



MOSAICS IN SCIENCE

Diversity Internship Program

2021 Project Descriptions

NPS UNIT: MOJAVE DESERT INVENTORY & MONITORING NETWORK	PD #: 2021516
<p>Project Title: Science storytelling for ecological monitoring in parks of the Mojave and Great Basin Deserts</p> <p>Position Type: Mosaics PLC</p> <p>Primary natural resource discipline: Biological Sciences</p> <p>Project keywords: Bats, plants, social media, science communication, desert, hydrology</p> <p>Location: Boulder City, Nevada</p>	
COVID-19 NOTICE	
<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>	
PROJECT DESCRIPTION AND WORK PRODUCTS	

Position Description: Have you ever read a story about a science topic that you couldn't put down? This internship focuses on how to sculpt such stories out of research and scientific findings. The Mojave Desert Network Inventory & Monitoring program (MOJN) conducts many exciting and valuable natural resources projects in nine national parks in the Mojave Desert and Great Basin (parks include Joshua Tree NP, Death Valley NP, Great Basin NP, Lake Mead NRA, Parashant NM, Mojave NP, Castle Mountains NM, Manzanar NHS, and Tule Springs Fossil Beds NM). This internship will assist MOJN in conducting three specific long-term monitoring projects- focused on sagebrush, bats, and desert springs- and creating narratives about those projects. These narratives can be shared and explored through a variety of media including written briefs for parks, newsletter articles, social media posts, videos, or other platforms that the intern is interested in. This position has three phases: background reading and learning, collecting data in the field and documenting these efforts, and content creation/writing. First, the intern will read materials that explain the long-term monitoring protocols and talk with protocol leads to support understanding. Then they will assist with implementing those protocols in the field. This field work will require car-camping for 3-8 days at a time in Great Basin National Park and possibly other MOJN parks, usually in primitive conditions. The intern will spend some of their time in the field collecting data and learning about the field methods and the rest of the time creating materials about these monitoring efforts (e.g. photos, videos, writing, drawing). Finally, the intern will create products to share using the materials they created and write about the three MOJN long-term monitoring projects. This position will have the opportunity to work directly with the MOJN ecologist, hydrologist, social media coordinator, and experienced field technicians, all of whom look forward to supporting the intern to learn and develop skills.

This position links two discipline categories as defined in the Program Scope: the "biological sciences" and the "communication and education" disciplines. This internship focuses on using science communication tools and platforms to share knowledge about three long-term ecological monitoring protocols. The natural resources this project will focus on include sagebrush steppe plant communities, bats, and desert springs. Currently at the Mojave Desert Network, we have a strong need to share our work and associated scientific findings with the parks we serve and the public. Our team is looking for fresh ways to interact with the public, and sharing our passion for science and communication with an intern who is looking to further their career. This project provides MOJN with a unique opportunity to share our science broadly by both engaging with an intern and supporting them in their scientific career, and by engaging with the public through the products the intern will create. In addition to communication and education, the data the intern will collect in the field will provide valuable ecological and hydrological data that will help to inform management of natural resources at parks within the Mojave Desert Network.

This position is offered through the National Park Service's Mosaics in Science Internship Program in partnership with Environment for the Americas.

Work Products: This internship position will create at least 3 social media posts (one each for the bat, sagebrush, and hydrology protocols) on Instagram and/or Facebook. The intern will also co-author with their supervisor a resource brief, which is a one to two-page document giving an overview of a long-term monitoring protocol. The intended audience of the brief and social media posts will be non-scientists. If the intern has additional creative ideas for science communication, this internship can be adaptable. Additionally, the intern will assist field crews to collect data in the field; data is one of MOJN's most valuable work products.

NATURAL & PHYSICAL WORK ENVIRONMENT

This position will be based in Boulder City, Nevada which is a small town located 30 miles south of Las Vegas. MOJN office is hosted at Lake Mead NRA. Our team includes 8-12 people, and we frequently work with park staff at Lake Mead. This position will be carried out in the office and in the field. While in the office, general duties will include sitting for extended periods of time, looking at a computer screen, and reading. Additionally, the Technician will assist with vegetation, bat, and hydrology monitoring in the field. MOJN I&M has developed and standardized monitoring protocols to collect scientifically rigorous data on a prioritized set of vital signs that will aid parks in managing their natural resources. General duties include: implementing Integrated Upland vegetation monitoring in sagebrush steppe in Great Basin NP (training will be provided), walking long distances over uneven terrain, hiking with backpacks that weigh 30+ pounds, collecting vegetation data using established procedures, taking GPS points and photos at work sites, conducting quality analysis/quality control (QA/QC) for all data collected, both in the field and in the office, collaborating with MOJN staff in project planning, oversight of field safety and logistics, field protocol and data QA/QC, equipment organization and maintenance. The bat and hydrology field work is dynamic and may be carried out across a variety of MOJN parks including Castle Mountains National Monument, Death Valley National Park, Grand Canyon-Parashant National Monument, Great Basin National Park, Joshua Tree National Park, Lake Mead National Recreation Area, Manzanar National Historic Site, and Mojave National Preserve. This position will require travel and camping during the field season in order collect data, document the data collection process, and allow the intern to fully understand the long-term monitoring MOJN conducts. Camping gear will be provided; this position will “car-camp” at campgrounds or dispersed sites as opposed to backpacking. Work may require long hours including early mornings, and potentially 8-day field hitches followed by 6 days off. Additional opportunities may be provided for the intern to participate in other projects and activities. Candidates for this position must be flexible and adaptable, willing to switch back and forth between projects from week to week. Projects will include bat, vegetation, and hydrology monitoring, sometimes working with MOJN and other seasonal staff. Currently MOJN staff are working remotely due to the pandemic, and the intern will likely work from home while doing office work. We have safety protocols created for the pandemic and update our plans as needed. If for some reason this position must be conducted fully remote due to the pandemic, we will adapt. MOJN is committed to safety and will never require an intern or staff member to do something they feel is unsafe. Relatedly, this position will be living in Boulder City during the hottest months of the year! While most field work will happen in Great Basin NP which is much cooler in the summer, the candidate should be prepared for living in the hot, dry Mojave Desert summer. Considerations include things like making sure the intern’s car has AC, acknowledging that exercise outside is limited to the early mornings and late evenings, and other safety and lifestyle impacts of desert heat.

QUALIFICATIONS

We are seeking an intern who has a strong interest in scientific writing, social media, and science communication. Camping and outdoor experience is preferred but not required; interest and enthusiasm for camping and working outdoors is required. Course work in biology, ecology, or hydrology required.

The applicant must be a U.S. citizen or U.S. permanent legal resident (“green-card-holder”) 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 available and will be provided at no cost to the participant. This position will be based out of Boulder City, Nevada at Lake Mead National Recreation Area (LAKE). Park housing will be provided in LAKE; Boulder Beach if available, or other housing options within the Park within a one-hour drive to our office. While housing is guaranteed, COVID protocols have affected availability. If it is safe as deemed by park safety protocols, the intern may have housemates. Housing includes a full kitchen, bathroom, laundry, living room, and bedroom with furniture and mattress provided.

INTERNSHIP START/END DATES

Start Date: 5/17/2021

End Date: 7/30/2021

Eleven weeks of the internship will be in the park. A mandatory Career and Leadership Workshop will be held in Washington, D.C. from August 1 – 5, 2020.

PLEASE DIRECT ANY QUESTIONS TO ENVIRONMENT FOR THE AMERICAS

Email: mosaics@environmentamericas.org