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Midwestern Pests

Cicadas
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The Cicada: Only a Slightly Impolite Guest

Good news for all fishermen and insect lovers alike! 2004 marks the biggest cicada party in nearly two decades with over 15 states participating in the momentous event. Can you guess where the main dance floor is located? That is right: Indiana. What this means is that we could be seeing as many as 1.5 million cicadas per acre of land this summer, with the main emergence taking place throughout May and June and finally tapering off in September.

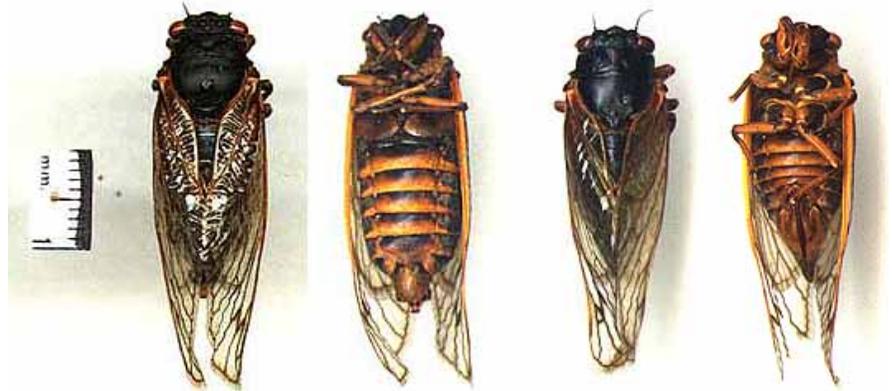
The last time we saw this particular species of cicada, which happen to be the largest, was in 1987 when not a single Indiana county remained untouched. For 16 years, our insect friends, formally known as Brood X of the *Magicalcada septendecim* species, have been burrowed underground, each year getting closer and closer to the surface so that they might begin their short mating season in 2004, when they will eventually die. One way this huge “emergence” may have been noticeable last year was in the increased number of mole sightings you may have had in your yard as they happily gorged themselves on the abundant insects. In fact, it is going to be a good year for the cicada predator, which includes birds, fish, reptiles, and rodents. Cicadas are going to be so abundant that the hungry animals’ insatiable appetites could never wipe them out, and the predators are going to be chubby and delighted, in the meantime. In addition, since this species only makes an appearance above ground every 17 years, Brood X cicadas have never developed any mass diseases to threaten their population.

In contrast with widespread beliefs, cicadas are not otherwise known as locusts, which are actually a subspecies of grasshoppers. Most cicadas have a life span of 2-8 years, emerge yearly all throughout late spring, and usually, begin to hit their peak in late summer.

When cicadas dig their holes to reach the surface, they aerate the soil.

Most cicada infestations occur on the edge of forests.

However, Brood X belongs to a class known as a “periodical” cicada, which transform into adulthood after a maturation stage of 12-16 years. Each year, a different Brood, along with the normal, greenish cicadas, emerges from the ground. They are distinguishable by their size, color, song ([AIFF format](#) or [MP3 format](#)), number of years of maturation, and by the area in which they are found. You will notice Brood X by their distinctive size (about 1 ½ inches long), and their black coloring with orange underbodies.



Although they may look menacing in their size and quantity, cicadas are not poisonous, nor are those pincher-looking things on their mouths going to hurt anything besides leaves. The ovipositor that female cicadas have are not meant to sting either, rather they are used for mating and depositing up to 600 eggs in small branches. The only thing you may have to look out for this year are the Cicada Killers, which are black and yellow wasps, but even they won’t hurt you unless you go after them first, and they are not group-oriented like most wasps.

Besides just being loud and looking scary, cicadas present several potential problems for our community this year. Most of the damage we’re going to see is caused by the female when she places her eggs under the bark of trees and twigs, which may cause splitting and destruction. Some damage is caused by the cicadas’ vegetarian-only feeding habits, but it isn’t nearly as significant. The result of all of this is that you will see a great deal of our trees with brown and dead ends. This is known as “flagging”. Most trees, those over four years old, won’t be daunted by the insects helping themselves to their resources, but all others may have a rough year. Deciduous trees, which are those that lose their leaves in the fall, like oak, apple, hickory, dogwood, etc are preferred hosts, and cicadas only

Pesticides on fruit-bearing plants can contaminate production.

go after woody plants where they can use the bark as a nest. This may be just fine for some farmers, but orchard growers and vineyard owners have cause for worry this summer. Luckily, most will only see a small decrease in their production, and the Farm Credit Services does not anticipate any increased number of disaster loans this year, but for newer, less established plants, you'll have to take some steps to protect your investment. In addition, it may be best for you to avoid making any new foliage additions to your yard this year, but if you do, there are always alternatives to keep the cicadas at bay.



During the initial emergence, you may be continually dive-bombed by the flying insects as they search for a suitable mate. This should be your signal to start protecting your trees or vines. The mating stage takes about one to two weeks before the male and female begin to settle down and make their nests.

Pesticides available are those containing the chemicals cyfluthrin, esfenvalerate, and permethrin, and they can be found almost anywhere. However, these methods are usually unneeded and can cause more harm than they help, including the pollution of soil, groundwater, and fruit. In addition, several applications are needed, sometimes daily depending on the outbreak, and this method works best when the insect is sprayed directly. The USDA states: "Contact your local extension agent or entomologist for insecticide recommendations and follow all label directions carefully. Chemical control is difficult during the peak of egg laying, because of the large number of cicadas present and relatively slow action of the pesticide."

Another option you have is by covering your smaller, more susceptible trees or vines with a netting of

Many landscapers hold off all pruning until after a cicada outbreak.

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cheesecloth or wire mesh. You need to make sure you have it bound tightly around the bottom to prevent the emerging cicadas from climbing, and just to be safe, you might want to keep it on for about four to six weeks after the outbreak. Finally, pruning is another good method to avoid any serious damage. You can simply cut off the ends of the branches or twigs that are covered with eggs. This works especially well with fruit-bearing trees because it kills the larvae and prevents them from burrowing underground and feeding on your trees' roots, which can slow up production.

Long ago, many Native American tribes believed this event to be a warning of evil impending. In reality, the bugs are actually fairly harmless, and the millions of dead carcasses they leave behind will contribute to the soil, adding great abundances of nitrogen. This summer we will see the largest outbreak of insects on Earth, but even the Indiana County Parks do not plan on using any method to control the insects. So, go out there, experience the best bass fishing we've seen in 17 years and be ready to plan your outdoor parties with a cicada theme.

We are currently in the process of working on a series of articles that focus on several insects or pests that are common in the Midwest. We will tell you about the potential damage they cause to properties and homes and bring you helpful advice on how you can prevent destruction or infestation. As each article in this series is completed, we will be placing them on the website and sending them out via email to everyone on our contact list. To get on the contact list, visit our website at www.goodvaluation.com and register as a new user. Make sure to include your email address. For those who may not have email, contact our office, and we will work with you to determine how you can receive future articles.

The information analyzed within this article was obtained from research conducted by the author and others in the research department of Good Valuation, Inc. Information was also obtained from web sites such as the Michigan Museum of Zoology Website, the IU Cicada Page, the Indiana County Parks Website, the University of Kentucky Etymology Page, the USDA Website, and from information obtained from the Farm Credit Services. Opinions expressed are based on observations and analyses conducted by the author.