

Plight of the American bumblebee: Disappearing?

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The photo provided by amateur Illinois bee spotter Johanna James-Heinz, shows a rusty-patched bumblebee, on Aug. 14, 2008, in Peoria, Ill. It is one of four types of bumblebees researchers say is in trouble. (AP Photo/Johanna James-Heinz)

WASHINGTON (AP) -- It's not just honey bees that are in trouble. The fuzzy American bumblebee seems to be disappearing in the Midwest.

Two new studies in Thursday's journal *Science* conclude that wild bees, like the American bumblebee, are increasingly important in pollinating flowers and crops that provide us with food. And, at least in the Midwest, they seem to be dwindling in an alarming manner, possibly from disease and parasites.

Wild bees are difficult to track so scientists have had a hard time knowing what's happening to them. But because of one man in a small town in Illinois in the 1890s, researchers now have a better clue. Naturalist Charles Robertson went out daily in a horse-drawn buggy and meticulously collected and categorized insects in Carlinville in southern Illinois. More than a century later, Laura Burkle of Montana State University went back to see what changed. Burkle and her colleagues reported that they could only find half the species of wild bees that Robertson found - 54 of 109 types. "That's a significant decline. It's a scary decline," Burkle said Thursday.

And what's most noticeable is the near absence of one particular species, the yellow-and-black American bumblebee. There are 4,000 species of wild bees in America and 49 of them are bumblebees. In the Midwest, the most common bee has been *Bombus pensylvanicus*, known as the American bumblebee. It only stings defensively, experts say. But in 447 hours of searching, Burkle's team found only one American bumblebee, a queen. That fits with a study that University of Illinois entomologist Sydney Cameron did two years ago when she found a dramatic reduction in the number and range of the American bumblebee.

"It was the most dominant bumblebee in the Midwest," Cameron said, saying it now has pretty much disappeared from much of its northern range. Overall, its range has shrunk by about 23 percent, although it is still strong in Texas and the West, she said. "People call them the big fuzzies," Cameron said. "They're phenomenal animals. They can fly in the snow." Her

research found four species of bumblebees in trouble: the American bumblebee, the rusty-patched bumblebee, the western bumblebee and the yellow-banded bumblebee.

A separate Science study by a European team showed that wild bees in general have a larger role in pollinating plants than the honey bees that are trucked in to do the job professionally. Those domesticated bees are already in trouble with record high prices for bees to pollinate California almond trees, said David Inouye at the University of Maryland. Scientists suspect a combination of disease and parasites for the dwindling of both wild and domesticated bees.

Online: Science: <http://www.sciencemag.org>

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