A Eulogy for the 13-Year Cicada — A Fly-Fisher's Tribute

by Walt Fulps

s I write this, the cicadas living on my property are already beginning to decline in numbers. My dog Baxter continues to eat as many of them as possible, in spite of the warnings from the vet that he'll get a tummy ache. Baxter seems to instinctively know that he'd better get them while the getting's good. Similarly, as a fly-fisherman, I want to be on the river as much as possible while these clumsy protein power snacks are bouncing off trees and plopping onto the water, and I have to admit that I'm grieving their passing.



Thirteen-year cicada of Brood 19. Photo Credits: Walt Fulps

This year's batch has been something special. Not only did we have a true bumper crop, but we also had record heat, making this a perfect storm for catching some nice trout. When our daily high temperatures jumped into the mid-90s, the water temperatures jumped as well. That affected the trout in two very important ways. First, as the water temperature increased, so did the trout's metabolism — trout are cold-blooded animals, so warmer temps lead to increased heart rate, respiration, and caloric requirements. In other words, they're **HUNGRY**.

However, warmer water also sheds dissolved oxygen, meaning they'll have problems pursuing larger prey, since they'll be struggling to breathe with less O₂ present. If you've ever gone backpacking in the mountains, I'm sure you know how they feel. But, like magic, Mother Nature provided the perfect nutritional solution to the trout's dietary problem: a giant mouthful of high-calorie food that does not run away.

I want to back up for just a moment, though, to clarify a couple of things about cicadas. The news media, in their frenzy to find something exciting to report, generally react very dramatically every time we have a big cicada emergence. "This is a once-in-17-year event," you'll hear them shout with glee, but it seems to me that there are cicadas singing in the trees every summer, so I guessed that the "senior bug analyst" at my local station wasn't reporting the whole story. For clarification, I gave Rob Lawrence at the Missouri Department of Conservation (MDC) a yell. As the MDC's Forest Entomologist, he is the true "senior bug analyst," and he was kind enough to set me straight on the facts.

The type of cicada that generally makes the news is referred to as "periodical," and those periods come in two varieties: 13-year and 17-year. Each group of cicadas that emerges from underground together is classified as a brood, with the seasonal timeframe generally ranging from early May to late June. This year, we're seeing a 13-year emergence of Brood #19 across most of Missouri (including the trout-holding areas), which is by far the largest brood of cicadas we have in the state I guess the news reporters were right to be excited this time. We actually have four different species of cicada that emerge on 13year cycles, and the term "brood" refers to any and all of those species that emerge at the same time. For example, Brood #19 includes all four species that happen to be on this specific schedule in this specific region of the country. The only other periodical broods that sometimes affect Missouri trout fishing are Brood #4 in the extreme southwest part of the state, and Brood #23, which is mostly Southeast Missouri, but also can affect some of the trout streams along the I-44 corridor — Little Piney Creek, Mill Creek, Roubidoux Creek, Blue Springs, Meramec River and so

on. Brood #4 is on a 17-year cycle, and Brood #23 is on a 13-year cycle. Oddly enough, both broods are due to return in 2015 — that's a rarity. Even so, it's Brood #19 that really covers the state with giant bugs, benefiting birds and fish and Lab-Shepherd mutts named Baxter

There is another type of cicada, though, that does not make the news broadcast. Annual cicadas are much larger than periodicals, and they look different, too, but the trout don't seem to care much about appearances in this case, and therefore neither do I. There are several species of annual cicadas present in Missouri, and their nymphal timeframes range from two-to-five years. Since the species' emergences overlap, we generally have a mix of all the species of annual cicadas every summer, usually starting in late June and extending into July. And since those insects are present every year, they don't radically change trout-feeding behaviors any more than a seasonal hatch of mayflies or caddisflies. Rather, it's the periodical varieties that tend to really stir things up.

By the time you read this, Brood #19 will be history — sorry if you missed the big feeding frenzy — but don't despair. Brood #19 has done something even more important for the fly-fisherman than provide some muchneeded nutrition for trout during tough times. Brood #19 has taught our trout to look up, meaning that a fish that normally chooses to feed exclusively near the bottom of the stream will now continue to have one eye toward the heavens throughout the summer season. Now that the Brood #19 is leaving us, the rest of our terrestrial insects will begin to take center stage: ants, beetles and grasshoppers, as well as the mighty annual cicada. As a fishing guide, I'm excited to get my clients on the river to see how they do throwing some ridiculous-looking #8 foam monstrosity with rubber legs hanging off it. I'm betting we're in for a summer worth remembering.

Thank you, Brood #19. You will be missed, even as your legacy lives on.

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