



# Meet the Scientist!



As a research forester, I conduct research on applied silviculture. Silviculture is the art and science of establishing and growing trees to meet the needs and values of landowners.

## Dr. Robert Deal Research Forester

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USDA Forest Service scientist



<http://www.naturalinquirer.org>

<http://www.scienceinvestigator.org>

### Important Scientist Characteristics

A combination of skills has helped me in my profession as a research forester. These skills include a deep curiosity of the natural world, detailed and careful observations, and the ability to combine pieces of information together to tell the whole story.

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

What is the value of life-sustaining ecosystem services to society? Ecosystem services are the environmental health benefits provided by a community of plants or animals. I am interested in using the ecosystem services concept to highlight the value of services provided by water, wetlands, carbon, habitat, and recreation opportunities for people.

### Technology or equipment used in research:

I have used stand reconstruction techniques to assess the past history of forests. Stand reconstruction helps determine how trees responded to disturbance events such as fire, wind and landslides. This research is like being a detective or Sherlock Holmes in the woods to understand the development of forests.

### Most Exciting Discovery

I looked at alternatives to clearcutting in Alaskan forests. I determined that harvesting trees using partial cutting could provide a sustainable timber resource. Partial cutting preserves forest biodiversity and forest complexity that is often lost following clearcutting in coastal rainforests.

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

I am a naturalist at heart. As a youngster, I grew up exploring forests near my home and reading books about scientists like Darwin or explorers like Lewis and Clark. Natural science is what I wanted to study, and it led me into the forestry profession.