

(Sounds)

This is the sound of the 17-year cicada that is due to emerge in eastern Kansas. Unlike the annual black-and-green cicadas that emerge in late summer, these cicadas emerge in late May and June, are slightly smaller, have a reddish tinge to their wings, and have beautiful bright red eyes.

Every August we hear the annual cicadas sk,sk,sk. But the 17-year cicada sounds different: "pharaoh, pharaoh" or "zero, zero."

Our grandparents called them 17-year "locusts." But locusts is an old name for any type of insect that swarmed in large numbers. The "plagues of locusts" from Biblical times were grasshoppers that still swarm in Africa today.

So we end that confusion by calling those "grasshoppers."

And these are cicadas. [sounds]

So where were the larval cicadas the previous 16 years?

-Under the ground, sipping sap from tree roots and growing very slowly for an insect. When they finally emerge from the ground, they crawl part way up a tree trunk and shed their last larval skin to emerge in the winged form.

As children, most of us picked the empty shells of annual cicadas from tree trunks each September. For sixteen years, the 17-year cicada looks like a small version of that shell.

With a straw-like beak, it has been sucking tree sap until it is time to emerge. Their biological clocks trigger their emergence in the correct year. -Usually. But there were a few stragglers who came out last year, or will linger into next year. All alone. No chorus to join. No one to date. And they stand out as easy prey.

Different species of cicadas come out at different times. 3-years. 5-years. 7-years. 13-years. And the 17-year cicadas that we are hearing now, this year. To the mathematicians among us, that is an interesting series of numbers...prime numbers.

While the average citizen may soon find their buzzing a nuisance, to a biologist cicadas pose interesting questions. Does their mass emergence overwhelm all of their predators? With the engorged birds unable to eat another one, this appears to be an effective strategy. And does the emergence on prime-number years prevent a predator from specializing on them?

Biologists love questions such as these.

But to a tree, this year will be a total loss.

The larval cicadas have been sucking an increasing amount of sap each of the previous 16 years. But this year will take the greatest toll of all. After they emerge and mate, the female will then lay egg into the outer 3 to 5 feet of a tree limb. This is new growth with green bark. Her saw-toothed ovipositor cuts a line down this branch and she lays a series of eggs. The stem breaks and hangs, the dead leaves producing a brown "flag"...until the branch and the cicada eggs fall to the ground and the larvae hatch and burrow down. One year of a tree's growth will be lost.

Today, Brood 4 is emerging in eastern Kansas. This is not only a big day in their lives, but in ours as well. If you haven't graduated from high school, this will be your first experience with 17-year cicadas.

And the next time you will hear this song...will be in the year 2032.

(Sounds)