Yale Postdoctoral Associate Opportunity: Management effects on carbon storage in eastern U.S. temperate forests

Policy makers and land stewards are evaluating US temperate forested ecosystems for their potential contributions towards natural climate solutions. However, the carbon mitigation potential of these forests is the product of multiple interacting factors, including past land use, stand dynamics, invasive species, changing climate, and the fate of harvested forest products. Political debate has often simplified carbon mitigation potential to two alternatives: active management and no management, yet in reality the optimal decision is likely to be strongly context dependent, necessitating that management decisions be matched to local conditions. The postdoctoral associate in this position will synthesize current information on forest management to identify practices that minimize risk of carbon loss and enhance carbon storage in forests and forest products in the region of eastern U.S. forests, with particular emphasis on New England.

The postdoctoral associate will lead this new collaborative project as part of a new Applied Science Synthesis Program housed in The Forest School, within the Yale School of the Environment. The postdoctoral associate will source and synthesize published and unpublished data to quantify the effects of forest management on forest carbon stocks, forest products, and carbon storage at the stand- to regional-scale for eastern temperate forests. Primary responsibilities within this objective include developing a synthetic empirical dataset of management effects on forest carbon storage, quantification of how management influences storage, and collaboration with internal and external partners. We are particularly interested in identifying best management practices that will help to store carbon and ensure forest resilience in light of multiple stressors, such as invasive pests and climate change. Dissemination of the findings is expected through white papers, presentations to external collaborators and other stakeholder groups, and peer-reviewed literature.

The team is committed to structured mentoring activities to prepare the postdoc to succeed in their individual career path, and to provide opportunities to those under-represented in silvicultural, biogeochemical, ecological and data sciences. We value the expertise of researchers whose identities and experiences bring unique and important perspectives to land management decisions, and we aim to provide an inclusive and supportive environment for all research team members. This postdoctoral associate will join a collaborative and supportive research community that includes other postdoctoral associates in the Synthesis Program, faculty and students at The Forest School, and other affiliated programs like the Yale Center for Natural Carbon Capture (https://planetarysolutions.yale.edu/center-natural-carbon-capture). Starting salary for the position is based on years of postdoctoral experience and will follow Yaleâ€™s recommended postdoctoral salary scale (see: https://postdocs.yale.edu/sites/default/files/files/PD_salarymemo%202021.pdf). This position provides full medical benefits, long-term disability, paid family leave, retirement saving accounts, and many other resources (see here: https://postdocs.yale.edu/applicants/yale-benefit-summary), as well as funding for travel to professional conferences and workshops. The desired start date is February 1, 2022, where the initial funding is for 1 year with at least one additional year dependent on satisfactory progress. Interested candidates should have a PhD in a field which provides subject expertise in forest carbon science and silviculture, a desire to conduct applied science, and (preferred) experience in data synthesis.

To apply, send a single PDF that includes a 1-page cover letter explaining research interests and experience, a CV, and listing three potential references. Applications or inquiries should be directed to Dr. Sara Kuebbing (sara.kuebbing@yale.edu) with the subject line Ã¢Â€ÂœTemperate Forest C postdocÃ¢Â€Â•. We will begin review of postdoc applications on December 15, 2021 and consider applications until the position is filled. We anticipate virtual interviews with our research team beginning the week of January 3, 2021 but may reach out sooner.