



# SCIENTISTS IN PARKS Fellows 2021 Project Descriptions



<b>NPS UNIT: GOLDEN GATE NATIONAL RECREATION AREA AND MUIR WOODS NATIONAL MONUMENT</b>	<b>PD #: 2021305</b>
<p><b>Project Title:</b> Monitoring and managing Endangered Forest Species in Muir Woods and surrounding GGNRA parklands</p> <p><b>Primary natural resource discipline:</b> Biological Sciences</p> <p><b>Project keywords:</b> Endangered species, forest ecosystem, northern spotted owl, marbled murrelet, barred owl</p> <p><b>Location:</b> Sausalito, California</p>	
<b>COVID-19 NOTICE</b>	
<p>As the COVID-19 pandemic continues to change and evolve, project timelines and structure remain flexible and it may be necessary to postpone start dates, begin work remotely, or reformulate the project’s description. Should any development in the COVID-19 outbreak impair a project’s timeline or results, the SIP Team will work with the park and project mentors to assess the situation and determine the best course of action at that time.</p>	
<b>PROJECT DESCRIPTION AND WORK PRODUCTS</b>	
<p><b>Position Description:</b> In 2018, MUWO and GOGA initiated several large construction projects under the Redwood Renewal Initiative. Under terms of a Biological Opinion with USFWS for the Redwood Renewal projects, the park must monitor the federally threatened northern spotted owl and inventory for the federally threatened marbled murrelet. An additional requirement was to inventory for barred owls, which are one of the primary threats to the persistence of spotted owls. Primary internship objectives: Train a diverse candidate for a biologist or resource manager position with NPS; Provide support and ultimately lead required monitoring for spotted owls, marbled murrelets, and barred owls; Gain an understanding of California coastal forest ecosystems and protecting endangered species. Duties: Through training and reading documents become familiar with the Biological Opinion for the Redwood Renewal projects, as well as the Section 7 consultation process; Through training and reading protocols, become familiar with monitoring programs for spotted owls, marbled murrelets, and barred owls; Provide support and then lead spotted owl surveys. Manage and enter data; Provide support and then lead both shore-based surveys and acoustic monitoring for marbled murrelets. Manage and enter data; Provide support and then lead barred owl surveys. Manage and enter data; Through training learn how to enter data into databases and map detection locations in ArcGIS; Meet at least weekly with mentor; Attend biweekly GOGA Natural Resource Division meetings; Develop a summary report of work performed, including monitoring conducted, including the previous three years; Develop a presentation for the Natural Resources Division on monitoring conducted, including the previous three years; Help develop project outreach materials, including at least one social media post; Some opportunities will be provided to learn techniques and support other projects including using remote wildlife cameras and coyote radio telemetry; Update resume and learn about federal hiring process. Skills developed through this internship: Learn how to be an NPS professional both in the office and in the field; Learn about Section 7 process with USFWS; Learn about how to monitor endangered birds; Field equipment training: songmeter acoustic monitoring, using GPS and Avenza maps, wildlife cameras, and wildlife telemetry; Report writing and developing outreach materials; Professional development and guidance including updating resume, advice on federal hiring, and networking support.</p> <p>This project will provide an intern a strong basis in wildlife management, endangered species monitoring, and the Section 7 consultation process with USFWS. In 2018, MUWO and GOGA initiated several large construction projects under the Redwood Renewal Initiative. Under terms of a Biological Opinion with USFWS for the Redwood Renewal projects, the park must monitor the federally threatened northern spotted owl and inventory for the federally threatened marbled murrelet. An additional requirement was to inventory for barred owls,</p>	

which are one of the primary threats to the persistence of spotted owls. This internship will provide support for and then lead elements of this required monitoring. The intern will manage data into project databases and ArcGIS maps. The intern will develop a summary report that will be the basis of 2021 reporting to USFWS for the Redwood Renewal project.

This position is offered through the National Park Service's Scientists in Parks Program in partnership with Ecological Society of America.

**Work Products:** Intern will enter and error check all data into a park database. Intern will update project species maps and monitoring locations in ArcGIS. Intern will develop a summary report on monitoring work in relation to the last three years, and will develop a presentation for our Natural Resources Division staff. Intern will support updating project and species outreach materials, and develop at least one social media post. Intern will update resume.

**NATURAL & PHYSICAL WORK ENVIRONMENT**

The Golden Gate National Recreation Area encompasses about 84,000 acres in the San Francisco Bay Area. Most work for this internship will be at the Marin Headlands, Muir Woods, and the Muir Beach Area in Marin County, just north of San Francisco. Office work will be at Fort Cronkhite, by Rodeo Beach, as the Marin Headlands. Parklands encompass a variety of ecosystems ranging from marine and intertidal, to sandy beaches, dunes, coastal scrub, hardwood and conifer forests, among others. Elevations range from sea level to about 2,300 feet. The park has a Mediterranean climate with winters and dry summers. The Pacific Ocean and San Francisco Bay and associated fog moderate temperatures. Work will be about 30% office and 70% field work. Field sites are close in and most can be reached in 15 to 20 minutes. Towns are always close by and San Francisco is about 20 minutes over the Golden Gate Bridge.

**QUALIFICATIONS**

We will provide all training and equipment necessary for this internship, which will likely open it up to a more diverse applicant pool. Seeking a motivated and enthusiastic individual with a passion for wildlife conservation (or really a passion to learn about it!). We are willing to mentor and train the right individual. Ideal candidate will have had exposure to wildlife science, ecology, or environmental science – or least some experience that relates to their passion (e.g. volunteer stewardship work, outdoor recreation, wildlife viewing or birding).

The applicant must be a U.S. citizen or U.S. National between the ages of 18 and 30 years old inclusive, or veterans up to age 35. Prior to starting this position, a government security background clearance will be required.

**VEHICLE AND DRIVER LICENSE REQUIREMENTS**

Applicant must have a valid drivers license and a good driving record.

A personal vehicle is REQUIRED for this position.

**HOUSING**

Park housing is NOT available. The intern will be responsible for finding housing in the nearby area. Due to Covid-19, the park is not letting interns use dormitory spaces. This could change by next spring, but for right now, we cannot commit to having park housing for this position. Marin County and San Francisco is an expensive place to live. There are options for shared housing that are more affordable. There should be numerous opportunities for this.

**INTERNSHIP START/END DATES**

**Start Date:** 5/2/2021

Eleven weeks of the internship will be in the park. A mandatory Professional Development Workshop will be held in Washington, D.C. from August 1 – 5, 2021.