



# Meet the Scientist!



Photo by Layne Kennedy

As a wildlife ecologist, I study wildlife populations and their relationships with their physical and living environment to identify what might cause the populations to increase or decrease. I apply these research findings to help endangered species' populations to increase.

**Dr. Joseph Wunderle**  
Conservation Biologist  
Ph.D., University of Minnesota  
USDA Forest Service engineer

Dr. Wunderle is pictured on the right with his team as they complete wildlife research.



<http://www.naturalinquirer.org>

## Important Scientist Characteristics

- ★ Curiosity
- ★ Careful observation
- ★ Good record-keeping, logic
- ★ Critical thinking
- ★ Patience (animals are stubborn)
- ★ Spanish

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

What is the winter habitat of the Kirtland's Warbler, and how is that habitat produced? The Kirtland's Warbler is an endangered migratory bird.

## Technology or equipment used in research:

We use radio telemetry to follow Kirtland's Warbler, and study their movements and habitat use. This involves placing small radio transmitters on each bird and locating them using a radio receiver that detects the transmitter's signal.

## Most Exciting Discovery

In the Bahamas, Kirtland's Warblers use habitats disturbed by people after they have removed vegetation by bulldozing, grazing goats, or burning. The warblers use these habitats because they eat fruits of shrubs that grow in these disturbed sites. The availability of these habitats will ensure that Kirkland's Warblers have suitable places to spend the winter, even after a hurricane.

## When did you know you wanted to be a scientist?

I was 12 years old when I learned that my hobbies of bird watching and keeping wild animals could become a career. At that age I learned that zoology and ecology were professions, but required that I study hard in school.

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