

# Periodical Cicada Emergence Update!

WI DNR Forest Health Protection

Mark Guthmiller, April 2007

## 17 Year Periodical Cicada “Brood XIII”

*Magacicada sp.*

**Introduction:** It’s that time again! After spending 17 years underground as young nymphs feeding on tree roots, the 17 year periodical cicada is poised to emerge in late May or June this year. Numbers can range from 100’s of thousands to 1.5 million cicada’s per acre. Often incorrectly called the 17 year “locust” this genus of cicada’s emerge in mass once every 13 or 17 years. In Wisconsin, we have a 17 year emerging “brood” known as “brood XIII”. There are up to 3 species of cicada’s that emerge together at the same time from a given 17 year brood. There are many broods through out eastern North America with different emergence years. Brood XIII is found in southern Wisconsin, northern Illinois, eastern Iowa, and Indiana near Lake Michigan. To check maps with broods and associated emergence years go to:

[http://insects.ummz.lsa.umich.edu/fauna/michigan\\_cicadas/Periodical/Index.html#Magacicada\\_broods](http://insects.ummz.lsa.umich.edu/fauna/michigan_cicadas/Periodical/Index.html#Magacicada_broods)

**Biology:** In late May or June, after spending 17 years feeding on roots underground, the young (nymphs) emerge at night in mass from the soil. The nymphs climb up trees, posts, or other structures to molt (shed their skin) to transform into winged adults.



Nymph emergence holes in late May or June.



John J. Mosessonbii, NBII

Adult periodical cicada’s have bright red eyes, a black body, and orange wing veins.

The adult males have “tymbal” structures on their abdomens which allow them to make a characteristic buzzing or singing sound during the day to attract females. Cicada species can be identified by the unique sound of their songs. After mating, the female lays up to 600 eggs in a series of slits on small twigs and branches. In about six to seven weeks the eggs hatch and the nymphs fall to the ground and burrow under the soil to find a root to feed on for another 17 years.

**Damage:** Periodical cicada's are not harmful to people and do not sting or bite defensively. They are also not poisonous and are eaten by many animals including humans. Periodical cicada's can cause damage to young nursery stock, fruit orchards, and recent tree plantings. The damage caused by this insect is from extensive egg laying on small branches that weaken and cause the branch to break. For large trees this does not affect the general health of the tree. Pesticide treatments are generally not warranted or effective due to the large numbers of cicada's that can fly in from a neighboring area. Covering small trees and shrubs with a fine mesh or cheesecloth, secured at the trunk, may reduce damage.



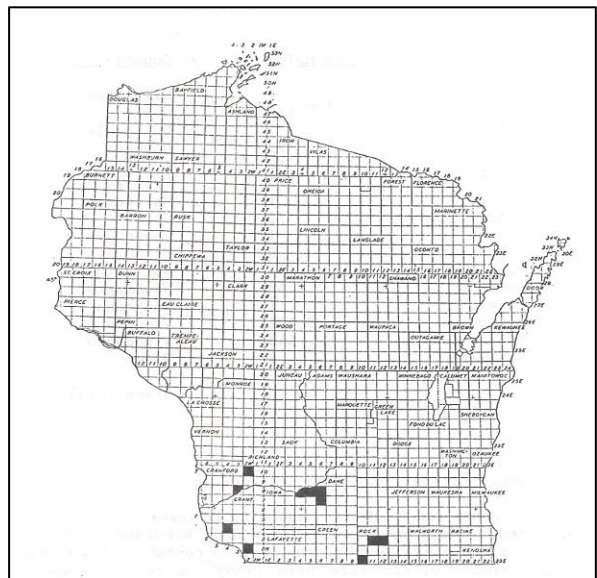
Egg laying (oviposition) injury caused by the female periodical cicada.

In Wisconsin oviposition injury has been reported on numerous tree species including maple, elm, poplar, juniper, basswood, sumac, boxelder, walnut, and oak.

**Emergence records:** Records of emergence of periodical cicada's in 1973 and 1990 include localized areas within Crawford, Dane, Iowa, Grant, Richland, Rock, Sauk, and Walworth Counties of southern Wisconsin. There have also been reports of emergence in Racine and Kenosha Counties from other sources.



Broken branch "flagging" to this elm caused by excessive egg laying.



Map of periodic cicada emergence locations 1990 (DNR & DATCP).

\*Photo credits unless labeled: Dave Hall, Wisconsin DNR