

Post oak grasshoppers emerging

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They're not afraid of heights, they're voracious, and Dr. Spencer Behmer wants to know if you've seen them hanging out in oak trees or on your house. They're post oak grasshoppers, and Behmer, a Texas Agricultural Experiment Station entomologist, wants to research their life cycle and behavior.

If you haven't heard of them, don't feel alone. Until recently, most Texans hadn't.

"I didn't see them for the first 25 years of my career," said Dr. John Jackman, Texas Cooperative Extension entomologist. "I would have told you there weren't any grasshoppers that chewed on trees."

Five years ago, he said, the grasshoppers' numbers started growing, and last year, exploded in areas from Dallas to near Corpus Christi.

"We don't know a whole lot about them," Jackman said.

Terry Juneke, a research assistant in one of the Texas A&M University department of entomology labs, began noticing the grasshoppers about four years ago. They were crawling up the side of her Wellborn home.

The majority of adult post oak grasshoppers have short wings and are flightless, Behmer said, but they love to climb up trees and houses.

"Last year they were in enormous amounts," Juneke said, "and mainly on the east side of my house."

If hordes of grasshoppers on houses aren't bad enough, they make their presence even more obnoxious by leaving frass -- or insect excrement -- behind, which often leaves a near-permanent stain, Behmer said. The stain is the result of tannins -- the compound used in tanning leather -- which are found in oak leaves. As the frass dries, the tannins bind strongly to other chemicals. Once this has occurred, stains become very difficult to remove.

The post oak grasshoppers become adults in late April, and from early May to mid-June the females lay their eggs in the soil. A female typically lays five to six eggs at a time in a pod, and will produce two to four pods over her lifetime. In the spring, when post oak leaves begin to emerge, the eggs hatch and the nymphs begin to climb trees to feed. They go through at least five developmental stages before becoming adults, all the while munching on leaves. Currently, they are still in the pre-adult stage, he said.

The grasshoppers prefer post oaks, but Behmer has heard reports of them feeding on other oak and hickory trees, even defoliating them.

To help him find out more about these post oak grasshoppers, Behmer is asking for the public's help.

"If someone thinks they have these grasshoppers, they can e-mail me (s-behmer @ tamu.edu) with general information about where they are," he said.

The exact location of their house isn't necessary, he said, but a zip code and a nearby major intersection would be helpful. If possible, they should send a digital photo of the grasshopper so he can positively identify it. Behmer wants to use this information to begin mapping their location throughout the state and to create a database.

He's also raising the grasshoppers in his lab, with Junek supplying nymphs she has already found this year.

Junek is also giving him other valuable insights gained through personal observations. Last year, when the grasshoppers reached adulthood, she caught them and fed them to her chickens. The chickens readily ate them, giving Behmer a clue that they are not toxic to other animals. Normally, chickens will not eat what will harm them, Behmer said.

Behmer is still not sure what the Easter weekend cold snap will do to the grasshoppers' population, but he wants to study that too. Junek said they were still crawling up the side of house on April 8, even though their numbers were reduced.

Further information on post oak grasshoppers is available from insects.tamu.edu/fromthefield/postoakgh.html , and at Behmer's research Web site at behmerlab.tamu.edu/index.html .

Source: Texas A&M University

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