



# Meet the Scientist!



Plant ecologists study plants and their surroundings, or environment, and inform people about how to leave plant communities healthy for future generations.

**Dr. Becky K. Kerns**  
Research Ecologist  
Ph.D., Northern Arizona University  
USDA Forest Service scientist



<http://www.naturalinquirer.org>

## Important Scientist Characteristics

As a scientist, I am very curious. I like to understand why things are the way they are, especially the plants!

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

What happens to the plants (trees, shrubs, and grasses) after a fire? How long does it take for the plants to regrow? Is the forest the same or different after the fire? What will happen to the plants in the future if the climate changes?

## Technology or equipment used in research:

In the field, I may use a simple tool like a tape measure to measure trees. Sometimes, I use a complex tool that has a laser. The laser can tell us the exact height of a tree. In the office, I use geographic information systems (GIS) on the computer. GIS helps me understand how plants are arranged in relation to each other and other things in the environment. I also use computer programs which help me understand how plants may respond to future changes in climate.

## Most Exciting Discovery

Silica is one nutrient used by plants. When a plant decomposes, the silica enters the soil and is used again by other nearby plants. I discovered that there is a type of plant silica inside the leaves of a ponderosa pine tree that stays in the soil for long periods of time. Finding plant silica in the soil can tell us what the vegetation was like in the past.

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

I first learned that I wanted to be a scientist when I was in college.

<http://www.fs.fed.us/research/people/profile.php?alias=bkerns>