



Friends of Acadia 2019 Stream Monitoring Intern
Bar Harbor, Maine
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Friends of Acadia is accepting applications for the 2019 Stream Monitoring Intern. Since 2016, the National Park Service, College of the Atlantic, the Maine Natural History Observatory, and Friends of Acadia have partnered to monitor stream health at 7 locations inside and bordering Acadia National Park and to map the geomorphology within selected streams. This partnership is part of the Wild Acadia initiative, an array of programs to restore ecological integrity of the park's natural resources. This internship will help the park and partners build a long-term dataset that will serve as the foundation of future research and educational projects and add to the understanding of how Acadia's streams and habitats respond to climate change or upstream infrastructure changes. The internship will be based out of College of the Atlantic in Bar Harbor, ME.

Duties

1. Collect regular field-based measurements (dissolved oxygen, pH, temperature, conductivity, turbidity) and discharge measurements according to United States Geological Survey and Northeast Temperate Network standard protocol, which requires wading in the stream along a defined transect. These measurements will be taken opportunistically (attempting to catch high and low flows), but at a minimum of 2x/week during the period of the internship.
2. Conduct water sampling in concert with the National Park Service's monthly sampling events (nutrients and potentially supplemental analyses). Continue sampling for bacteria to identify non-point sources of bacteria at the Cromwell-Kebo Brook watershed and other watersheds on Mount Desert Island (MDI), as needed.
3. Collect and organize hourly precipitation data for available sites on MDI in database.
4. Characterize the stream reaches and location of channel heads using qualitative geomorphic descriptions, bed-load grain size descriptions, GPS mapping, and surveying techniques.
5. Identify priority culvert-replacement projects using GIS and assess these sites in the field for channel characteristics, cross-section and map view patterns, bedforms, and bed materials.
6. Make improvements to remote watershed characterization datasets in GIS (e.g. repair digital elevation data, quantify basin characteristics, such as land-use and subwatershed delineation based off culverts around MDI, to help locate vulnerable road crossings, etc.)
7. Participate in other hydrology projects as they may arise from collaborators listed in this proposal.
8. Prepare data summary and report of findings for use in future presentations and outreach about the Wild Acadia initiative.

9. Write an end-of season evaluation of work experience.

Qualifications: Knowledge of or willingness to learn about Acadia National Park and its streams and watersheds; Familiarity with GIS, stream monitoring field methods, and data management. Excellent oral and written communication skills. Sense of humor. Flexibility to adapt to quickly changing work demands and schedules and ability to be prepared for anything on any given day.

Period of Service: 8 weeks (320 hours maximum); start date is flexible anytime between May 13, 2019 and June 10, 2019. **Days off:** 2 days/week to be arranged. Hours may vary depending on precipitation events but may not exceed 40 hours/week. Weekend work may be needed. **Wages:** \$14.00/hr. **Pay period:** Every two weeks. **Housing:** Not provided. **Work Environment:** Much of the work is performed outdoors and may involve moderate risks or significant discomfort. **Uniforms/Equipment:** Interns are expected to supply their own outdoor gear appropriate for working in streams and wet conditions. **Vehicle:** Applicant must have a valid driver's license and may be expected to use his/her personal vehicle for on-the-job transportation. Friends of Acadia will reimburse for mileage beyond the daily commute.

To Apply: Email cover letter, resume, and references to Stephanie Clement at stephanie@friendsofacadia.org.

Application deadline: March 4, 2019

Call Friends of Acadia at (207) 288-3340 or 1-800-625-0321 with questions. Friends of Acadia is an Equal Opportunity Employer.

Friends of Acadia is an independent nonprofit organization, founded in 1986. Its mission is to preserve, protect, and promote stewardship of the outstanding natural beauty, ecological vitality and distinctive cultural resources of Acadia National Park and the surrounding communities for the inspiration and enjoyment of current and future generations.