



Meet the Scientist!



As a natural resource analyst, I gather geographic and field data on forests and wildland fires. I analyze these data using computer software to answer scientific questions related to fire and plant interactions.

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Important Scientist Characteristics:

Communication with my colleagues and land managers, as well as my attention to detail, help me gather the most useful information for research questions. While GIS can explain our complex world, there is rarely a standard practice that guides us how to do this. Creative problem solving and determination also help me discover solutions to research questions.

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

What are the ecological impacts of long-term irrigation (the watering of agricultural areas) on surrounding forest ecosystems? We built a database with satellite images that were used to accurately describe the evolution of increased irrigation in the Coastal Plain of Georgia. We are now using multiple databases to learn about the ecological impacts.

Technology or equipment used in research:

I use geographic information systems (GIS) to analyze 2D and 3D geographic information. I create maps and analyze data using the maps to learn about the patterns and relationships between the data. When I work in the forest, I use a Global Positioning System (GPS) unit. The GPS unit helps me determine locations of our study areas. We also use laser scanners to measure the 3D structure of our forests.

Most Exciting Discovery

My most exciting work was working with data from Africa! Using social, census, and natural resources data for the country of Liberia, we were able to develop a "Vulnerability Index." This index tells us how sensitive the social and natural systems in Liberia may be to potential changes in climate. This information is a tool to be pro-active about long-term adaptation to climate change.

When did you know you wanted to be a scientist?

I grew up exploring the forests and creeks of rural south Georgia. I would question the processes of nature and how they were linked together. Even at a young age, I found enjoyment in the challenge of answering questions related to the natural world.

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