



2024 Periodical Cicada Emergence: Frequently Asked Questions



Illustration © Samantha Gallagher

1. **What are periodical cicadas?** Periodical cicadas are small, plant-eating insects that live 13 or 17 years. They spend 17 years underground as nymphs, drinking sap first from grass roots, then deciduous tree roots. When ready for the final stage of their life cycle, nymphs emerge from the ground by the millions, shed their exoskeleton (protective shell) to become adults, and sing and reproduce in the treetops for 4–6 weeks.
2. **What do cicadas look like?** Adult cicadas measure about 1.5 inches long. They have dark bodies, orange-veined wings and red eyes with black pupils. After mating, females lay 400–600 eggs in the tips of tree branches. Six to 10 weeks later, nymphs hatch from the eggs, drop to the ground and burrow into the soil for 17 years, beginning the life cycle again.
3. **I hear cicadas singing every summer. How is this different?** The cicadas heard every summer are called annual cicadas. These cicadas have life cycles of 2–5 years. Since species overlap geographically and are not synchronized, we observe some cicadas every summer. They typically emerge to sing and reproduce in July and August. Due to the long life cycles of periodical cicadas, most people will only see them emerge a handful of times in their lives.
4. **What types of 17-year periodical cicadas are found in Lake County?** Three 17-year species live in Lake County: Linnaeus' 17-year cicada (*Magicicada septendecim*), Cassin's periodical cicada (*Magicicada cassini*) and the decula periodical cicada (*Magicicada septendecula*). Except for different orange-brown stripes on their undersides, the species look identical. Learning their distinctive songs is the best identification method.



5. **Are periodical cicadas only found in North America?** Yes, periodical cicadas in the *Magicicada* genus are only found in North America. Other species of periodical cicadas can be found in India and Fiji.
6. **Are periodical cicadas a type of locust?** No. Cicadas belong in the scientific order *Hemiptera*, a group of insects known as true bugs. Two key characteristics of cicadas and other true bugs include four wings and a tube-like mouth part used to drink fluids.
7. **Can cicadas fly?** Yes, cicadas can fly, although they are not the most agile fliers.
8. **How much do periodical cicadas weigh?** Periodical cicadas weigh approximately two grams, or about as much as a dime.
9. **How long will the emergence last?** Once the temperature of the upper 8 inches of soil reaches 64 degrees Fahrenheit, Brood XIII will emerge in late May and early June. They will sing and reproduce for 4–6 weeks into July, until adults die.
10. **What should I do during the emergence?** Enjoy this fantastic natural phenomenon and try to coexist peacefully. Cicada control is not necessary on well-established trees. Consider delaying the planting of new trees or shrubs until fall. Young trees and shrubs already planted may be protected by covering them with mesh or cheesecloth with openings smaller than 0.5 inches. Insecticides are ineffective and may harm people, birds and beneficial insects.
11. **What is a brood of cicadas?** A brood is a group of cicadas that emerge together at regular intervals. Lake County's periodical cicadas are in Brood XIII (13), spanning portions of Illinois, Indiana, Iowa and Wisconsin. Nationwide, there are 12 broods of 17-year cicadas and three broods of 13-year cicadas.
12. **I heard this is a big year for cicada emergence. Is that true?** Yes. Brood XIII's 17-year emergence coincides with that of Brood XIX's (19) 13-year emergence for the first time since 1803, when Thomas Jefferson was president of the United States. Tecumseh's confederacy, a confederation of Indigenous peoples living in the Great Lakes region, also began forming in the early 19th century.
13. **When will the next cicada emergence happen?** Brood XIII's next emergence is expected to occur in 17 years in 2041.
14. **Why do periodical cicadas have such long life cycles?** Periodical cicadas' 13-year or 17-year life cycles give them an edge over predators, which typically have shorter life cycles. The crunchy buffet represents a survival strategy called predator satiation. It is safety in numbers. So many cicadas surface that predators cannot eat all of them. It is likely enough nymphs will survive to become the next generation.
15. **Do cicadas bite or sting?** No, cicadas do not bite or sting. They are harmless to humans and pets.
16. **What happens if my pet eats a cicada?** It is not dangerous for your pet to eat cicadas in and of itself. Cicadas do not bite or sting, and they are not poisonous. However, if your pet consumes many cicadas, this could lead to digestive issues. Additionally, cicadas are biologically similar to crustaceans such as shrimp. While rare, pets with



shellfish allergies may develop allergic reactions to cicadas. We recommend closely supervising your pet while outdoors during the cicada emergence.

17. **Should I wear ear plugs?** A male cicada's song can reach 90–100 decibels (dB), as loud as a motorcycle. The Occupational Safety and Health Administration recommends hearing protection in situations where the average dB level exceeds 100 dB for two or more consecutive hours. If you plan to be outdoors for this length of time, it is advisable to wear ear plugs.
18. **Will cicadas kill my trees?** This is unlikely, especially for mature trees. To lay their eggs, female cicadas cut shallow, V-shaped grooves into the tips of tree branches. This may cause some branches to turn brown and break off, a phenomenon called flagging. While it may look concerning, this is beneficial, natural pruning that does not cause long-term harm to mature trees. Younger trees might be more affected by flagging, however. We suggest delaying the planting of new trees or shrubs until fall.
19. **Do cicadas carry diseases?** No. Cicadas do not carry any diseases communicable to humans or pets.
20. **If I have trees in my yard, am I guaranteed to have cicadas?** No. A better indication is if you or your neighbors saw cicadas in 2007. Neighborhoods with well-established trees will have a better chance of experiencing a cicada emergence. Mature trees in full sunshine surrounded by low vegetation are ideal habitats.
21. **Do cicadas have predators?** Yes. Many animals eat cicadas, including birds, mammals, snakes, turtles, frogs, spiders and even fish.
22. **I found a cicada with white patches on its abdomen. What is this?** Periodical cicadas are susceptible to infection with the fungus *Massospora cicadina*, which creates a white "plug" of spores. The fungus is not harmful to humans or pets. It is unique to cicadas and attacks the lower portion of the abdomen and genitalia, sometimes causing them to fall off, and eventually killing the insect. *Massospora cicadina* has a 17-year life cycle, timed to coincide with the emergence of adult periodical cicadas.

Have more questions? Our educators have the answer. Email: AskAnEducator@LCFPD.org.