



GEOSCIENTISTS-IN-THE-PARKS Internship Program

2019 – PROJECT DESCRIPTION FALL/WINTER SEASON

NPS UNIT: GREAT BASIN NATIONAL PARK		PD #: 2019440
<p>Position Title: Cave and Karst Assistant (1) Position Type: GIP Intern Primary natural resource discipline: Multidisciplinary Project keywords: caves, inventory, planning, education, biomonitoring, climate, mapping, GIS Location: Baker, Nevada</p>		
PROJECT DESCRIPTION AND WORK PRODUCTS		
<p>Position Description: The GIP intern will be tasked with updating/completing an inventory of Lehman Caves in Great Basin National Park. Duties will include: completing an inventory of Lehman Caves using previously completed data forms and filling in gaps when necessary, adding inventory data to GIS layer of the cave, and working to update cave maps for the park using Adobe Illustrator. The intern will also undertake the study of 300 cave shields in Lehman Cave, assist with lint and restoration camp, winter bat surveys, Model Cave hydrologic trip, installation of new visitor center cave exhibits, write articles for the resource management newsletter, and other projects as assigned.</p> <p>Lehman Caves is a two-mile long cave with a half-mile long concrete trail through it. Off-trail sections include some climbing and crawling. The cave is heavily decorated with speleothems, so that extreme care must be taken to move through the cave without damaging anything. The most remote parts of the cave take about an hour to travel to, requiring squeezing through tight spots, using cable ladders, and having a spotter so that delicate features are not touched.</p> <p>Lehman Caves is the preeminent destination at Great Basin National Park. The work done by the GIP will help us understand this resource better and help us prepare for a large-scale update of cave infrastructure. We will be better able to protect and preserve Lehman Caves when we have an accurate inventory of what is there.</p> <p>This position is offered through the National Park Service's Geoscientists-in-the-Parks (GIP) Internship Program in partnership with Stewards Individual Placement Program (Stewards) and The Geological Society of America (GSA).</p> <p>Work Products:</p> <ul style="list-style-type: none">• Completed Lehman Caves inventory• GIS layer of Lehman Cave inventory• Updated cave maps for at least five park caves• Data on cave shields• Articles for resource management newsletter		

QUALIFICATIONS

Experience in caves, GIS, Adobe Illustrator, and writing; attention to detail; pursuing a degree in natural sciences, resource management, mathematics, engineering, or related field. Willingness to live in a remote area with limited services.

The applicant must be a U.S. citizen or U.S. permanent legal resident ("green-card-holder") between the ages of 18 and 35 years old. Prior to starting this position a government security background clearance will be required.

VEHICLE/DRIVER LICENSE REQUIREMENTS

Applicant must have a valid driver license and a good driving record. Intern will be driving a park vehicle.

A personal vehicle is REQUIRED for this position. The nearest grocery store is 65 miles away.

If the GIP is required to drive a park vehicle for their position, Stewards will perform a driving records search, and the GIP's ability to drive a park vehicle during work hours will be contingent upon the results. GIPs will have to have had their license for 3 years or be over the age of 21 to be insured as drivers under Stewards insurance policy. Examples of things that will preclude a GIP from driving a park vehicle include: GIP under the age of 21 years old that has been licensed less than three years, DUIs, multiple moving vehicle violations, suspended or revoked license, or three or more accidents (regardless of fault) in the last 3 years. If the driver's search is favorable, Stewards will provide driver's liability insurance while the intern is driving a NPS vehicle for their GIP position. If the GIP is denied coverage by Stewards, they will not be permitted to drive during work hours.

HOUSING

Park housing is available and will be provided at no cost to the participant. Dorm with private room and shared kitchen, living, dining, and bathroom facilities. The GIP will need to bring bedding, towels, and toiletries.

INTERNSHIP START/END DATES

Start Date: 1/13/2020

Number of weeks: 12 weeks

Flexibility of dates: Yes

LIVING ALLOWANCE

12 weeks (\$350/week = \$4,200)

RELOCATION ALLOWANCE

\$250 (mainland only)

AMERICORPS PROGRAM



AmeriCorps is a program that engages individuals in intensive community service work with the goal of "helping others and meeting critical needs in the community". The GIP Program is supported through AmeriCorps by providing a Segal Education Award in addition to the GIP's living stipend and relocation allowance.

Upon successful completion of the GIP position, the GIPs (AmeriCorps members) are eligible for a \$1,612 - \$6,095 pre-tax education award that can be used for paying back student loans or for continuing their education. The amount of the education award is based on the length of the position.

AmeriCorps limits the number of terms an individual can serve to 4 terms. If an applicant has previously completed 4 GIP or other AmeriCorps positions, they will not be eligible to apply for an additional GIP position.

NATURAL & PHYSICAL WORK ENVIRONMENT	
<p>Natural Environment: Great Basin National Park encompasses over 77,000 acres of the South Snake Range, located in east-central Nevada. It is considered high elevation desert. Winter temperatures are generally cold, with snow possible. Snow shoeing and cross-country ski opportunities abound. The park's resource management office is at 5300 feet elevation, while Lehman Cave is at 6800 feet elevation.</p> <p>The nearest grocery store is 65 miles west of the park, in Ely, Nevada, about a one hour drive. The nearest large cities are Salt Lake City, Utah, 234 miles to the northeast, and Las Vegas, Nevada, 291 miles to the southwest. The park is surrounded by land managed by the Bureau of Land Management and private land.</p> <p>Over 41,000 acres of the park consist of karst, a landscape that is capable of supporting caves. Forty caves are currently known.</p> <p>Physical Work Environment: This position will be split approximately 50:50 for office:field time. Field time will primarily be underground in a 50-degree Fahrenheit cave and will require the ability to fit through small spaces. Crawling and belly crawling for up to 30 minutes at a time is required to visit remote areas of the cave, as well as negotiating a 20-foot cable ladder. Much of the footing off-trail is on loose rocks, similar to traveling cross-country above ground on mountain slopes, but with a low ceiling and delicate formations that must be avoided. The caving is considered moderate, and will take place at a pace that is good for all participants and cave conservation. All off trail trips follow a job hazard analysis that includes caving with other people, having appropriate PPE (such as helmets, lights, kneepads, and gloves), and being prepared for any hazards. The park will provide training for work underground.</p>	
MENTORING AND LEARNING GOALS	
<p>Mentoring: The intern will be paired with park staff to learn about cave inventory techniques, GIS, cave conservation, bat survey techniques, and cave mapping. The intern will attend the training for the cave lint and restoration camp. The intern will work closely with the park ecologist on the cave shield study. The intern will also get feedback on the written articles for the resource management newsletter.</p> <p>Learning Goals:</p> <ul style="list-style-type: none"> • Cave inventory process • GIS experience • Lint and cleaning techniques • Setting up a cave scientific study • Drafting cave maps with Adobe Illustrator • Exposure to a variety of cave specialists 	
SUPERVISORS	
<p>Primary Supervisor: Gretchen Baker Ecologist 100 Great Basin National Park Baker, NV 89311 (775) 234-7541 Gretchen_Baker@nps.gov https://www.nps.gov/grba/index.htm</p>	<p>Secondary Supervisor: Ben Roberts Chief of Natural Resources 100 Great Basin National Park Baker, NV 89311 (775) 234-7561 Ben_Roberts@nps.gov https://www.nps.gov/grba/index.htm</p>