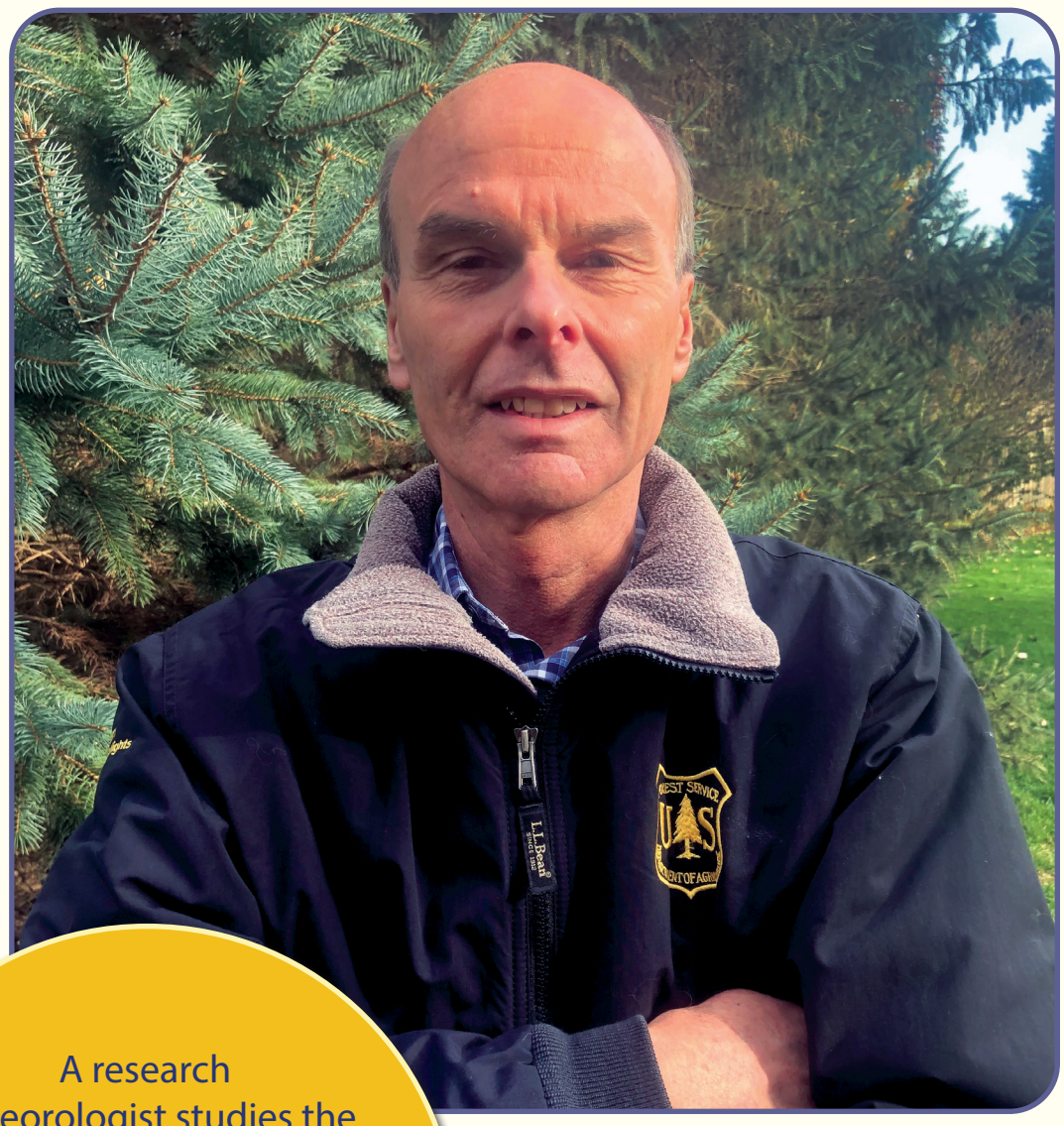
Meet the Scientist!



A research meteorologist studies the behavior and characteristics of the Earth's atmosphere (i.e. weather and climate) and their impacts on the environment and environmental processes.

Dr. Warren Heilman

Research Meteorologist

Ph.D., Iowa State University

USDA Forest Service scientist

http://www.naturalinquirer.org

Important Scientist Characteristics:

Curiosity and critical thinking contribute most to my scientific work. My atmospheric research is almost always driven by the desire to answer the question: Why is the atmosphere behaving this way? Then I develop analysis strategies and experiments to answer the question.

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

How do wildland fires interact with the atmosphere? What impacts do wildland fires have on wind speed, wind direction, and wind gusts in the environments surrounding the fires?

Technology or equipment used in research:

My research utilizes equipment set up in the vicinity of wildland fires such as sonic anemometers to measure wind and thermocouples to measure temperatures. My research also involves the use of numerical (computer) models to simulate fire-atmosphere interactions.

Most Exciting Project or Discovery

While all of my research projects have been interesting, my most exciting and current project is focused on how atmospheric turbulence (wind gusts) can affect the spread and behavior of wildland fires in forested environments.

When did you know you wanted to be a scientist?

Watching the U.S. space program unfold during the 1960s, the landing on the moon in 1969, and my childhood fascination with thunderstorms cemented my desire to become a scientist.

https://www.nrs.fs.fed.us/people/Heilman