Harvard Forest Summer 2020
Research Program in Ecology
Petersham, MA

APPLICATION DEADLINE: February 7, 2020 at 9:00 AM ET

This is a Career and Civic Engagement Center Partner Internship. The selected student will participate in the Beyond Bryn Mawr Summer Internship Program.

A complete application includes 3 steps:
(1) A one-page resume and personal essay through this Handshake listing
(2) The Summer Funding Partners Application Form, and
(3) The Online Harvard Forest Application, which consists of a resume, essay, application form, and names of 2 references*

*note: you will be asked to submit names of references, and these references will be asked to complete a recommendation form. If the recommender cannot complete letter by February 7, references are welcome to upload a document with their contact information. For questions about this, please contact Professor Sydne Record at srecord@brynmawr.edu.

ABOUT THE PROGRAM

The Harvard Forest Summer Research Program in Ecology is an 11-week, immersive research experience that connects students, mentors, and researchers to pursue scientific inquiry in a field station setting.

This paid internship opportunity includes a $6,600 stipend, full room and board, and travel to/from Harvard Forest. Harvard Forest is located in the small town of Petersham, Massachusetts (1.5 hours west of Boston).

“The Future of Harvard Forest: Seedling Demography and CO2 Enrichment Experiment”

Funding for this internship partner is available for the specific project, “The Future of Harvard Forest: Seedling Demography and CO2 Enrichment Experiment” led by Professor Sydne Record of the Biology Department at Bryn Mawr College. To learn more about the project, please visit: https://harvardforest2.fas.harvard.edu/asp/hf/php/reu/reu_project_view.php?id=5074. Students are also welcome to contact Professor Sydne Record with questions about the project before submitting an application.
Over-arching Intellectual Theme
Seedlings are often neglected in forest studies, in part because most seedlings do not survive to become adult trees. However, seedlings have the advantage of being amenable to manipulative experiments, and their recruitment and survival are a key determinant of forest regeneration after disturbances.

The four students involved in this project will gain a familiarity with Northeastern forest species and learn experimental protocols for tree demography, ecophysiological, and biogeochemical studies. Students will also be encouraged to link their findings to theory within the ecological literature. We seek five students to work on three specific sub-projects and expect students to spend some time collaborating within the sub-projects to gain exposure to different methodologies.

General requirements for all overall project:
1. Participate in field studies, including ~8 hours per field day crouching in a forest environment to measure seedlings with biting insects and hot, humid conditions.
2. Hike with scientific gear (30-45 lb. pack) in rough, forested terrain.
3. Willingness to work in a collaborative team of students and mentors.
4. Have or develop a basic understanding of R for graphical and statistical analysis.
5. Think critically about theoretical issues in forest demographics and ecophysiology and link them to field work and data analyses.
6. Ask questions about everything from procedures to theoretical implications of our research.

Students are welcome to contact Assistant Professor of Biology, Sydne Record, to discuss your interest in the program. Professor Record can be reached at srecord@brynmawr.edu or 610-526-5094.

APPLYING TO THE PROGRAM
We encourage applications from students who are enthusiastic about participating in a collaborative, hands-on learning environment. Significant past experience in ecological research is not required, although some projects may have specific requirements (see project descriptions for listed requirements).

ELIGIBILITY

- The Harvard Forest Summer Program is open to undergraduates from all U.S. institutions.
- Both domestic and international students are eligible for this partnership.

Applications are due by Feb. 7, 2020 9:00 AM EST. Late/incomplete applications or recommendation letters will not be accepted. You will be notified by email upon submission of your application and after each recommendation is submitted.
Our holistic view of the program is a 3-legged stool:

- **Research**: Work collaboratively to solve environmental problems using scientific methods. *A day in the woods measuring trees, or a day at the computer analyzing sensor data*

- **Education**: Bridge from student to scientist: build marketable skills, learn how to use and understand data. *Morning workshop on R programming language, afternoon seminar by visiting researcher*

- **Community**: Join scientists at a world-class research hub to expand your network. *Contribute to meal set-up, have dinner with a seminar speaker, attend a festival with fellow students*

See summer highlights on our [student blog](https://harvardforest.fas.harvard.edu/education/reu-apply).

Research mentors from Harvard Forest and collaborating institutions develop summer research projects. A research project is made up of a collaborative research team with multiple students and mentors, all working together to address an overarching research question. During the summer, our main goal is for participants to work within that larger context on their own project, building their skills and independence in the research process.

**For more information, please visit our website at**
[https://harvardforest.fas.harvard.edu/education/reu-apply](https://harvardforest.fas.harvard.edu/education/reu-apply)