# 2025 Recruiting Interns, Hubbard Brook and Bartlett Experimental Forests

*Undergraduates seeking research experience in forest ecology are invited to apply for a 10-week expense-paid internship in the White Mountains of New Hampshire.*

**About the project:** MELNHE (Multiple Element Limitation in Northern Hardwood Ecosystems) is the longest-running N by P factorial fertilization study in a temperate forest anywhere in the world. Since 2011, we have been conducting nutrient manipulations in 13 stands in Bartlett Experimental Forest, Hubbard Brook Experimental Forest, and Jeffers Brook. The MELNHE project presents many opportunities for short- and long-term research. More information is available at https://www.esf.edu/melnhe/, including a blog from previous field crews.

**Internship Description:** Interns will be guided in the design of their research projects and will interact closely with graduate students and senior research scientists from SUNY-ESF, Cornell, University of New Hampshire, and Miami University. Interns will gain a wide variety of skills by assisting in all ongoing projects. Interns have the opportunity to present their results at the annual Hubbard Brook Cooperators Meeting in July.

**Possible research topics include:**

Stem mapping: Tree locations can be used to assess competition and to interpret the effects of tree size and species on many of the variables we measure, such as soil respiration, root biomass, and herbaceous plants. Our current MELNHE stem maps need to be updated to include the most recent ingrowth (tagged during tree inventory in 2023). Experience with ArcGIS would be helpful but is not required.

Experimental beech leaf disease treatment and monitoring: This project includes applying treatments to selected beech trees and monitoring their canopy condition. Treatments are centered around testing the ability of phosphite and potassium to mitigate BLD symptoms, either as they arise or after being established.

Measuring soil respiration: Soil respiration in our plots has been increasing steadily since 2012, and these trends are not explained by increasing temperature. If photosynthesis is increasing in response to elevated CO2 but carbon is not stored as biomass and is instead respired off, this is important to global carbon budgets.

Work days typically begin at 8:00 and end at 4:00, but may be shorter or longer depending upon the day's activities. Interns are provided with shared housing near Bartlett Experimental Forest. A stipend of $200 per week is provided for living expenses. Food is prepared communally by the interns and graduate student researchers, and costs for groceries average $6-7 per day. Mileage to and from sites will be covered at the federal mileage reimbursement rate, but initial transportation to NH will not be covered.

**Desired Qualifications:** Ideal applicants will have a strong interest in forest biology, ecology, biogeochemistry, or geospatial analysis. Undergraduate students and recent graduates will be considered. A positive attitude is important and a sense of humor is a plus. Willingness to work and live in a communal setting is critical. Candidates should be able to perform repetitive tasks with attention to detail in a field setting under adverse conditions. Applicants should be flexible in their expectations, but an estimated breakdown of the summer is: 60% fieldwork, 15% lab work, 10% data management, and 15% research proposals and reports of independent projects.

**To Apply:** Please send one pdf file including your statement of interest, resume, and contact information for three references to Erica Albertson and Sara Sternick (Yanai.forestecology.lab@gmail.com). Your statement of interest should include a ranking of the three research topics. We will begin interviewing selected applicants in early March and will continue to accept applications until the position is filled. The field season will begin on June 1 and ends on August 15; let us know if your availability differs from those dates.