

Rutherford County

FROM THE GROUND UP



January 2, 2024

After 13 Years, It's Time For The Cicadas Again

According to population growth information on the Neilsberg Research website, Rutherford County's population rose from 269,206 in 2011 to 360,619 in 2022. That's an increase of over 91,000 people. That's more than 91,000 people who weren't here in 2011 to experience the last emergence of the 13-year periodical cicadas. Depending on where they moved from, some of our county's newer residents may have never been fortunate enough to witness a periodical cicada emergence at all. Friends and neighbors, if you fall into the latter category, your luck is about to change! Brood XIX of the 13-year periodical cicada is projected to re-emerge in Rutherford and other Middle TN counties in 2024.



Mitchell Mote,
Extension Agent III



All kidding aside, folks who have never lived in an area that's home to one of the periodical cicada broods may have difficulty grasping the scope of the entomological display that's expected to occur this spring. A little background information on periodical cicadas may help them understand what to expect.

The periodical cicada has the longest developmental period of any insect in North America. Two races of the periodical cicada exist. One race has a life cycle of 13 years and the other has a 17-year life cycle. Both the 13-year and 17-year cicadas occur in Tennessee. There are various populations, called broods, that emerge at different 13 or 17-year intervals. Scientists have described fifteen broods of periodical cicadas that are identified by Roman numerals. There are three 13-year broods and twelve of the 17-year broods. Rutherford County is home to Brood XIX of the 13-year cicada. Its' last emergence was in 2011 and was described as spectacular thanks to the millions of the insects that emerged across Middle Tennessee. This brood is expected to re-emerge in 2024. Scientists use the phrase "expected to re-emerge" because they are dealing with nature and sometimes nature doesn't respond or react as expected, but this will be the fourth 13-year cicada emergence I have experienced in my Extension career and the 1985, 1998 and 2011 emergences occurred as expected and I anticipate a similar occurrence in 2024.

Adult periodical cicadas, impressive because of their size, large reddish-orange eyes and loud, shrill song, don't cause major damage to plants or any damage to people or animals. Cicadas aren't locusts (locusts are a species of grasshoppers) and aren't going to feed on and destroy crops. They do cause some damage to woody plants when females make slits in twigs and branches as they lay their eggs in them, but the damage is seldom fatal. They don't bite people or animals. They will land on people, and many don't like that, but

they don't bite. The shrill, high-pitched song used by males to attract females can reach near 95 decibels. It seems that some female cicadas confuse the sound of gas-powered weed eaters and leaf blowers with the male cicadas' mating song, so avoiding the use of such tools during broad daylight may reduce personal encounters with the big-eyed bugs.

Periodical cicadas spend all but a few weeks of their life cycle underground feeding on tree and plant roots with no noticeable effect on the trees. Mature cicada nymphs usually emerge from the ground after sunset in May either 13 or 17 years after they hatched when soil temperature eight inches deep reaches 64° F. They crawl up vertical or upright structures such as tree and shrub trunks, posts and such where they molt and leave behind their discarded exoskeletons. After the newly molted adults dry off, they take flight to initiate their mating routine and continue the cycle. The eggs laid in twigs and branches hatch in six to seven weeks. The newly hatched nymphs drop to the ground where they burrow in and slowly grow and develop until it's their turn to procreate. If you'd like to learn more about periodical cicadas, visit <https://utextension.tennessee.edu/publications/> and check out publication SP341 Periodical Cicadas.

People often ask if they should take steps to protect their landscape plants from cicada damage. For the most part, no. Folks can delay setting out new woody plants until after the cicadas are gone. They can use lightweight plant row covers or cheese cloth to cover small plants and protect them from possible egg laying damage, but that's about it for protection.

The cicadas will likely emerge in May, be a nuisance for a few weeks, and then be out of site for another 13 years. Try to keep the anticipated cicada emergence in perspective. If this is the worst thing that happens, 2024 will be a pretty good year.

Rutherford County Extension - Lane Agri Park - 315 John R. Rice Blvd. Suite 101, Murfreesboro, TN 37129

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