We will perform GHG measurements with chambers and eddy-covariance, in combination with water stable isotopes, to partition evapotranspiration and determine plant water uptake.

You will join a team of researchers at the University of Helsinki and the Finnish Meteorological Institute. Applicants should be highly motivated and comfortable with working long field days. Basic knowledge of plant physiology and stable isotope research is an asset.

The start is flexible, the core time is June – August 2026. The working place is Helsinki, Finland. Field trips will take place in Southern Finland. A small salary will be paid.

Interested? Just contact me: angelika.kuebert@helsinki.fi

Project 1

Assessing the impact of tree transpiration on peatland restoration in Finland

The successful restoration of drained peatlands strongly depends on the water table after rewetting. The water table of peatlands is primarily driven by evapotranspiration (ET). Tree transpiration largely contributes to ET in drained peatland forests. However, it remains unclear how trees affect the water table after rewetting. Here, we monitor tree transpiration at a peatland before and after restoration. We assess how restoration changes ET and tree transpiration and how this affects the peatland hydrology.

Before and after harvesting and rewetting

Project 2

Boreal peatlands under stress: assessing plant water-carbon dynamics during drought and recovery

Peatlands are important global carbon sinks that reduce human-made climate change. Increasing drought in the boreal zone, however, threatens peatlands. Droughts harm plant productivity and can trigger large carbon emissions. Little is known about how peatland plants respond to drought and how their water use drives peatland carbon uptake. We will experimentally study the impact of drought on two typical peatland types, a bog and a drained forest, located in Finland. Our findings will help us to revise the role of peatland plants in land surface models to better predict peatland carbon emissions in a warmer and drier climate. Our results will provide valuable information for policymakers to manage peatlands sustainably.