



Meet the Scientist!



<http://www.naturalinquirer.org>

<http://www.scienceinvestigator.org>



Forest Service soil scientists study how soil is interrelated with how plants grow, how harvesting changes the soil, and how we can improve forest health by taking care of the soil.

Dr. Debbie Page-Dumroese
Soil Scientist
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USDA Forest Service scientist



Dr. Debbie Page-Dumroese

Important Scientist Characteristics

★ My most important talent is observation — seeing how the soil looks, feels, and tastes (sometimes) helps me understand why plants grow in some places and not others.

Example of a simple research question I have tried to answer: How does ground-based timber harvesting change soil physical, chemical, and biological properties?

Technology or equipment used in research:

Our most important tool is a shovel, but that's not very high-tech! However, we also look at how soil gas exchange is affected by land management and for this we use (1) a CO₂ analyzer that determines how much CO₂ is leaving the soil and (2) we use a flame ionization detector for looking at the release of greenhouse gases such as methane (we actually measure termite farts!).

<http://forest.moscowfs.wsu.edu/smp>

Most Exciting Discovery

Learning that not all soils are created equal and that some soils are very resilient and others are very sensitive to land management. Finding out which one is which and where they are located is important for making sure we maintain soil quality.

When did you know you wanted to be a scientist?

When I was in ninth grade I took a class in limnology at high school—it was pretty cool to see what lived in stream and pond waters.