



A fire ecologist explores the interactions between wildland fire and plant communities. I study how fires burn and how forests grow and reassemble after fire.

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Important Scientist Characteristics:

Collaboration and strong relationships with colleagues are the greatest contributions to my research. Although I work independently at my desk each day, communications with my colleagues is important. I have found that scientific discovery is a collaborative effort. We work together to shape ideas into clear theories and testable hypotheses.

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

How do we continue to preserve fire as an important process in our forests? Fire is a part of our environment and occurs in forests globally. Many forests are well adapted to frequently occurring fire, helping to create diverse animal and plant communities.

Technology or equipment used in research: I use infrared thermography cameras, which record temperatures on video. These cameras measure aspects of wildland fires, such as fire intensity and spread. These data can be linked to forest fuels and plant regrowth. Computer modeling helps me examine how fire interacts with climate and management, and how forest communities change over time.

Most Exciting Discovery

- I discovered that trees and other plants interact in unique ways to changes in climate and climate-wildfire interactions.
- This finding is true for many forest ecosystems in the United States. I have found that active forest management, such as prescribed fire, is important for conservation of diversity and maintaining forest health.

When did you know you wanted to be a scientist?

- In college, I took biology and chemistry courses. I loved learning about how things work in the natural world. After graduating, I explored various outdoor biology jobs. I learned about conservation and how ecologists contribute to forest conservation.