

Yard and Garden – 12-03-2016- Ted Griess / Extension Horticulture Assistant

I love my work. There is always something to learn. After nearly fifteen years on the job, I am continuously excited when something crosses my desk that I've never seen or heard of before. Such was the case about a week ago.

A gentleman brought to my office a little jar containing about a dozen of what I initially thought to be extremely small maggots.

Upon handing me the jar, he asked, "What are these?" My first response was, "Where did you find them?"

"On my driveway", he commented. Knowing that maggots are the immature larvae stage of flies and usually found feeding on decaying organic matter or something even grosser, I immediately thought finding them on the driveway doesn't fit the picture.

He then commented, "I first thought them to be grains of rice. I assumed that perhaps my wife had spilled a bag of rice and had not swept the rice off the drive. Then, after looking more closely, I saw the rice-shaped objects moving. That's when I scooped up a bunch and brought them to you for identification!"

Needless to say, I hadn't a clue.

After delving deeper, I discovered there was a big ash tree growing alongside his driveway where the worms were found. Interspersed on the driveway, along with the worms, were numerous seeds that had fallen from his ash tree. The client then asked me if the worms might be immature ash borers. I assured him they were not. Unfortunately, their identity continued to remain an enigma.



Whenever in doubt, I have the good fortune to call upon my colleagues in the Plant Science Department at the University of Nebraska in Lincoln. I immediately took photos of the mystifying worms using our microscope/camera and fired off a few pictures to the Entomology Department requesting their help. Shortly thereafter the mystery was solved.

An entomologist informed me that the worms were *Thysanocnemis bischoffi*, more commonly called ash seed weevils. Although their identity had been revealed, their existence remained a conundrum. That's when I started researching.

In general, ash trees are either male or female. I discovered the ash seed weevil feeds only on female ash trees — only female ash trees produce seeds. The seeds form in clusters known as samaras and can be readily seen during the winter months after the leaves have fallen. They often remain hanging until spring.

After seeds have developed on the tree, the adult ash seed weevil, which is only two to four millimeters in size, uses its small chewing mouthparts to bore a hole into a single seed. There, it deposits a single egg. The egg hatches and a larva develops throughout the summer. By fall, some larvae drop to the ground and burrow into the soil where they overwinter. Others may spend the winter in seed pods, entering the soil in the spring. In the soil, the grubs eventually pupate. New adult weevils emerge at a time coinciding with the production of ash seeds, and the life cycle repeats itself. Ash seed weevils produce only one generation per year.

Fortunately, ash seed weevils pose no serious threat to the life of an ash tree.

In conclusion, I have a hunch my client would not have discovered these small larvae had they not fallen on concrete instead of soil. Since then, I've been looking for female ash trees in the neighborhood and particularly for those overhanging streets or driveways. Guess what? I've discovered more of these little critters.

As stated earlier there is always something to learn. I'll close with a fitting quote from Dr. Fred Baxindale who often serves on NETV's Backyard Farmer panel. "This is just another example of nature's pageantry."

