

USDA Forest Service Resource Assistant Program

Position. Geology Assistant (Caves and Karst)

Duration. 8 Month Fellowship (32 weeks): Starting June 2023 – February 2024 (dates are

dependent upon the start date)

Location. Washington Office, Minerals and Geology Management – 1617 Cole Boulevard Bld. 17,

Lakewood, Colorado

Reports To. The National Caves and Karst Program Coordinator.

Job Overview

This project seeks a RAP participant to assist with the administration of the caves & karst program and geoscience internships in the USDA Forest Service (FS). Work will involve GIS/LiDAR, research, data management, communication, writing, web content development, and information sharing. The internship will focus on the management and/or assessment of geologic resources, especially cave and karst. The participant will also assist with the management of a national geoscience internship. The goal of the project is to provide support to Forest Service units as they make management decisions regarding caves and karst landscapes. The participant will have the opportunity to work with program leads at the Washington Office – Minerals and Geology Management Office.

Responsibilities and Duties

This is an in-office position and the majority of the work can be done remotely. However, the participant will be required to be in the office one day a week. During the summer months the participant will have the opportunity to join their mentor in the field, as needed

- Assist with Geology/GIS mapping using LiDAR to create digital elevation models (DEM) overlain by a surface model to map potential karst and/or geohazard features in National Forest System lands. In the process, update and refine the processes and procedures document that details how to implement this process, so that other Forests may implement this at their locations
- Assist with creating national guidance for karst vulnerability to support management decisions regarding karst landscapes, related water resources, and issues including employee and public safety, identification and management of unique and sensitive resources, and assessment of hydrologic connectivity
- Develop presentation templates and/or educational activities for educators related to cave and karst science
- Write/update web content for the caves/karst website
- Update caves/karst outreach media (i.e., posters, brochures, educational materials)
- Assist with oral history interviews of caves/karst personnel and partners in the Forest Service
- Participate in conference calls for the planning Cave Week and Bat Week activities



- Assist with the management of a national internship program focusing on geoscience (i.e., participate in calls, assist with webinars, update program materials)
- Other tasks as requested

Qualifications

- Master's and Bachelor's in Geology AND have on their graduate or undergraduate transcripts introductory courses, a minor, or a certificate in GIS
- Master's degree in GIS/Geography OR Physical/Biological Sciences OR Engineering AND Bachelor's in Geology

Experience gained from personal hobbies like speleology, classes, volunteering, internships, and paying jobs will be taken into consideration.

Skills:

- Experience in speleology or caves.
- Proficient with GIS software such as ArcGIS Pro 2.X or ArcMap 10.X
- · Experience using LiDAR or other remote sensing data like SAR
- Experience in illustration and graphic design with a focus on science and caves
- Excellent verbal and written communication skills. English proficiency is needed as well as good skills with grammar, punctuation, syntax, sentence construction, etc. in writing. Technical / nontechnical editing experience is a plus
- An interest in geology, caves, and the natural world and a desire to assist the Forest Service
- Comfortable working in an office but also doing field work and hiking off trail

Minimum Requirements

- Completion of 2 years at an accredited university, an Associate's degree, or higher
- US citizenship or permanent residency. RAs must undergo a government background check if selected
- Participation in US Forest Service Orientation Training scheduled for June 2023