



## **Vegetation feedbacks on surface water availability in bogs**

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In *Sphagnum* dominated vegetation the *Sphagnum* layer is responsible for a large part of the evapotranspiration and carbon assimilation. Both processes are keyed to the water availability at the upper 1-5 cm of the *Sphagnum* surface. As *Sphagnum* lacks roots, this water availability is mainly a function of physical processes determining the balance between water losses and water gains, which in turn are affected by species characteristics and vegetation structure. In this presentation we will combine results of a number of experiments to give a short overview of potential feedbacks between vegetation, soil physical structure and its effects on surface water availability. We will pay attention to *Sphagnum* species, mixing ratio, patch size and ongoing research involving the effects of surrounding vascular vegetation on capitulum water content and evapotranspiration.