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Important Scientist Characteristics:

management activities, such as trail building and

timber harvesting, do not

negatively affect the forest soil.

Seeing the "Big Picture" and being a clear communicator are two important skills in this career. Soils are just one part of what is occuring in a forest. The ability to see how soils interact across a landscape with water, plants, rocks, and humans is important to good decision making. Clear communication among different scientists and the public is also important for a project to be successful.

Example of a simple research question I have tried to answer: What are the long-term effects of acid rain on forest soils across the Daniel Boone National Forest in Kentucky? I've found that although acid rain has decreased over the past decades, the soils are still showing negative effects from this phenomenon.

Technology or equipment used in research:

I often use a Global Positioning System (GPS) unit and ArcMap to get to remote locations on the forest. GPS units use satellites to determine my location on the ground and guide me to the site. A map on a smartphone probably uses similar technology. ArcMap is a computer program that can create a map of an area's characteristics, such as geology, slope, and soil type.

Most Exciting Discovery

Unlike a research soil scientist, I do not regularly discover scientific phenomena. However, I am constantly learning new things that I come across while working in the forest. For example, some mushroom species glow in the dark!

When did you know you wanted to be a scientist?

As a child I often hiked with my family, some of whom could name the trees, rocks, flowers, and mushrooms. I wanted to be able to do the same. As I got older, I became aware that I had a connection to the woods, and I decided to make it my career. At age 30, I went back to school to get my Ph.D. in forestry.