



(Photo courtesy of Dave Bunnell, Under Earth Images)

A speleologist is a scientist who studies caves and the environments in which caves occur. Speleologists come from a diversity of educational backgrounds. My background is hydrogeology and geography.

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### **Important Scientist Characteristics:**

Observational skills, curiosity, and critical thinking are important for my career. Speleologists interact with groundwater under the surface of the Earth and study the topography to understand where groundwater is most vulnerable to contamination in springs, sinkholes, and cave entrances.

### **Example of a simple research question I have tried**

**to answer:** When water disappears underground, where does it flow beneath our feet and our homes, and where does it reappear?

### **Technology or equipment used in research:**

We use non-harmful dyes to trace water to discover where it goes underground, and for springs, how much of a landscape contributes to its flow. We can use optical probes and data loggers to see in real time how much dye flows past a particular point in the water system.

### **: Most Exciting Discovery**

: Hiking out across the landscape  
: and discovering a new cave that  
: goes for kilometers underground  
: is always an amazing experience.  
: Seeing formations made of calcite  
: that no one has ever seen before  
: or discovering a subterranean  
: stream are also really exciting!

### **: When did you know you wanted to be a scientist?**

: When I was in  
: grade school, I was fascinated  
: by rocks along the shore of Lake  
: Michigan. I wanted to learn more  
: about how the rock arrived there,  
: and what they consisted of—  
: some were red, others grey. Later  
: on, I learned that I could be a  
: scientist that studied those exact  
: questions!