Valley Forge National Historical Park
Natural Resource Management

Natural Resource Management Internship
Summer 2020 Announcement

Job Title: Volunteer Student Intern (non-paid), Natural Resource Management (up to 3 positions available)

Deadline for Application: Until position is filled; Interviews and offers expected in early spring (March/April)

Job Description:

Valley Forge National Historical Park (VAFO) is home to over 1,300 species of vascular plants and vertebrates, contains a variety of vegetation communities (e.g. forest, meadows, wetlands), and includes significant water resources (e.g. Schuylkill River, Valley Creek). Hopewell Furnace National Historic Site (HOFU), a smaller national park central to the Hopewell Big Woods, is also managed by VAFO natural resource staff and opportunities to participate in conservation projects at HOFU may also be available. The purpose of this internship is to provide college-level students with a practical experience in natural resource management that affords the opportunity to apply classroom theory through a “hands-on” experience with the National Park Service. At the same time interns will contribute to the collection of data and implementation of projects that benefit park resources and will assist park managers in achieving management goals. Specific internship activities may vary from year to year, depending on park needs and priorities. In 2020, duties will include:

Non-native Species Management (35%). Interns will: (1) Work with park staff to control invasive, non-native plant species within the parks; (2) Map the distribution of high priority invasive plants and treatment areas inside the parks; (3) Work with partners to control non-native, invasive plants on lands outside park boundaries; (4) Remove the non-native, invasive Rusty Crayfish from Valley Creek using nets; (5) Complete data collection, data entry, and implement quality assurance/quality control procedures for conservation projects; (6) Work closely with volunteers and summer high school crews on projects to remove non-native plants and animals; and (7) May work with the NPS-Exotic Plant Management Team. These activities will primarily involve manual control methods (e.g. mowing, hand pulling, cutting) requiring the use of hand tools (mechanized and non-mechanized). Opportunity to learn and participate in the safe application of chemical herbicides may be offered in specialized circumstances and according to regulations.

Independent Project (30%). Interns will work with Natural Resource staff to develop an independent project to be completed during the internship experience. Past projects include assessment of the relative abundance of crayfish species in Valley Creek, assessment of tree seedling regeneration in established vegetation monitoring plots, development of curriculum-based lesson plans, and research related to historical meadow management practices in the park. Individual interests will be considered when developing projects however projects will be selected based upon the needs of the parks. This summer, projects may include general reptile and amphibian surveys, meadow wildflower inventories, bat acoustical surveys, forest restoration evaluation, invasive plant inventory.

Wildlife and Vegetation Management (10%). Interns will: (1) Locate, assess, and repair protective fencing within forests and along riparian buffers; (2) Map the distribution of high priority plant species; (3) Install and maintain fencing to protect rare plant populations; (4) Contribute to the collection of data related to white-tailed deer (e.g. morphology, presence of chronic wasting disease); (5) Maintain tree shelters; (6) Assist NPS and partner scientists with
research being conducted in the parks; and (7) Participate in the maintenance and care of plants in the park greenhouse.

**Trails Management (10%).** Interns may: (1) Work with partners to maintain trails both inside the parks and on nearby partner sites, including clearing, mowing, vine removal, and installation of water management structures such as waterbars.

**Water Resources (5%).** Interns will: (1) Participate in implementation of conservation projects (e.g. streambank stabilization, tree plantings) conducted by members of the Valley Creek Partnership; (2) Assist with the collection of long-term water quality monitoring data; and (3) Participate in river clean-up days and other organized volunteer events.

**Natural Resource Interpretation (5%).** Interns may: (1) Contribute to development of park informational brochures on natural resources; (2) Assist with development and installation of “on-the-spot” messages for park trails; (3) Assist with delivery of a variety of natural resource interpretive programs including Fourth of July picnic; (4) Assist with preparation and presentation of Parks After Dark program series.

**Park Planning (5%).** Interns will to attend and participate in a variety of planning efforts related to natural resources (e.g. Valley Creek Partnership meetings, Valley Creek Streambank Stabilization Plan/EA), participate in meetings with resource professionals, and assist with filing, photocopying, and general office organization (limited).

**Benefits:**
- Dorm-style housing provided if not a local resident. Office is within walking/biking distance of housing.
- Vehicle provided for use during work (private vehicle recommended for personal use if living in park).
- NPS volunteer t-shirt and baseball cap provided.
- Training related to specific activities as well as general park operations and management of the National Park System provided.
- Experience in the National Park Service conducting work that will serve as a foundation for future employment.

**Qualifications:**

**Required:**
- Major in a field related to the biological sciences (e.g. wildlife and fisheries science, biology, forestry, environmental science, etc.) with a minimum GPA of 2.5. Preference juniors and seniors.
- Must possess a valid driver’s license
- Ability to work independently and as part of a team
- Excellent oral and written communication skills
- Applicants must pass a criminal background check which requires fingerprinting prior to start date.

**Preferred:**
- Experience working with Microsoft Office products (e.g. Word, Excel, Powerpoint), Geographic Information Systems (e.g. ArcGIS), and experience with global positioning systems.

Activities will require the ability to hike up to 5-7 miles per day across varied terrain and to operate basic mechanical and electronic equipment (e.g. weed whip, gps unit, etc.) and may include exposure to extreme weather conditions, herbicides, poisonous plants, stinging and biting insects and wild animals.

**Time Commitment:** Full-time, five days per week (generally Tuesday-Saturday), eight hours per day with some flexibility; Start date **Tuesday, May 26, 2020**, End date **Saturday August 15, 2020**
How To Apply: Please submit the following:

- Cover letter indicating the title of the position, how you found out about the position, and whether the internship will contribute toward college credits. **Preference in selection will be given to students who receive college credits for this experience.**
- Resume
- Transcript (official or unofficial)
- Writing sample describing what you hope to gain through this internship and interests as related to an independent project. (No more than 1 page)
- Contact information for two academic or professional references

NOTE: Incomplete applications will not be considered

Park Information: Located approximately 20 miles northwest of center city Philadelphia, Valley Forge is the site of the 1777-1778 winter encampment of General George Washington and the Continental Army. The park receives 1.2 million visitors each year and contains about 3,500 acres of forested rolling hills, tall grass meadows, wetlands, and rough lawns. Recreational and cultural opportunities are abundant, including museums, theaters, concerts, fishing, boating, hiking, etc. For additional information please visit the park website at [http://www.nps.gov/vafo](http://www.nps.gov/vafo) or Valley Forge Convention and Visitors Bureau at [http://www.valleyforge.org/](http://www.valleyforge.org/).

Contact Information: Please mail, email, or fax your complete application packet to:

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Natural Resource Management Staff

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