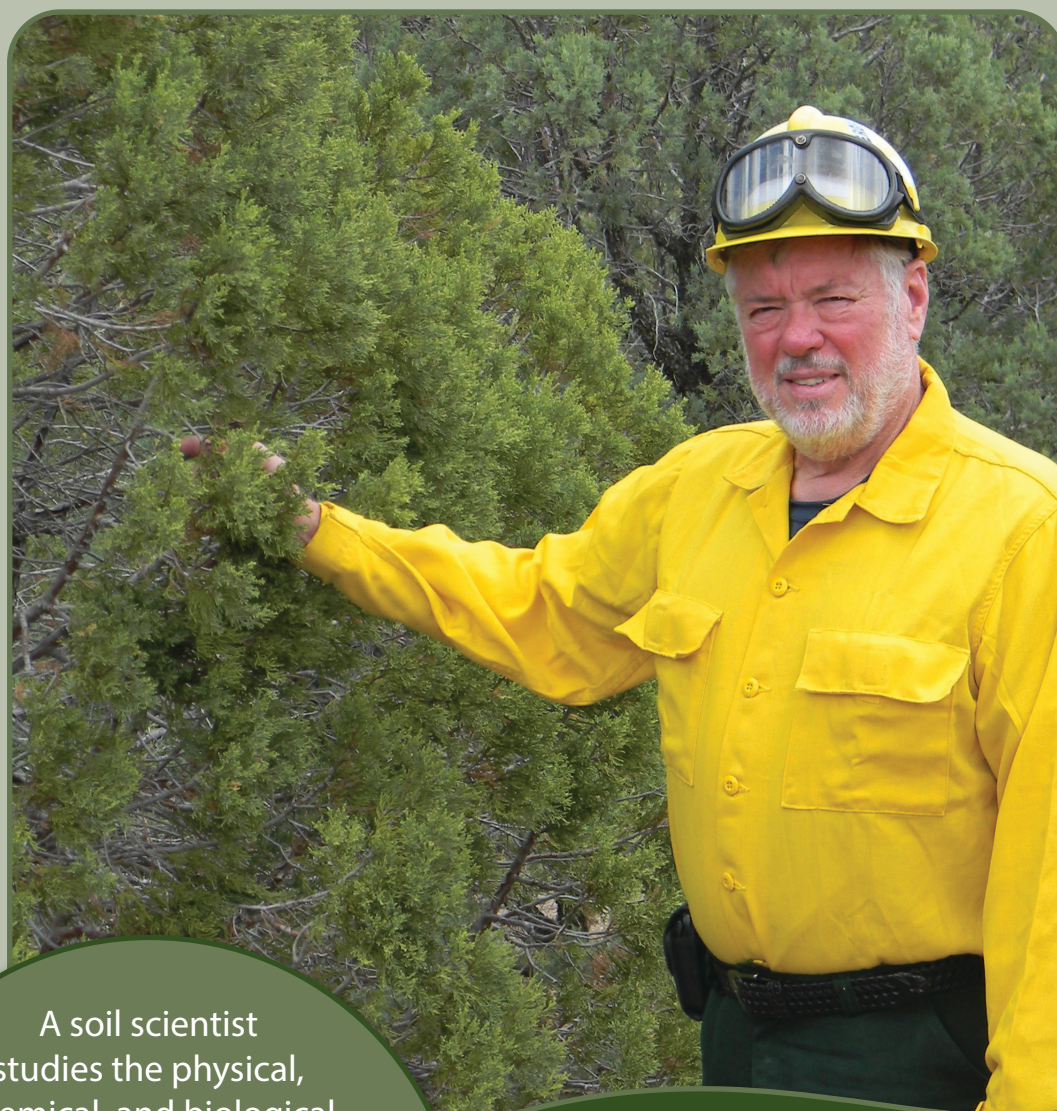




Meet the Scientist!



<http://www.naturalinquirer.org>



A soil scientist studies the physical, chemical, and biological aspects of soils, how they are classified, how they function, and how water moves into and through them. A hydrologist studies all the aspects of the quantity and quality of water cycle from precipitation to streamflow to groundwater.

Dr. Dan Neary
Soil Scientist/Hydrologist
Ph.D., Michigan State University
USDA Forest Service scientist

Important Scientist Characteristics

- ★ Creativity
- ★ Careful observation and logic
- ★ Inherent curiosity about nature and the physical environment

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

What are the impacts of wildfires and prescribed fires on soil erosion and water resources?

Technology or equipment used in research:

Automatic weather stations are used to measure the climate. They measure the amount and timing of rainfall, air temperature, relative humidity (i.e., percentage of moisture in the air), or the percentage of moisture in the air, wind speed and direction, and evaporation. Data can be collected at short intervals (1-5 minutes) and are stored for 3-4 months or can be sent by radio signal to a remote computer.

Most Exciting Discovery

It is all exciting. I wouldn't know where to start. Maybe, the scale and magnitude of soil erosion and flooding after the Schultz Wildfire of 2010—it was enormous! Another exciting thing is the opportunity to work all over the world.

When did you know you wanted to be a scientist?

As a child, I was fascinated by rocks and forests. I collected rocks and would often play in forests. We made forts and villages in forests and would pile up rocks to make swimming holes in small streams.

<https://www.fs.fed.us/rmrs/people/dneary>