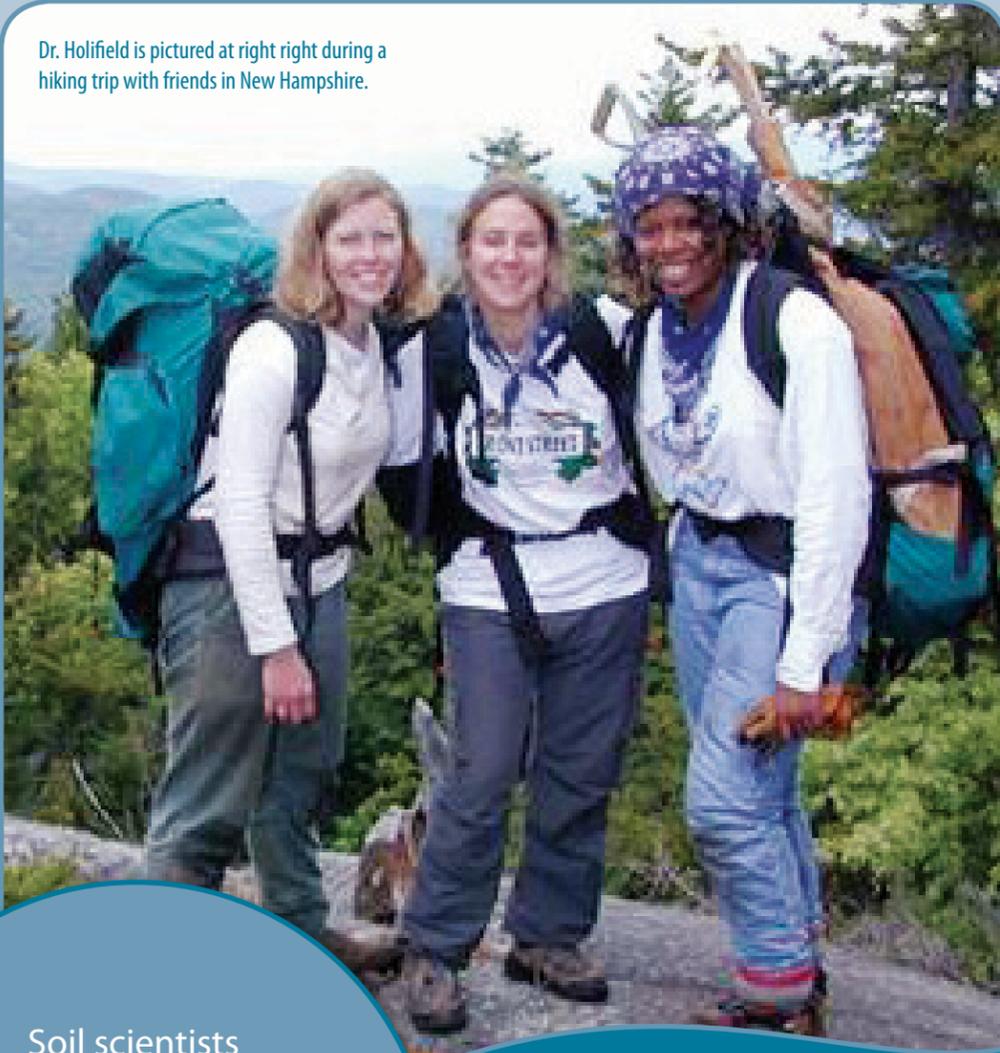




Dr. Holifield is pictured at right right during a hiking trip with friends in New Hampshire.



# Meet the Scientist!

Soil scientists are concerned with the physical, chemical, and biological characteristics and behavior of soils, and their management for both agricultural and nonagricultural uses.

## Dr. Quin Holifield

Soil Scientist

Ph.D., State University of New York College of Environmental Science and Forestry (SUNY/ESF)  
USDA Forest Service scientist



<http://www.naturalinquirer.org>

### Important Scientist Characteristics

- ★ Thinking outside of the box
- ★ Investigation
- ★ Ability to see the “whole picture”

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

Can microbial populations be used as an indicator of healthy soils and healthy trees, much like vital health signs, such as heart rate, body temperature, glucose levels and blood pressure, are used to assess human health?

### Technology or equipment used in research:

Soil scientists may use a variety of simple hand held equipment to hi-tech instruments to assess the conditions of the soil in both the field and in the laboratory. Of course, a shovel is very handy to collect soil in the field. Soil scientist may also use sophisticated equipment like a LI-COR® multiplex system to measure soil respiration or a hydrometer to measure the moisture content in the field.

### Most Exciting Discovery

The decline of red spruce trees in the northeastern U.S. is a result of changing land history.

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

As a child, I was curious about how the natural world really worked. My grandfather was a farmer, and he exposed me to the wonder world of soil, at an early age. I had ambitions of being an architect, lawyer or a medical doctor. After doing a book report on Benjamin Banneker, the first African-American man of science, I realized that I wanted to pursue science as a career.