

Position: Forest Ecology Research Associate

Duration: Minimum 16-month position with long-term (multi-year) extension based upon performance and funding (see details below). Begins late Fall or Winter 2019

Reports to: Schoodic Institute Director of Science and Education

This a full-time, salaried (exempt) position located with the Schoodic Institute at Acadia National Park in Winter Harbor, Maine.

Application Deadline: November 1, 2019

About Schoodic Institute: [Schoodic Institute at Acadia National Park](#) is a 501(c)3 nonprofit organization. Schoodic Institute is advancing understanding of environmental change, developing conservation solutions, and engaging people in scientific discoveries. The Institute's goal is to be a national leader for research and education that inspires environmental stewardship and fosters bright futures for parks and people. From its Acadia National Park campus in coastal Maine, the Institute engages scientists, educators, students, and the public in addressing complex challenges of a rapidly changing environment. We focus on forest, bird, and marine ecosystems, global change, citizen science, and science communication. Our year-round campus includes classrooms, laboratories, meeting spaces, and a modern 124-seat auditorium surrounded by wild, rugged shorelines and thousands of acres of evergreen forest. Campus infrastructure enables us to convene and host public events, and provides an inspirational setting for education and art programs, workshops, and conferences.

Primary Responsibilities: The Forest Ecology Research Associate will lead a recently funded project, Forest Condition and Management in Eastern US National Park Units. The primary duties are to:

- develop an assessment of the current status of forest regeneration in eastern US parks (Task 1) and
- develop a conceptual model to guide forest management decisions into the future across all parks in the eastern US (Task 2).

The Task 1 assessment will include: (1) a synthesis and comparison of the abundance and composition of forest regeneration among all parks in the study, (2) comparisons between forest canopy and regeneration composition among all parks, and (3) additional analyses as developed by the research associate. Park regeneration status (i.e., forest health) will be compared among parks and to regionally determined regeneration levels that would be seen under "healthy" forest conditions.

The Task 2 conceptual model and resulting management practices will encompass how park managers, regional programs, and local partners can manage the many stressors that parks, and their local communities, are facing that affect forest regeneration and ultimately forest health. Management recommendations will evaluate and describe tools (even if they are novel) potentially available to park managers such as invasive species control, prescribed fire, deer culling, silvicultural treatments, direct planting, fencing, etc. Finally, management practices will

include a discussion of how forest health will change into the future under a range of scenarios (including no management response).

The assessment and models will be based on existing long-term forest health monitoring data for parks from Maine to Virginia. This large dataset includes 39 parks and more than 1400 plots measured every 4 years for up to the past 12 years by the NPS Mid-Atlantic, Northeast Temperate, Eastern Rivers and Mountains, and National Capital Region Inventory and Monitoring Networks.

The research associate will work closely with Schoodic Institute and National Park Service scientists. There is currently 16 months of funding for this project with a verbal commitment from NPS for an additional 8 months (24 months total).

Longer-term employment is available based upon skills, performance, and funding. For example, Schoodic Institute has been awarded funding (beginning in Fiscal Year 2021) to continue and expand vegetation restoration treatments on summit areas in Acadia National Park. This three-year project includes 18 months of research associate salary (6 months/year) and will apply tested techniques to restore vegetation on large areas of Cadillac summit and targeted areas of two additional summits. The project will result in the re-establishment and expansion of native plant communities on summit areas in Acadia and development of techniques that could be applied in other protected areas.

Additional projects may include tree seedling experiments across local and regional climate gradients, leading trainings for conservation professionals, and working with Schoodic Institute bird ecology, marine ecology, and science education and communication staff on interdisciplinary projects.

Preferred Qualifications and Skills

- Ph.D. in forest ecology or related subject area
- Advanced quantitative analysis skills
- Proficiency in the statistical software program R
- Effective writing and presentation skills
- Ability to work independently and as part of a team
- Strong enthusiasm and desire to work at the science-management nexus

Our desired candidate can lead the forest regeneration and vegetation restoration projects and integrate into a long-term full-time position on the science and education team at Schoodic Institute. We are a relatively young science and education institute expanding our reach and impact in the areas of ecosystem science, resource stewardship, and community science. Thus, we are looking for a candidate with strong skills and a passion for connecting science to management and advancing stewardship under changing conditions. An advanced degree in forest ecology or a related field is required – Ph.D. is preferred but a candidate with a master's degree and advanced skills will be given consideration.

Salary and Benefits

Compensation is commensurate with experience and includes health insurance, retirement savings, life insurance, as well as paid vacation and PTO.

Schoodic Institute at Acadia National Park is an Equal Opportunity Employer

Discover more about our science: <https://schoodicinstitute.org/science/>

To apply

Send cover letter and CV to search@schoodicinstitute.org. In the email subject line, please indicate the position to which you are applying (Forest Ecology Research Associate).