



# Meet the Scientist!



A restoration ecologist studies how to restore species that have experienced significant population declines. These declines are often caused by nonnative insects or diseases and/or ecosystem damages from human activities.

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Restoration Ecologist

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<http://www.naturalinquirer.org>

### Important Scientist Characteristics:

Enthusiasm for my research, which is restoring damaged ecosystems, is my strongest quality as a scientist. It motivates me, inspires me, and helps me push forward when I am challenged by obstacles.

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

What is the impact of a rare native insect, chestnut sawfly, on the health of American chestnut trees? The chestnut sawfly causes the chestnut trees to lose their leaves. We found that the loss of leaves did not significantly impact the health of the young chestnut trees.

### Technology or equipment used in research:

We commonly use light meters to measure levels of photosynthetically active radiation in the environment. Photosynthetically active radiation is the range of light that plants use for photosynthesis. This information helps us understand how light interacts with other ecosystem characteristics to affect plant growth.

### Most Exciting Discovery

In one study, we compared the growth of hybrid American chestnut trees and native American chestnut trees. Hybrids are bred using a combination of two or more different types of chestnut tree. Hybrids can be resistant to chestnut blight fungus, which can kill native American chestnut trees. Our team found that hybrid American chestnut trees grow similarly to native American chestnut trees.

**When did you know you wanted to be a scientist?** I knew at a young age that I wanted to work in the natural resources field. I spent my childhood summers roaming the woods with my sister. We studied and collected wild edible plants, fished, and built forts. I knew I had to find a job that allowed me to keep learning about forests.

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