

POSITION DESCRIPTION Summer 2022

NPS UNIT: Mammoth Cave National Park

Position #: 26

Position Title: Cave and Karst Assistant

Position Type: Mosaics PLC

Primary natural resource discipline: Physical Sciences

Position Keywords: Caves, Springs, Fossils, GIS, Physical Science

Location: Mammoth Cave, Kentucky

COVID-19 NOTICE

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.

POSITION DESCRIPTION AND WORK PRODUCTS

Project Description: The primary duty of the internship participant will be to assist the park's Science and Resources Management Division in the field with a variety of projects. The project includes updating and expanding the inventory of caves and karst features in the park, locating and inventory of small karst springs in the park. Documentation will include collecting GPS coordinates, updating park database and photographs. Field work will include back country hiking as well as some caving. The selected person will be locating via GPS unit and map cave sites, spring sites, karst features or paleontological sites. Checking recorded locations to determine if present, recording vital data such as GPS locations, photographs, recording data on field data sheet, and etc. Office work will include combing records for resources that have not been field verified and entering data into park databases and the GIS system.

If the intern is interested, there is also an opportunity to document Mississippian and Pennsylvanian fossil plants in sandstone outcrops and rock shelters on the park. Documentation would be similar to lesser caves and springs, but would also include filling out a paleontological site form for each site.

Other possible opportunities while at the park may include monitoring avian species in the park, trail monitoring, water quality, monitoring sensitive species, archaeological site monitoring, historic site and abandoned well locations, visiting cemeteries, etc.

The individual will work under the supervision of the park's GIS Specialist. Prior to starting this position a government security background clearance will be required to allow the individual to obtain computer access. The work will involve strenuous physical activity, hiking through forest and undergrowth, hot and humid weather. We have two types of venomous snakes as well as several varieties of non-venomous snakes, ticks, yellow jackets and etc. The participant will receive training in safe caving and back-country fieldwork. The majority of the work will be in the field there is little office work involved with this position.

Work Products: The participant will write up a report and power point presentation regarding the research and projects they have worked on during the summer for presentation. This will be presented to the Division Chief and other division/park employees. They will have worked on a variety of inventories collecting data. They will provide information such as photos, GPS locations, fossil collection, and filling out a paleontological site form for each site. Updated information will be put in to the appropriate databases and GIS programs. This newly collected data will be used to assist with the protection and study of the park resources.

NATURAL & PHYSICAL WORK ENVIRONMENT

Field work will be on established surface trails, off trails in forested areas with hilly terrain, along bluffs, rock shelters and along rivers/streams. Outdoor hazards include ticks, poison ivy, stinging insects, snakes, mosquitoes, various wildlife: coyotes and bobcats (rare sightings). Kentucky has a moderate climate, characterized by hot and humid conditions.



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Summers are usually extremely hot, and winters are generally cool.

Work will also be completed inside the main cave system as well as lesser caves not connected to the main cave system. Cave temperatures are around 55°F but can fluctuate from 55°F to below 32°F in areas. Most of the main cave trail is lighted and paved with mainly wide, open passages, but there are some narrow corridors and low ceilings. The caves may be wet and muddy or dry and dusty. To reach cave work sites it may involve traverse of hundreds of stairs and several steep inclines. Kentucky is located in a path several storm systems follow year-round. The park is relatively remote/isolated with spotty cell and WiFi service. However, the housing community is typically social, most interns and seasonal staff coordinate recreational activities with each other. During off season, there may only be 1-2 occupants in housing.

QUALIFICATIONS

Ability to hike through the forest carrying a heavy load, in thick undergrowth, during hot and humid weather. Able to work in caves assessing entrances, may be crawling in small wet muddy passages. The participant will receive training in safe caving, back-country fieldwork, field work in caves and how to carry a heavy load in the field. The majority of the work will be in the field -there is very little office work involved with this position. A valid driver license is required to drive a park vehicle. A park vehicle will be available for field work, but a personal vehicle is recommended for getting to town for supplies and groceries. Housing is within walking distance of the assigned office.

A background in Science or GIS is helpful for this position but not 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 driver's license to drive a government vehicle.

A personal vehicle is recommended for this position.

HOUSING

Park housing is available and will be provided at no cost to the participant. Mammoth Cave National Park has multiple shared housing units. Interns may be placed in either a shared apartment or shared house (2 to 3 housemates). All units are in the headquarters area and within a 5-minute walk to the Science & Resources Management office they will be working out of. The Visitors Center is a 3-minute drive or a 10-15-minute bike ride. Each unit has a full-sized kitchen with all major appliances, dinnerware and cookware. Bedrooms and bathrooms vary per unit and occupancy capacity is dependent on the status of COVID-19 precautions at the time of arrival. Apartments = 1 bedroom with 2 twin beds and 1 bathroom. Houses = 3 private bedrooms with 1 twin bed, 2 shared bathrooms. Each unit has a shared washer and dryer. WiFi is currently not available to all homes, although there are various places on the park to connect to WiFi. Internet connection can be purchased through a local private carrier. Each unit has central heating and air condition system. Verizon Wireless is reliable cellular carriers in most areas at the park, all others are spotty to non-existent. Grocery stores with basic items are between 17 – 30 minutes (5-20 miles) away in local communities (Park City, Brownsville, Cave City, and Glasgow) (35-50 miles) away (Bowling Green and Elizabethtown). Major cities with diverse shopping and recreation options are within (60-75 minutes) Nashville and Louisville.

INTERNSHIP DATES

Start Date: 05/08/2022 End Date: 07/31/2022 Number of Weeks: 12 Flexible Start Date: Yes



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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 - 4, 2022.

LIVING ALLOWANCE

12 weeks (\$600/week=\$7,200)

Partners

This position is offered through the National Park Service's Scientists in Parks (SIP) Program in partnership with various organizations.







PLEASE DIRECT ANY QUESTIONS TO ENVIRONMENT FOR THE AMERICAS

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