

Cicadas

by Lyn Chimera and Carol Ann Harlos

Cicadas are insects which belong to the order Hemiptera, the “true bugs”. (True bugs suck! With their mouthparts that is.) This means they are related to both leaf hoppers (Think SLF) and frog hoppers. Annual cicadas complete life cycle takes two to five years. Periodical cicadas have life cycles of 13 or 17 years, all emerging at the same time. Yet the basic life cycles of both types of cicada are similar. The time the pupae spend under the ground is the variable. There are about three thousand species worldwide!

Cicadas are large approximately one and a half inches although there are some tropical species which are larger yet! They have large prominent compound eyes, short antennae, piercing-sucking mouth parts, . The males have well developed structures on their sides called “tymbals” which buckle when bent and are then released. This produces the incredible sounds one hears during their mating time.

The wings of all cicadas are covered with waxy cones that are water repellent. These cones make the wing veins very prominent. Dew condenses on the wings. When it evaporates the temperature of the cicada drops. This apparently keeps the adults from overheating during the mating season!

Females lay their eggs in the new growth of deciduous trees by making a slit with the rostrum, a piercing mouth part, which causes many stems to die back (flagging). Tree damage is usually minimal. (This depends on the cicada species, whether the trees are saplings or mature trees, and the condition of the trees.) The nymphs hatch from the eggs after four to six weeks. They drop from the tree to the ground. They use their first pair of legs to burrow about a foot underground where they feed on roots for 2 – 17 years. Some damage to trees does occur... it depends on the age of the trees and the concentration of the nymphs.

Once the nymphs mature, they burrow out of the soil and crawl up the side of a tree or other vertical surface. The outermost skin splits open and the adult cicada emerges. I’m sure many of you have found the empty casings. C.A.’s children used to collect the casings!

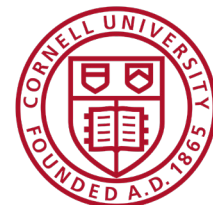
The adult cicadas only live a few weeks and while they do feed on vegetation it is usually not at a harmful level. While they can “bite” with their straw like mouthparts this rarely happens and only when threatened.

The easiest way to tell the annual cicadas from the periodical cicadas is by their eyes. Periodic cicadas have bright red eyes, and the annual cicadas have brown to black eyes. Generally, the annual cicadas are a bit larger. The annual cicadas are often referred to as “Dog Day Cicadas” because they emerge during the warm days of July and August (in the Northern Hemisphere,). Both cicadas are an important protein source for insects and mammals including humans. C.A. was offered an adult cicada in China but said “No thank you...not hungry now.”

Billions of periodical cicadas (Brood X) will emerge this year in 2021 in fifteen states including New York (Central Park, Staten island, the Bronx) Their presence is used to study environmental and climate change.



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