



# Meet the Scientist!



Silviculture is the art and science of growing trees to achieve the goals of the landowner. Silviculture can include creating a specific type of wildlife habitat or growing a specific kind of wood efficiently.

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## Important Scientist Characteristics

Logical thinking and listening to the observations of others are important to my research. Everyone has good ideas. If I apply logical thinking to what I learn from others, it speeds up the time between a question and a good hypothesis.

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

How can we measure crowding among the trees in a forest? Crowding is when one plant limits the growth of another plant because they are growing near one another. I'm especially interested in how we measure crowding in forests consisting of trees of many different species and sizes.

## Technology or equipment used in research:

A common tool to measure trees is a diameter tape, or "d-tape." Wrapping the d-tape around trees actually measures a tree's circumference. From that measurement, it's easy to estimate many other measurements of a tree. For example, there are equations to predict the width of the crown, the tree height, and the amount of wood that can be removed from the tree.

## Most Exciting Discovery

I learned that many of the ideas for measuring crowding among trees could be used to measure the crowding of deer in forests. The population of deer in the forests does not depend on the density of the deer alone. Instead, it depends on the density of deer in relation to the amount of food in a particular landscape.

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

After college, I became interested in how forests help people. Forests provide everything from fuel and building materials to beautiful places for recreation and clean water. This knowledge encouraged me to learn how to manage forests to sustain all those benefits. For me, the first interest was forests, and it led to an interest in science.

<http://www.nrs.fs.fed.us/people/sstout>