



Take a day-trip south to experience the 17-year cicada, but better make it soon.

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Not Your “Every Year” Cicada

All the hype in varied media about the emergence of the 17-year cicada this spring set a lot of us locals up for disappointment. It turns out the northern limit of the “Brood X” range barely leaks over the state’s southern border, so if most Michiganders want to experience it, better plan a trip beyond the Indiana or Ohio border, and soon. It is happening now, and will all be over within a few weeks.

Carol and I took a trip over Memorial Day weekend to east central Illinois. Incidentally, not with the cicada emergence in mind, but rather to secure a couple of frog species so we could once again round out our educational menagerie with what we call “the grand slam of Michigan frogs” – all thirteen species found here, and to our knowledge the only complete collection in the state. (Interestingly, there are several species quite rare in Michigan that become increasingly common as you travel south of the state’s border. We make the drive to glean specimens of these species where they are abundant.)

With minimal effort online, you can find a plethora of published and posted information in anticipation of this spring’s cicada emergence - highlighting details of the insect’s life cycle, behavior, ecology, range and more (For example, this link has a David Attenborough video of the phenomenon up close and also a range map showing where the action is, should you decide to go looking: <https://www.vox.com/science-and-health/22362042/cicada-brood-x-map-2021>). However, from a personal perspective, experiencing the mass surfacing and all that goes with it provided an extra interesting element to a natural environment that is already notably more lush with plant and animal life than a seasoned naturalist would experience a mere few parallel degrees to the north here in lower Michigan.

A row of counties along the eastern border of central Illinois demarcates the westernmost edge of the Brood X range, and so the density we experienced was certainly not what may be experienced more eastward



Molted nymphal skins cling to leaves days after the adults have flown.



The male is smaller and darker than the female. A pair of noise-producing tymbals are located directly behind its legs.

toward the heart of its range. All the same, as soon as we stepped out of the vehicle amid mature woodland habitat near Marshall, Illinois, we were struck by the sound of an omnidirectional verberation created by hundreds of 17-year cicadas perched largely out of sight among the foliage all around us - a continuous, otherworldly background din that lightly veiled all other sound like an amorphous auditory fog. Visit our Facebook page to watch and listen to a one-minute video I took in which the eerie background noise made me think of what a hovering alien spacecraft might sound like.

Turns out the 17-year periodical wasn't the only cicada in town. Sporadically throughout our visit we were treated to a duet of two cicada species, the noise emanating from them as different as that of two instruments in an orchestra. The annual cicada had begun emerging here, as well. The rise and fall of rolling buzzes of this species were much louder and easy to pinpoint in the trees. It is present at our latitude in Michigan every summer, too, but doesn't typically emerge from underground to commence buzzing for mates until a week or so into July. Over two days we never set eyes on one of the darker, larger, more robust annual cicadas because they were so sparsely distributed, but the smaller, somewhat daintier, crimson-eyed, periodical cicadas were impossible to miss.

I wrote about my early discovery and fascination with the annual cicada while growing up in Chicago in the opening column of our July 2017 newsletter, entitled "Cicada Meets Altar Boy": <http://naturediscovery.net/pdf/WILD%20TIMES%20July15.pdf>. Since then, across the airspace over my head I've observed the decidedly powerful, swift, purposeful and direct flight characteristic of the annual cicada many dozens of times.

By contrast, at any moment during our Illinois stay one or more demonstrably weaker periodical cicadas could be observed flying - almost floating - in labored fashion through the air. In fact, many times I'd watch as an airborne subject would steadily lose altitude as it attempted to fly from one tree across a clearing toward another. Sometimes the bug would succeed, but just as often one would descend and alight in the grass or crash land on the pavement short of its intended destination. If one flew past me at eye level it was easy to step forward and just snatch it from the air with a cupped hand. Attempting to catch an annual cicada in this manner would require the skill of a ninja.



Annual cicada.



A random mix of live and injured cicadas were strewn across the asphalt, yet, in far greater number, the carcasses of those that had alighted there at an earlier time lay flattened among the living. Although the mind-boggling phenomenon of mass emergence is ostensibly meant to overwhelm a long list of able predators ("Just try to eat us all!"), looking at the carnage on roadways, in parking lots, and around other human infrastructure - environments that we occupy and severely alter for our convenience - it is easy to conclude that humanity's mere presence delivers a deeper dent in the sheer numbers of the 17-year cicada than the local wildlife ever could.

- Jim McGrath

Nature Discovery

5900 N. Williamston Road Williamston, MI 48895
517.655.5349 naturedisc87@gmail.com www.naturediscovery.net



See and feed a rare, state-threatened Spotted Turtle.

Visit Our Nature Center by Appointment

Suggested Minimum Donation:
\$5/person/hour

The sky's the limit for natural science learning here – with a Michigan twist! Individual adults, couples, individual families and small groups are welcome to schedule a safe, intimate outdoor or indoor visit to what we call “The Biggest Little Nature Center in Michigan,” and “Home to the Largest Zoo of Michigan-native Reptiles and Amphibians.” The unique, in-person, hands-on experiences here are a welcome relief to a student’s screen-learning time! We will bring snakes, turtles, frogs and salamanders out of tanks to interact with adults or students of any age or grade-level. Visitors are required to wear a mask during all indoor time.

