

# Cicada BROOD X TIME CAPSULE

Record during the 2021 emergence • Open at the next emergence in 2038

Have you heard of Brood X? Also called the Great Eastern Brood, Brood X is a group of periodical cicadas – insects that appear only once every 17 years in eastern North America. Last seen in 2004, these amazing insects will emerge from the soil this spring to make their 2021 debut. Then, after less than two months above ground, they will disappear into the soil for another 17 years.



**Celebrate this unique event by creating a TIME CAPSULE!!**

- Use this booklet to record facts about yourself, the world in 2021, and cicada Brood X.
- Seal everything inside a shoe box or other container.
- Open your time capsule in 2038 when Brood X emerges again and see how things have changed.

For more information visit: [ento.vt.edu](http://ento.vt.edu) and [hokiebugfest.org](http://hokiebugfest.org) or



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## FUN FACTS About You

Name \_\_\_\_\_

Age/grade \_\_\_\_\_

Height \_\_\_\_\_

Weight \_\_\_\_\_

Shoe size \_\_\_\_\_

Address \_\_\_\_\_

Describe your room \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Self Portrait

Did you know...  
Cicadas are white to cream  
colored when they shed  
their "exoskeletons"?  
They darken as they  
harden.

## FUN FACTS About Brood X

**Common name:** Periodical cicada, Brood X (includes 3 species)

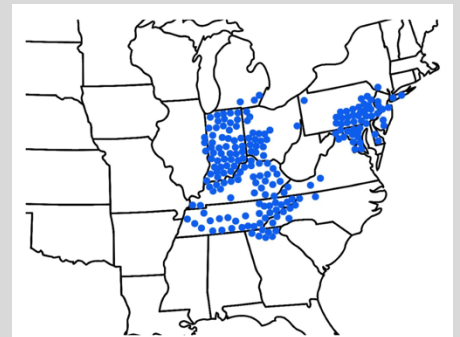
**Scientific names:** *Magicicada septendecim*,  
*Magicicada cassini*, and *Magicicada septendecula*

**Age:** 17 years

**Height (length):** 1 to 1  $\frac{1}{2}$  inches

**Address:** Southwestern and Northwestern VA and parts of  
DC, DE, GA, IL, IN, KY, MD, MI, OH, NC, NY, PA, TN and WV.

**A cicada's "room":** Periodical cicadas spend most of their  
lives 18-24 inches deep in the soil near roots of woody plants.



Gene Kritsky, Mount St. Joseph University

Periodical cicadas are found only in eastern North America and can have either 13- or 17-year life cycles. Periodical cicadas that are in the same stage of development, and that emerge together in a given region during the same year, are known as a single "brood." Each brood is designated by a Roman numeral. Brood X (10) is one of the 17-year cicada broods we see in southwestern Virginia.

# Your Favorites

Food \_\_\_\_\_ Color \_\_\_\_\_

Friend \_\_\_\_\_ Teacher \_\_\_\_\_

School subject \_\_\_\_\_ Pet \_\_\_\_\_

Movie \_\_\_\_\_ TV show \_\_\_\_\_

Song \_\_\_\_\_ Activity \_\_\_\_\_

Family tradition \_\_\_\_\_

Online game \_\_\_\_\_ App \_\_\_\_\_

Form of communication \_\_\_\_\_

## Brood X FAVORITES

**Food:** When underground, cicadas suck nutrients from the roots of woody plants. This feeding does not commonly harm plants.

**Family tradition:** Every 17 years, when soils warm to 64°F or more, they emerge from the soil.

**Form of communication:** Males use special organs called "tymbals" to produce a loud sound to attract females. When many males "sing" together, the sound can exceed 100 decibels (almost as loud as a chainsaw).

**Activity:** Shortly after coming above ground, females cut tiny slits in the stems of trees and woody shrubs where they will lay their eggs. When the eggs hatch, the immature cicadas, called "nymphs," will burrow into the soil. After 17 years underground, the nymphs will emerge from the soil, shed their "exoskeletons" (outer shells) to become adults, and start the process anew.



# Life in 2021

Price of:

Gallon of gas \_\_\_\_\_

Gallon of milk \_\_\_\_\_

Loaf of bread \_\_\_\_\_

Stamp \_\_\_\_\_

U.S. President \_\_\_\_\_

Current events \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What type of phone do you or your parents have?

