Graduate student position in forest-drought interactions at the University of New Hampshire

We are looking for a highly qualified and motivated graduate student to join our research team in the Ecohydrology Lab at the University of New Hampshire starting in Fall 2019. The student would be expected to conduct their PhD or MSc research related to an ongoing research project focused on understanding climate change impacts (especially drought) on northeastern forests and tree species, including assessing how different species vary in their resistance, resilience, and recovery to drought and identifying environmental and physiological thresholds of drought response. The student would have an opportunity to collaborate on two established long-term throughfall exclusion experiments, one located in a mixed white pine-red oak forest in Durham, NH, and the second in a red maple-beech-birch forest at the Hubbard Brook Experimental Forest in Woodstock, NH.

Although the student’s thesis or dissertation should relate broadly to the topic of drought, there is sufficient flexibility within the project to pursue a range of different specific research directions. Topics identified as particular relevant by the research team include: (1) assessing the role of non-structural carbohydrates in mediating the response of different species to drought, (2) quantifying and comparing the hydraulic traits and functions related to adaptive strategies for surviving soil moisture stress among species, (3) examining the environmental and physiological controls on species’ carbon and water fluxes, including threshold responses and legacy effects that may provide insight into long-term resistance, resilience, and recovery to drought. Two years of funding are available to support a Teaching Assistantship, and we anticipate securing additional funding for continued support beyond two years, as needed.

The ideal candidate will have a BS or MSc degree in ecosystem ecology, plant ecophysiology, ecohydrology, forest biology, or a related field. Additionally, extensive field and/or lab experience, skills working with ecological and plant ecophysiological techniques, and strong data analysis and writing skills are desirable. Interested candidates should submit their CV, letter of interest, and the names of three references to Dr. Heidi Asbjornsen via email (heidi.asbjornsen@unh.edu). Review of applications will begin on February 15 and continue until the position is filled.