of Basel investigates the ecophysiological processes in plants that determine the fluxes of water, nitrogen, and carbon in natural and agricultural ecosystems. The goals of our research are to understand how plants operate in the context of their environment and to reveal how plants shape the functioning of terrestrial ecosystems. The open positions are within the SNF project FORDROUGHT, where we seek to understand the drought vulnerability and acclimation potential of temperate European tree species. The project is situated at the Swiss Canopy Crane II research site, where a large-scale and long-term throughfall manipulation experiment is being installed <https://ppe.duw.unibas.ch/en/sccii>.

Your position

The key objective of the advertised PhD projects is to understand the physiological, anatomical and morphological responses of mature trees to experimentally induced water limitation. Your tasks will be to assess in the field how key ecophysiological processes (e.g. stomatal conductance, photosynthesis, water potential, osmotic adjustment, water uptake depth), anatomical traits (e.g. vessel diameter, cell size), as well as morphological characteristics (e.g. leaf area, leaf size, rooting depth) respond to the experimental treatments. You will further use state-of-the-art statistical tools and models to analyze these data to understand the potential of the different tree species to resist against or acclimate to changes in hydroclimate.

Your profile

We are looking for dynamic, reliable, and motivated students with M.Sc./Diploma in biology, ecology, forestry, or related disciplines. Strong interest in process-oriented research in plant physiology and plant ecology and hands-on experience with ecophysiological instruments and field work are beneficial. You need to feel comfortable to work in the gondola of the Swiss Canopy Crane II, 35 m above the ground. A valid driver license is required. Teamwork within the group and project partners requires advanced spoken and written English language skills.

We offer you

The research will be carried out within a 4-year project starting in the spring of 2022. We offer an interesting position in an international, interdisciplinary research environment at the University of Basel. Salary and social benefits are provided according to University of Basel rules.

Application / Contact

We accept online applications only, use the link below to access the online application form. Please submit a letter of motivation, a CV, a documentation of academic degree and contact information of three referees. Application deadline is April 10th 2022. Further information can be obtained from Prof. Dr. Ansgar Kahmen (ansgar.kahmen@unibas.ch).