\_\_\_\_\_

Live and in concert  
every night for the  
next several weeks, it's  
*THE CICADAS!*



I hear they  
are no longer  
an  
underground  
band.

**Fun things to add to  
your time capsule!**

- Newspaper clippings
- Family photo
- Postage stamp



# Cicada Brood X

Date they emerged \_\_\_\_\_

Location found \_\_\_\_\_

How many did you count? \_\_\_\_\_

Did you hold one? \_\_\_\_\_

Did you find one with blue eyes? \_\_\_\_\_

Special memories \_\_\_\_\_



[cicadamania.com](http://cicadamania.com)

## More fun things to add to your time capsule!

- Photos of the cicadas
- Photo of you holding a cicada
- Recording of the cicadas' song
- Photo of a tree under which you found cicadas

Did you know...  
When a cicada emerges from the soil, it sheds its "exoskeleton" to change from a nymph to an adult? Cicadas leave these "shells" on vertical surfaces. How many can you collect?

## Cicada Portrait



# PREDICTIONS

*What do you think life will be like when Brood X emerges again in 17 years!*

What year will it be? \_\_\_\_\_ How old will you be? \_\_\_\_\_

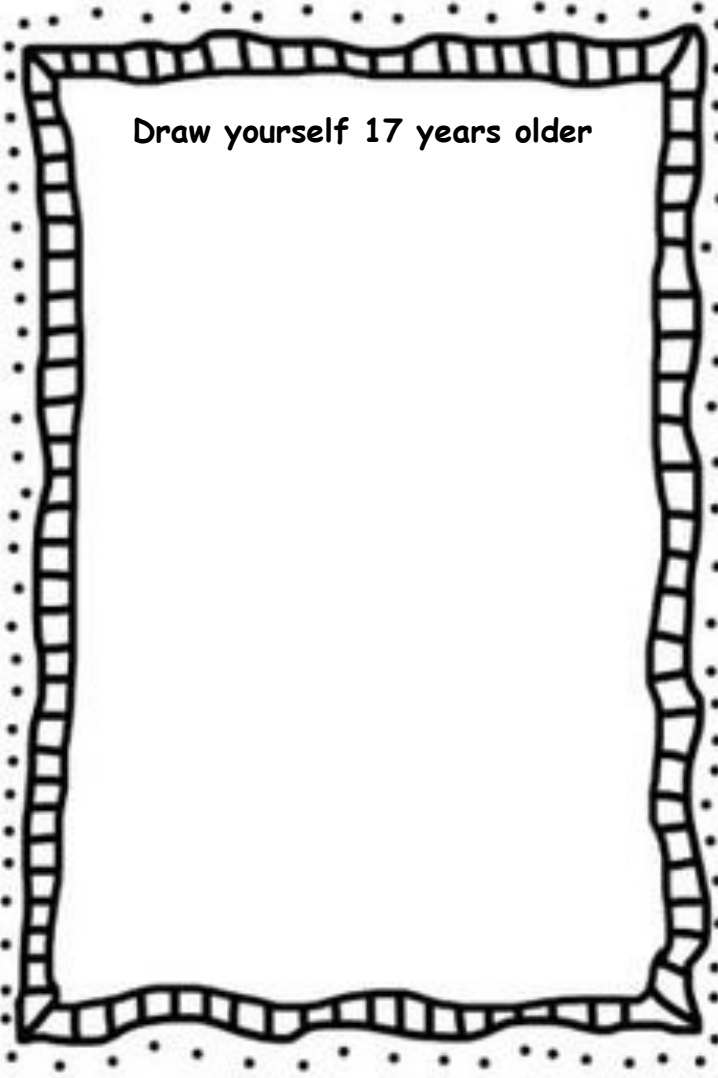
Where will you be living? \_\_\_\_\_

What job will you have? \_\_\_\_\_

Will you be married? \_\_\_\_\_

Will you have children? \_\_\_\_\_ If so, how many? \_\_\_\_\_

What new invention will there be? \_\_\_\_\_



Draw yourself 17 years older



Write a letter to your future self