



Latino Heritage Internship Program

LATINO HERITAGE INTERNSHIP PROGRAM

Diversity Internship Program



NPS UNIT: CABRILLO NATIONAL MONUMENT (CABR), RESOURCES MANAGEMENT & SCIENCE DIVISION	PD#: 7
<p>Position Title: Wildlife Biology in the 21st Century: Reptiles, Climate Change, and Natural Resources Management</p> <p>Position Type: LHIP Direct Hire Authority Resource Assistance (DHA-RA)</p> <p>Primary natural resource discipline: Resource Management</p> <p>Location: 1800 Cabrillo Memorial Dr, San Diego, CA 92106</p>	
PROJECT DESCRIPTION	
<p>Position Description: Cabrillo National Monument (CABR) recently completed a program review of its herpetofauna monitoring program, part of the NPS Inventory & Monitoring Division’s “vital signs” program. Herpetofauna, including lizards, snakes, and amphibians, comprise a major part of the wildlife at CABR, which is an ecological island located at the end of the Point Loma Peninsula. 25 years of monitoring data from 16 pitfall arrays were recently organized since data was collected by multiple agencies (USGS and NPS). This rich dataset provides an opportunity for a wildlife biology intern to analyze the data and answer various questions that will help park management maintain biodiversity.</p> <p>These issues include anticipating impacts of a new proposed trail (that will split a large, uninterrupted patch of habitat), understanding how herpetofauna population dynamics may change with climate, and potentially providing more information on how re-introduction of a locally extinct species (coastal horned lizard) could impact the ecosystem.</p> <p>The intern will have some latitude with which management question they hope to answer using the dataset. The intern is expected to spend 65% of their time working on the dataset to produce a brief report for an audience of natural resource managers and the park management team summarizing patterns and trends that may be useful to inform decisions on a new trail or how the park should manage its herpetofauna under climate change . The intern will spend 20% of their time on fieldwork and conducting the actual monitoring to give them an understanding of how the data is generated and limitations and challenges in the field. We anticipate the intern will be able to assist with two sampling periods, each period being five days of fieldwork. Finally, the intern will spend 15% of their time on mentorship, and skills development, including how to communicate their findings to the general public.</p> <p>The park is excited to support an intern who is interested in continuing to build skills in data analysis (R & Excel preferred). No previous experience with wildlife required, only an interest in learning about ecology and natural resources management.</p> <p>This position is offered through the National Park Service's Latino Heritage Internship Program in partnership with Environment for the Americas.</p>	

COVID ACCOMMODATIONS

Yes

LEARNING GOALS

The intern will learn skills in data analysis, understanding factors used to make decisions in natural resources management, how to navigate the natural resources field as an under-represented minority, or URM (including office dynamics and fieldwork safety challenges specific to URM). The intern will also get an introduction to the National Park Service, its mission, and the different divisions and people that work together to support it.

MENTORING

The park biologist/Chief of Resources will mentor the intern on both project oversight and mentorship specific to developing a career in natural resources management and the unique challenges that come with being a URM in the field (e.g., lack of family support, subtle acts of exclusion, fieldwork safety, etc.) The intern will connect with local Latinx researchers for additional mentorship support.

PROJECT RESULTS

The intern will present results of their data analysis to CABR's management team and the Resources Management & Science division. Outside of NPS, the intern will present their findings to the Robert Fisher Lab with USGS and Point Loma Ecological Conservation Area members (Navy, U.S. Coast Guard, City of San Diego, and Department of Veterans' Affairs). The intern will also be invited to make a short presentation at the annual Mediterranean Network Inventory & Monitoring meeting in January 2022, if available. The intern will also be encouraged and supported in preparing a poster on their project that can be presented at a scientific conference hosted by a scientific society or by their home institution.

LEADERSHIP

The intern will primarily be mentored by the biologist/Chief of Resources. Additional help with data analysis or troubleshooting in R or Excel will be supported by the marine biologist, who has several years of experience working with interns on independent projects. The intern will meet regularly with both the biologist and marine biologist to receive feedback and direction as they explore and analyze the dataset. They will be connected with stakeholders, including members of the Point Loma Ecological Conservation Area, which include the Navy, U.S. Coast Guard, City of San Diego, and Department of Veterans' Affairs, to share the results of their findings. The biologist/Chief of Resources will help with presentation preparation and building skills in science communication, including how presentations are adapted depending on the audience.

DHA-RAI OUTCOMES

The intern will produce an approximately 5-page report on a new trail's impact on wildlife, or a trend analysis on the 25 year dataset, or impacts of climate change on the herpetofauna community. The intern will also produce a scientific poster or science communication piece to share the results more broadly outside of NPS and local stakeholders.

NATURAL & PHYSICAL WORK ENVIRONMENT

Physical Work Environment: Cabrillo National Monument sits at the end of the Point Loma Peninsula. Our proximity to the Pacific Ocean and San Diego bay has a major influence on weather in the area. Coastal marine layers can develop at any time, bringing moisture, cooler temperatures, and wind to the park, while the inland regions remain warm and sunny. The office building sits on a cliff overlooking the bay and has a favorable

temperature year-round, except for a few weeks in summer. During this time, portable air condition units are provided in each office to reduce the temperature.

Point Loma is the nearest community to the park. There is a small shopping center six miles down the road with a grocery store, sandwich shop, coffee shop, frozen yogurt, and pharmacy. California's population is ~40% Latinx. A thriving Chicano community called Barrio Logan can be found about 14 miles away in south central San Diego. Latinx communities can be found woven into every neighborhood in San Diego; with colorful murals, events, and delicious food adding greatly to the melting pot of cultures that comprise this city.

Work Environment: Work will be done in an office setting and outdoors in rocky, uneven terrain. Long periods of sitting and standing are to be expected. Most work will be done indoors, analyzing data and preparing reports. When participating in fieldwork, the intern can expect to be working in dense vegetations, on steep inclines with uneven terrain, and in varying weather conditions. Rattlesnakes are the main concern for staff working off trail, and protective shin and foot wear will be provided. The intern must be able to work in all different weather conditions, sit, stand, and walk for extended periods of time, and lift up to 50 lbs. CABR has hosted more than one intern in previous summers.

VEHICLE AND DRIVER LICENSE REQUIREMENTS

A driver's license is not required, but preferred. There is a reliable city bus with a route from Point Loma to Cabrillo. Public transportation can be found throughout San Diego county, though the infrastructure make it so that coming from anywhere outside of the immediate area may take quite a while. While a personal vehicle is not required, it is highly suggested that the intern have one if they choose not to live in the neighborhoods closest to the park.