



Volunteer Position Description for Natural Resources Internship, FY 2009

Supervisors:

John DiGregoria (Range Ecologist): Range Management Program & Native Plant Seed Collection Program

Ellen Hamingson (Restoration Biologist): Habitat Restoration Program

Michael Reichmuth (Fishery Biologist): Giacomini Wetland Restoration/Estuary Fish Monitoring & The National Park Service Inventory and Monitoring Coho and Steelhead Monitoring Program

Location: Point Reyes National Seashore

Project Duration: June - August

Time commitment: 2 months, 40 hours/week (for high school students, minimum 5-8 weeks)

Minimum age: 16 years; must be a current high school or college student

Goals/Outcome of Position:

This internship is an opportunity for current students to work with several programs within the Natural Resource Management Division of Point Reyes National Seashore in an arrangement that would provide the intern with diverse resource management experiences while helping park staff to accomplish important projects. The intern will have the opportunity to work on one or all of the following projects:

Fisheries Management Program: The natural resources intern will assist monitoring activities performed by the Coho and Steelhead Monitoring Program. Coho and Steelhead Monitoring Program is responsible for collecting baseline data on endangered coho salmon (*Oncorhynchus kisutch*) and threatened steelhead trout (*O. mykiss*) in coastal watersheds within Point Reyes National Seashore and Golden Gate National Recreation Area. The baseline data collected by the Coho and Steelhead Monitoring Program will help guide future restoration activities within National Park Service lands. The Natural Resources Internship will be responsible for assisting fisheries monitoring crews in field activities to be performed on and adjacent to National Park Service lands. The natural resources intern is expected to work 8 to 16 hours per week for a period of one month on this project.

Range Management Program: The natural resources intern will also assist with various projects taking place on park rangelands. The Range Management program is responsible for managing the pastoral zone in Point Reyes National Seashore (approximately one-third of the Seashore's land) in a manner that will provide environmental protection and restoration of those lands while permitting ranchers to continue their traditional agricultural operations. The intern will assist with the Native Plant Seed Collection Program, collecting seed from target species to grow or use directly in the revegetation components of range improvement projects. The intern may also assist with mapping range resources, such as fence lines, using a GPS unit. Additionally, the intern may assist with the monitoring of vegetation plots established on park rangelands. The natural resources intern is expected to work 8 to 16 hours per week for a period of two months for the Range Management Program.

Habitat Restoration Program: The natural resources intern will assist the Habitat Restoration program with invasive plant removal and mapping. The restoration program works to control high-priority invasive plant species to protect and restore important plant communities and habitat for rare, threatened, and endangered plant and wildlife species. Point Reyes National Seashore is home to over 900 vascular plant species (16% of California's flora), 49 of them rare (four of which are federally listed) and three of which are found only at Point Reyes. Many rare plants are directly impacted by the invasive plants that can dominate or alter parts of our landscape. The natural resources intern is expected to work 8 to 16 hours per week for a period of two months for the Habitat Restoration Program.

Description of Duties

- Assist park staff in various fisheries monitoring techniques including seining, electrofishing, habitat surveys, and measuring water quality parameters
- Assist park staff in mapping, monitoring, and manually removing invasive non-native plant species
- Assist park staff and AmeriCorps intern in completing work performed data sheets
- Identify target native plant species, determine stage of growth, and collect seed according to protocols
- Utilize GPS unit to collect geospatial data (possible)
- Assist park staff with vegetation monitoring (possible)
- Maintain field gear including waders, seines, and other field equipment used while monitoring

Tools and Equipment to be Used in the Performance of Duties

- Personal protective equipment (e.g., gloves)
- Various monitoring equipment, including, but not limited to waders, nets, seines, stadia rods, measuring boards, sampling quadrats, and weighing scales
- GPS unit, measuring tape, digital camera, binoculars, compass
- Plant identification manuals and hand lens
- Hand tools such as hand picks, pulaskis, handsaws, rakes, loppers, and weed wrenches
- NPS two-way radio
- Government-owned vehicle

Training Provided and/or Required

Training provided on the job.

Knowledge/Skills/Experience Desired

- Interest in learning aquatic and plant ecology
- Interest in native plants, ability (with training) to identify target native and non-native plant species
- Ability to use hand tools safely and effectively
- Ability to work long field days in difficult terrain (including vegetation with a poison oak component) in adverse weather conditions (windy, hot, cold)
- Ability to handle fish and other aquatic animals
- Ability to use technical measuring devices
- Ability to learn use of compass and GPS units
- Interest in and ability to work effectively with diverse volunteers

Special Requirements of the Position

- The intern must complete the "Valid DL Self-Certification Statement" to drive government vehicles.

- The intern must complete the “California Law Enforcement Telecommunications System Statement Form” regarding access to confidential information.
- The intern must provide personal hiking gear, sunscreen, and water bottles.

Benefits to the Intern

- The intern will learn data collection methods.
- The intern will learn fisheries sampling techniques in both freshwater and estuarine conditions and gain an understanding of the diversity of intertidal fish assemblages.
- The intern will observe techniques utilized in wetland restoration.
- The intern will learn native plant/grass identification and restoration techniques.
- The intern will learn invasive plant species ecology and management.
- The intern will gain personal enrichment and experience working in a National Park setting.

Reimbursements and Housing

A meal reimbursement of \$20/day will be provided.

Contact Information and How to Apply

Please send a resume and cover letter via email to Jessica_Luo@partner.nps.gov

Applications will be evaluated on a rolling basis, but must be received no later than April 30th, 2009.

Please indicate in your application whether you would like to work on:

- Fisheries Monitoring
- Rangeland Management / Native Seed Collection
- Habitat Restoration
- Multiple-project internship (1-2 days per week on each of the above projects)

For more information, contact Jessica Luo at 415-464-5132 or by email (listed above).