Meet the Scientist!

Forest soil scientists study the connections of soil with forest ecosystems. Soil sustains life. I try to understand what it takes to keep forests healthy and productive.

Dr. Mary Beth Adams

Soil Scientist/Forester

Ph.D., North Carolina State University

USDA Forest Service scientist

http://www.naturalinquirer.org

http://www.scienceinvestigator.org

Important Scientist Characteristics

Curiosity is an important trait for me. In college, I learned how to ask questions so that I could test hypotheses. Being able to ask questions and know how to answer them is very useful to me. Also, I like spending time in the forest and doing field work. Being outside makes research much more enjoyable.

Example of a simple research question I have tried to answer:

What are the effects of air pollution on forest growth and forest use of resources such as water, light, and nutrients? I study the effects of acid rain and ozone. Understanding the effects of pollution on soil and other resources can help us manage forests to ensure they last into the future.

Technology or equipment used in research:

I use various types of shovels and soil sampling equipment. Once the soil sample is out of the ground, analyzing the nutrient content requires different equipment. An atomic absorption spectrophotometer measures how much light is absorbed by atoms within the soil sample.

Most Exciting Discovery

Working on long-term experiments is exciting. Some of the experiments are older than I am, and I am able to add new knowledge to these national treasures. Also, learning by working with other scientists who also have long-term studies is really cool!

When did you know you wanted to be a scientist?

I have always been curious, and my parents encouraged me to ask questions. I had a summer job with the Youth Conservation Corps in high school. In that job, I discovered how much I liked working outdoors and my questions about ecosystems were encouraged. So, I put the two together.

www.nrs.fs.fed.us/people/mbadams