



Meet the Scientist!



<http://www.naturalinquirer.org>



An urban forest ecologist studies the interactions between trees, people, and their environment in the city.

Dr. Nancy Falxa Sonti Urban Forest Ecologist

Ph.D., University of Maryland
USDA Forest Service scientist

Important Scientist Characteristics:

My creativity enables me to find ways to measure trees in all kinds of unique situations in the middle of the city. Good listening skills help me figure out what questions are important to answer in order to help cities manage their forests.

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

How are urban trees different from trees growing in rural forests? Are native trees and seedlings growing faster in the city? Is the wood from urban trees more or less dense than wood from rural forest trees? Why?

Technology or equipment used in research:

I use an increment borer to take tree cores. Some of these cores are thin and are used to count and measure tree rings; some of these cores are thicker and are used to analyze wood properties. The thicker ones are very hard to collect!

Most Exciting Project or Discovery

I grew white oak seedlings from acorns in growth chambers using soils and temperatures from Baltimore City and the surrounding rural area. I found that Baltimore City soils support robust seedling growth and photosynthesis rates compared to soils from a nearby rural forest.

When did you know you wanted to be a scientist?

I like writing, and in college I wrote articles for the school's science magazine. But I realized I wanted to be DOING the science, not just writing about it, so I got some fieldwork experience and went to graduate school.

<https://www.nrs.fs.fed.us/people/nancyfsonti>