



Conservation ecology is the study of plants and animals in their natural and human-impacted environments to determine what they need to maintain healthy populations.

Dr. Susan Loeb
Conservation Biologist
Ph.D., University of California, Davis
USDA Forest Service scientist

<http://www.naturalinquirer.org>



Dr. Susan Loeb



Important Scientist Characteristics: My natural curiosity enables me to ask questions about animals and design studies to answer those questions. Also, my ability to work with other people enables me to take advantage of their skills. Working together, we can answer bigger questions than I could answer on my own.

Example of a simple research question I have tried to answer: How does prescribed fire, also called controlled fire, affect the roosts and roosting habitat of the Indiana bat in the short-term and over the long-term? The Indiana bat is an endangered species that uses dead trees for roosting, or resting, during the summer. In the southern Appalachians, Indiana bats primarily use dead pine trees as their roosts.

Technology or equipment used in research: One of the most valuable pieces of equipment that I use in my research is a bat detector. Bat detectors pick up the ultrasonic echolocation calls of bats. Most bats have distinct echolocation calls, so I can determine which bat species are using an area, when they are most active, and how they may interact with other bat species.

- **Most Exciting Discovery**
- One of the discoveries we made
- was that Rafinesque's big-eared
- bats may be repelled by the
- social calls of other Rafinesque's
- big-eared bats. We had originally
- thought that they would be
- attracted to the calls. Sometimes
- the most exciting discoveries are
- the ones that are different from
- what you thought would happen.

- **When did you know you wanted to be a scientist?** I knew I
- wanted to become a scientist
- in college. I began studying the
- behavior of chimpanzees in an
- enclosure in California. Then I
- had the opportunity to study
- chimpanzees in the wild in
- Tanzania. I really enjoyed asking
- questions and then working with
- the data to find the answers.

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