Identify and feed “the grand slam of Michigan turtles,” all ten species native to our state, as they swim in pools at your feet. Meet, pet and feed “Milberta”, our always hungry Red-footed tortoise.

Handle any or all of Michigan’s three species of garter snakes while learning how to tell them apart, then watch them gobble up worms and live frogs. Hold or “wear” a gentle 6-foot Black Rat Snake – the largest in the state!



See the rare Blanchard's Cricket Frog.

Many more snakes, turtles, frogs and salamanders to identify and feed. Take a guided walk on our trails to identify birds, insects, trees, vines, and invasive plants.

Ask about arranging guided interpretive experiences or guided birding outings, for your small group of kids, adults or families at a local natural area of your or our choosing.

Contact us for more info or to make an appointment.

2021 Summer Day Camps Update



Yes, they're back!

After careful consideration while watching COVID trends thus far we've decided to offer 6 weeks of very limited-enrollment day camps through the weeks below. Here is a list of the dates and age ranges. For more details click this link:

<http://naturediscovery.net/pdf/SummerCamps2021.pdf>

Full-day (FD) camp fees are \$300. Half-day (HD) are \$160. An additional small field trip mileage fee will apply to the two camps for students 10 yrs and older. In red after each listing below is the number of spaces remaining on that week's roster as of June 6.

June 14-17: Michigan Birds & Birding (FD - 10 yrs & older) **FULL**

June 21-24: Nature Discovery (FD – 7 to 9 yrs) **5**

June 28-July 1: Budding Naturalists (AM only, HD – 5 to 6 yrs) **5**

July 26-29: Nature Discovery Nature Discovery (FD – 7 to 9 yrs) **3**

August 2-5: MI Reptiles & Amphibians (FD – 10 yrs & older) **3**

Aug 9-12: Nature Discovery (FD – 7 to 9 yrs) **1**

Contact us to enroll by email (naturedisc87@gmail.com) or phone (517.655.5349)



LCC Summer Youth Programs

Carol will also be teaching 4-day summer science camps for students entering grades 2-8 at LCC's East Lansing Campus. Check out the schedule below, which offers hands-on, fun learning with Chemistry, Physics, Math, Engineering, Natural

Science, and Machine Building. Morning classes, 9am-noon. Afternoon classes, 1-4pm.

July 12-15 AM: Fun with Physics (Gr 2-3). PM: Wetland Explorers (Gr 4-8)

July 19-22 AM: Rockets & Robots (Gr 6-8). PM: Classroom Arcade (Gr 4-5)

For details or to register for Summer Youth Camps, visit lcc.edu/seriousfun.

Nature Discovery

5900 N. Williamston Road
517.655.5349

naturedisc87@gmail.com

Williamston, MI 48895

www.naturediscovery.net

Raise Caterpillars of Big and Beautiful Polyphemus or Luna Moths this Summer!



A Fantastic Hobby & Unique Gift!

*Fertile eggs and young larvae available
for sale now and thru June.*

*Four eggs or larvae of one species with
complete care instructions, \$12.*

*Contact us to make pickup arrangements.
Ask us about acquiring larger quantities
or additional species to raise.*



A close-up photograph of a cicada resting on a large, vibrant green leaf. The cicada has a dark, segmented body and transparent wings with prominent veins. The background is a soft-focus green, suggesting a natural outdoor setting.

Our sincerest thanks to those who have supported us through generous donations, including these donors this past month...

Anonymous

Jill Canny

Sandy Carey & Family

Jan Heminger

Dorothy & Giovannini Perri

Eric Petrie

Susan Rusnik

Julia & Mike Spalding

Stepping Stones Montessori

Straits Area Audubon

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Zwickle Family

Climate Change is the Foremost Issue

The op-ed, *We Need to Treat Climate Change as the Emergency That It Is*, argues that the media's and our attention spans are still falling woefully short. According to opinion polls less than a quarter of the public hear about climate change in the media at least once a month, and only 26 percent of Americans say they are "alarmed" about climate change.

<https://www.aljazeera.com/opinions/2021/6/3/we-need-to-treat-climate-change-as-the-emergency-that-it-is>

Got Netflix? Check out a new documentary hosted by David Attenborough entitled, *Breaking Boundaries: The Science of Our Planet*. This review from *The Guardian* includes the trailer.

<https://www.theguardian.com/environment/2021/jun/04/david-attenborough-netflix-documentary-australian-scientists-break-down-in-tears-over-climate-crisis>

Although the message to mankind to get its act together and soon, is clear, this *New York Times* review pans the documentary's style.

<https://www.nytimes.com/2021/06/04/movies/breaking-boundaries-the-science-of-our-planet-review.html>

-JM

The next generation would be justified in looking back at us and asking, “What were you thinking? Couldn’t you hear what the scientists were saying? Couldn’t you hear what Mother Nature was screaming at you?” -Al Gore

I don’t want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. I want you to act. I want you to act like you would in a crisis. I want you to act like your house is on fire, because it is. - Greta Thunberg

Scientific findings should never be distorted or influenced by political considerations.

- from President Biden’s Memorandum on Restoring Trust in Government through Scientific Integrity and Evidence-Based Policymaking.



Less Beef = Less CO₂
Cowspiracy.com

**[Union of
Concerned Scientists**
Science for a healthy planet and safer world



Worldwarzero.com



RSPO.org



insideclimatenews.org

Become a fan of *Nature Discovery* on Facebook!

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