



GEOSCIENTISTS-IN-THE-PARKS Internship Program

2019 – PROJECT DESCRIPTION FALL/WINTER SEASON

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| NPS UNIT: CARLSBAD CAVERNS NATIONAL PARK | PD #: 2019407 |
| <p>Position Title: Paleontology Assistant (1) Position Type: GIP Intern Primary natural resource discipline: Geologic resources Project keywords: paleontology, fossils, GIS, GPS, inventory Location: Carlsbad, New Mexico</p> | |
| PROJECT DESCRIPTION AND WORK PRODUCTS | |
| <p>Position Description: The Permian-aged Captian Reef was deposited primarily in shallow inland sea environments. Primary fossil types include marine invertebrates. Extensive karst development has produced over 120 caves, many of which contain Pleistocene vertebrate fossils. The selected applicant will help further park knowledge of these valuable resources by assisting with the development of a paleontological inventory of Carlsbad Caverns National Park.</p> <p>Major responsibilities of the position will include:</p> <ul style="list-style-type: none"> • Literature research to locate additional information on the paleontological resources in the Guadalupe Mountains for the time periods of interest (Permian and Pleistocene). • Documentation of fossil resources collected from the the park that are now in archives and museum collections. May require some travel to these collections. • Re-locate significant paleontological sites within park boundaries; record location and site conditions; document sites through photography and on-site data collection; enter information into computerized databases; and utilize ArcGIS to develop maps of site locations. Fossil collection and preparation will be completed using standard paleontological collection techniques. All collected fossils will be curated into the appropriate museum collections. • Assisting the NPS lead paleontologist in the development of a paleontological inventory of the park. • Developing written reports, presentations, and digital media to assist the NPS in showcasing and preserving the paleontological heritage of Carlsbad Caverns National Park and increasing visitor understanding about the significance of these resources. <p>Other projects may include preparing maps using ArcGIS, assisting visiting researchers, working with other staff and outside organizations, and providing visitor education through interpretive programming related to paleontology at Carlsbad Caverns National Park.</p> <p>This project will assist NPS in showcasing and preserving the paleontological heritage of Carlsbad Caverns National Park and increasing visitor understanding about the significance of these resources.</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).

Work Products: Project goals and materials to be produced will include reports, presentations, maps, and digital resources. Preparation of abstracts and presentations for the Geological Society of America (GSA) annual and/or regional meeting will be encouraged.

QUALIFICATIONS

Applicants should be advanced undergraduate or graduate students whose educational background and career objectives are in paleontology. Applicants must have completed basic undergraduate coursework toward a degree in geology or biology, ideally with emphasis in paleontology. Preference will be given to students having an excellent academic record, a work history, and a demonstrated ambition to pursue paleontology as a career. Experience with graphic design software (Adobe suite), database software, and ArcGIS will be useful. Previous experience in cataloging collections, developing content for outreach programs, photography, and caving is desirable.

- The participant must have the ability to work independently and travel on foot to remote areas using topographic maps and a compass.
- The participant must be able to utilize GPS equipment and digital cameras.
- The participant must be skilled at taking and organizing field notes.
- The participant must be willing to enter caves with small parties and traverse passages requiring walking, stooping, crawling, and climbing. Cave environments at Carlsbad Caverns National Park can be difficult with tight squeezes and long rope pitches.
- The most qualified applicant will have extensive experience caving and be able to demonstrate single rope technique skills to descend and ascend vertical cave passages.
- The selected applicant should be able to work well independently on the surface and in an office setting, but be flexible enough to work well as part of a team.

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. The applicant will be required to drive a government vehicle to locations throughout the park for field work.

A personal vehicle is REQUIRED for this position. A personal vehicle is required for personal errands and for exploring the area independently during time off. Housing is located 35 minutes from the nearest sizable town with a grocery store.

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. Park housing is provided at no cost to the participant. Specifically, the housing will be located near the the Resource Management Office in the Caverns Historic District. The intern will share a furnished single-family apartment, potentially with other park staff members, but will have access to their own private, lockable bedroom. The kitchen equipped with appliances (refrigerator, freezer, oven, stove, microwave), bathroom, and living room will be shared between house occupants. The intern will need to bring kitchen, bathroom, and bed linens. Some dishes and utensils will be available, but the intern may wish to bring additional kitchen items. There are on-site laundry facilities. TV and internet access are not provided. No guests and no pets are allowed in this housing. Groceries and other goods and services are located in Carlsbad NM, a 35 minute drive from housing.

INTERNSHIP START/END DATES

Start Date: 9/15/2019
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

Natural Environment: Carlsbad Caverns National Park is located in the Guadalupe Mountains in southeastern New Mexico. The Guadalupe Mountains are the remnant of a Permian Age reef. Massive limestone and accompanying dolomites and siltstones comprise the outcroppings in which over 120 caves are formed. The park’s caves contain a huge abundance and diversity of speleothems including cave pearls, soda straws, draperies, popcorn, and many rare and unique formations such as subaqueous helictites, rusticles, and outstanding gypsum chandeliers. Genesis by sulfuric acid dissolution differentiates the caves of Carlsbad Caverns NP from most of the other caves in the world.

On the surface, Carlsbad Caverns NP is incised with deep rugged canyons with dramatic karst spires and cliffs. The park’s desert landscape is dominated by sparse shrubs, grass, and cacti providing a home to diverse wildlife including javelina, Barbary sheep, and large colonies of cave swallows and bats. Summers in the park are hot and dry with highs in the low 100’s. The park experiences frequent rain the early fall, with occasional snow and ice in the winter.

From Carlsbad Caverns NP it is a 35 minute drive to Carlsbad, NM, the nearest town with groceries and other goods and services. Carlsbad has a permanent population of 30,000 people with an additional 30,000 people working temporarily in the area. Carlsbad is the base for two National Parks, a National

Forest, two State Parks, and over three million acres of BLM land, all offering a variety of outdoor related activity opportunities.

Physical Work Environment: The intern’s main duty location will be at Carlsbad Caverns National Park, NM. The intern will be provided a desk and computer in the shared natural resource office space. The intern should be prepared to work outdoors (i.e., wear proper warm weather clothing and bring water) in fall and winter weather, which is generally warm, and occasionally cool to cold. Footwear appropriate for hiking should be worn while in the field.

The individual selected for this position should possess the physical ability to hike in relatively steep terrain over long distances. The intern should be prepared to encounter ticks and rattlesnakes. Afternoon thunderstorms can be intense with lightning, hail, and high winds.

MENTORING AND LEARNING GOALS

Mentoring: After arriving at Carlsbad Caverns National Park, the intern will be orientated to the National Park Service, Carlsbad Caverns National Park, park staff, and the park’s resources and challenges. Throughout the internship, the participant will work closely with and be mentored and trained by the park Chief of Resources, among other natural resource staff. The intern will have opportunities to interact with park seasonal and permanent staff during work hours and more casually outside of work hours during occasional organized informal events.

Learning Goals: The participant will have opportunities to learn and put into action methods for documenting and monitoring paleontological resource sites, conducting literature reviews, improving technical writing skills, mapping paleontological cave sites, and condensing scientific content for public understanding.

SUPERVISORS

Primary Supervisor:

Rod Horrocks
Chief of Resources
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Secondary Supervisor:

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