



Meet the Scientist!



<http://www.naturalinquirer.org>



Ecologists study how interactions among organisms within communities and environmental factors influence the diversity, distribution, and dynamics of species.

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Ecologist

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Important Scientist Characteristics:

The skills and passions that most contribute to my research are my curiosity about the natural world and my strong desire to try to 'solve the puzzles' of why the interactions between species or changes in plant communities I am observing occur as they do.

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

How do the independent and interactive influences of deer browsing, understory fire, and canopy gaps shape plant communities in mixed oak forests?

Technology or equipment used in research:

For my line of work, equipment needs are basic (e.g., meter sticks, diameter tapes). However, one approach we commonly utilize is computer analysis of fish-eye photographs of the forest canopy and sky. These analyses provide estimates of how much light reaches through the canopy to the forest floor.

Most Exciting Discovery

I've discovered that native understory plant species can, when exposed to various types of forest disturbances, behave exactly as exotic invasive plants. In these cases, the native plants monopolize broad bands of forest understories. Once established, these unruly understory vegetation layers strongly limit the plant biodiversity in forests.

When did you know you wanted to be a scientist? I grew up in Panama, close to the tropical jungle. From an early age, I appreciated the beauty of forests and the wonder of biodiversity. I wanted to understand why it is that we have so many plant species in our forests and how natural and human disturbances affect biodiversity.

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