



# Meet the Scientist!



Engineers study many different areas. My area is forest operations, or more simply put, logging management.

**Dr. Dana Mitchell**  
Research Engineer  
Ph.D., Auburn University  
USDA Forest Service scientist



<http://www.naturalinquirer.org>  
<http://www.scienceinvestigator.org>



## Dr. Dana Mitchell

### Important Scientist Characteristics

- ★ Good communication skills
- ★ Curiosity
- ★ Detail-oriented

### Most Exciting Discovery

I liked working with a large power company and an equipment manufacturer to find ways to use wood in existing coal-fired power plants. The results included testing at the power plant, and a new piece of equipment that the manufacturer now markets. I analyzed the feedstock characteristics of the biomass and determined the production rates and costs of the harvesting system.

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

If we want to put small, uniformed sized wood chips on a coal pile for producing 'green energy': what equipment would we use to create the specially sized chips?

**Technology or equipment used in research:** In my research area, I extensively use computers to analyze data and document research findings. In the field, I collect data using air sampling equipment, steel measuring tapes, calipers, digital cameras and recorders, DBH tapes, clinometers, compasses, stop watches, and safety equipment (boots with steel toes, hard hats, orange vests, and lots of bug spray).

<http://www.srs.fs.usda.gov/forestops/>

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

Since I was 9 years old, I rode motorcycles in the woods. So, I studied forestry right out of high school. But... I also liked math and engineering. I have a master's degree in forest engineering and I get to use all of these skills/interests as a research engineer.