

Mysterious oak leaf itch mite leaves its tiny bite mark across lower Plains

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The mysterious bug bites first appeared a few weeks ago.

George Monks, a dermatologist in Tulsa, Okla., started hearing complaints about weird, itchy welts. The bites had strange, tiny blisters in the center, ruling out mosquitoes. Appearing on arms, necks and faces, they were in the wrong places to be from chiggers, which tend to attack around waistbands and sock lines.

Then Monks' friends got bitten. Then his kids. And when he then posted on Facebook about the odd welts, he couldn't believe how many people responded that their kids had bites too.

That's when Monks realized that some kind of epidemic must be unfolding before him - except nobody had seen the culprits.

"It's a massive, massive outbreak," said Monks, who says about 1 in 5 of his patients coming in for other skin issues have the mysterious bites. "I've been in practice for 13 years and never seen an outbreak like this."

Countless victims in the lower Great Plains this year have fallen prey to a bizarre, accidental predator that is not well-known to Midwesterners and not widely tracked by scientists or health officials.

Experts suspect the nearly invisible invader, measuring 0.00787 of an inch, is the oak leaf itch mite.



Scientists didn't even know the oak leaf itch mite existed in America until 2004. The mite can live on the leaves of oak trees, and it's so small that experts believe it can be carried in the wind and even blow through window screens to bite people indoors.

The good news is that the mite gets its nourishment from other insects and not from humans. The bad news is that when the mite sheds off the trees in the late summer and fall, it can shower onto people and decide to take a bite anyway, and there is not much you can do.

"When you really talk to people, almost everybody has had a few or a lot of these mite bites this year - I can even say myself, my wife," said Douglas Dechairo, a physician and head of Watkins Health Services at the University of Kansas in Lawrence, which is seeing more than 10 students a day complaining of bites. "It's pretty much a universal problem."

Local news stories about the mysterious critter have been shared thousands of times on Facebook by bewildered, itchy residents of Kansas and parts of Missouri and Oklahoma who are finding out about the mite for the first time.

Comments sections on social media have turned into disgusting photosharing sessions, peppered with suggestions for itch remedies and with newfound suspicion of long-beloved oak trees. Before going to work outside, one user put on gloves and a long-sleeved shirt and wrapped duct tape around his wrists and ankles - and his neck - saying, "I don't want those little suckers anywhere on my body!"

"These mites, you don't really notice probably that you've been bitten for hours after the bite," said Dennis Patton, a horticulture agent for Kansas State Extension in Johnson County, where the oak is a popular shade tree. "We started getting calls late July here and there: 'Hey, I was out in



my yard the other day, working; the next morning I woke up itching with these bites on my body.'"

About two weeks ago, when KWCH-TV reporter Lauren Seabrook stood near a cluster of <u>oak trees</u> in Wichita, Kan., to tape a news segment, she joked on Twitter that she was anticipating "about 537" mite bites in the morning.

She didn't have to wait that long. She woke up in the middle of the night itching like crazy.

"For the 30 minutes I was outside, I got 10 bites," Seabrook said.

The arrival of oak leaf itch mites has been correlated with years when oak leaves are laden with galls - deposits of midge larvae inside leaf folds.

The galls are where the oak leaf itch mite feasts on the larvae, using a venom powerful enough to kill a larva 166,000 times its own weight. Which is impressive, right up until the mite unwittingly injects that venom into a human.

"I'm pretty sure we've all been afflicted in some way, anecdotally," said Kathryn Wall, a public health information administrator for the Springfield-Greene County Health Department in Missouri, whose agency doesn't track the insects since they do not carry diseases. "I have a bite on my neck."

Since the mite's discovery in Kansas during a bite epidemic in 2004, it has been detected in several U.S. states stretching as far south as Texas and as far east as Pennsylvania. A 1956 insect sample revealed the critter has also been as far west as Colorado. The species has been spotted on every continent except Antarctica.



But because the oak leaf itch mite does not seem to carry any diseases or cause serious health problems, it's a low priority for tracking by health officials, and it can seemingly vanish for years at a time.

"It doesn't lend itself to be something that somebody can study," said Bob Bauernfeind, a professor of horticultural entomology at Kansas State University, who once bandaged oak leafs to his arms to inflict himself with mite bites - unsuccessfully. "If the beasts aren't here, how are you going to study them?"

"It is kind of obscure," Bauernfeind added of the pest, recalling one study that had been launched only to discover that the oak leaf itch mite had disappeared. "There are no experts."

Justin Talley, an associate professor in entomology and plant pathology at Oklahoma State University, set out last week to collect oak leaf itch mites from the Tulsa area, which, from what he'd heard, seemed to be particularly hard-hit.

Talley sampled about 100 leaves from municipal parks. He found leaf galls and midges. But no mites. Zero.

Had they all already left the galls on the leaves? Had they ever been there?

"The mites very well could have bitten some people, but maybe we're on the tail end of the life cycle," Talley said. "Maybe we didn't get in the right areas."

For the Great Plains, the season's first freeze is likely to bring the end of the oak leaf itch mite problem, except perhaps for homeowners raking leaves. And then the pest is expected to fade away.



"When we get to the end of year and are sitting around the Christmas tree, we won't be talking about them," Bauernfeind said. "We may not be talking about this for four, five, six years, before they pop up again."

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