



Dr. Hoagland is a trained professional. The mouse she is holding was not harmed and was released back in to the wild. Never approach or handle wildlife.

Meet the Scientist!

Biological scientists study many different types of organisms from endangered birds to large predators. We study wildlife populations and their habitat to help conserve them for future generations!

Dr. Serra J. Hoagland
Biological Scientist
Ph.D., Northern Arizona University
USDA Forest Service scientist



<http://www.naturalinquirer.org>

Important Scientist Characteristics

My curiosity, tenacity and open-mindedness are most important to my work. These skills help me question our current natural resource paradigms and theories. They have enabled me to think about problems through a different lens but with an open mind.

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

We're looking at how Mexican spotted owls respond to forest thinning. These owls live in steep canyons, and they eat small mammals. Although they prefer forests with relatively dense canopies, those same forests are threatened by wildfire. We're trying to reduce fire risk through thinning while keeping the owls happy.

Technology or equipment used in research:

For another research project I used a program called CIRCUITSCAPE. We can use this technology to simulate how various animals move across the landscape. Many wildlife corridors are created using this software, and it has been used in projects around the world — serving elephants to tortoises!

Most Exciting Discovery

I discovered that there were "hotspots" in Santa Barbara County where many wildlife species were getting hit on the roads and highways. There were also more wildlife species using nearby open spaces than we thought! Various organizations helped fix certain wildlife passages to minimize wildlife-vehicle collisions.

When did you know you wanted to be a scientist?

I work a lot with Native American tribes. My family is Laguna Pueblo from New Mexico. I wanted to become a scientist when I saw how science could help Native communities in managing their forests. I also wanted to bring traditional ecological knowledge to the scientific community.

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