

Postdoctoral associate position in cloud forest ecohydrology, ecosystem services, and coupled natural-human systems at the University of New Hampshire

A postdoctoral associate position is available with a large interdisciplinary research project that will examine the ecohydrological and socioeconomic impacts, interactions, and feedbacks associated with Mexico's Payments for Hydrological Services program. The primary focus of this position will be to understand how land use change influences stand water balance in a cloud forest zone in central Veracruz, including shade coffee plantations varying in management intensity and cloud forest secondary regeneration of different ages. There will also be substantial opportunity for the postdoctoral associate to explore his/her own specific research interests within this larger project. Additionally, s/he will work closely with other members of the research team to integrate these ecohydrological field measurements within a modeling framework to conduct watershed scale assessments of potential consequences of future land use change scenarios on hydrological services, and to assess trade-offs between different ecosystem services, particularly carbon sequestration and biodiversity. Fieldwork will be conducted in the Coatepec-Xalapa region of Veracruz, Mexico, while data analysis, writing, and project coordination activities will be conducted at the University of New Hampshire in Durham, NH. The postdoctoral associate will be expected to submit manuscripts to peer-reviewed journals, to present results at national and international scientific meetings, and to collaborate with other project researchers on interdisciplinary publications. The position will be based in the lab of Dr. Heidi Asbjornsen at UNH, and will involve close collaboration with Dr. Russ Congalton (UNH), Dr. Randy Kolka (USDA Forest Service Northern Research Station), and Dr. Friso Holwerda (National Autonomous University of Mexico). There will also be opportunities to collaborate with other scientists working on various aspects of the project, including watershed hydrology, modeling, biodiversity, carbon dynamics, and spatial analysis of landscape change. The project is funded by the National Science Foundation's Coupled Natural-Human Systems program.

Minimum qualifications include a Ph.D. degree in plant ecophysiology, ecohydrology, or a related field, with demonstrated expertise with one or more of the following areas: sap flow techniques, throughfall measurements, and/or hydrometeorology. Candidates will require a strong analytical background, an ability to manage large data sets and to conduct and supervise fieldwork, and strong GIS skills (ArcGIS v 10). Additionally, the prospective candidate should have demonstrated strong work habits and communication skills, an ability to work independently as well as within an interdisciplinary research group, and success with producing publications based on individual research. Preferred qualifications include experience with integrating plant ecophysiological and hydrological data to examine ecohydrological implications of land use change, experience evaluating ecosystem carbon storage and/or biodiversity, and strong Spanish language skills.

Interested candidates should submit a curriculum vitae, statement of interest, and names of three references to Heidi Asbjornsen, heidi.asbjornsen@unh.edu. Review of applications will begin on May 1, 2014, and will continue until the position is filled. The anticipated start date is October 2014, although some flexibility is available. The initial contract is for one year, with the

possibility of continuation for up to three years. The salary is commensurate with qualifications. The University of New Hampshire is an equal opportunity/Affirmative Action/equal access employer.