SHORT COMMUNICATION

OBSERVATIONS ON PERIODICAL CICADAS (BROOD XIII) IN INDIANA IN 2007 (HEMIPTERA: CICADIDAE: MAGICICADA SPP.)

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ABSTRACT. The periodical cicada Brood XIII emerged during May and June 2007 in Lake, Porter, and LaPorte counties in northwestern Indiana. The county distribution of this, the smallest of Indiana's cicada broods, has not changed during the past century.

Keywords: Periodical cicadas, Magicicada

Periodical cicadas belonging to the 17-year Brood XIII emerged in northwestern Indiana during May and June 2007. All three periodical cicada species, *Magicicada septendecim*, *M. cassini*, and *M. septendecula* were observed during this emergence. The first mapping of this brood occurred in 1888 when F.M. Webster surveyed that year's emergence (Webster 1899).

Brood XIII also occurs in the northern half of Illinois, southern Wisconsin, and eastern

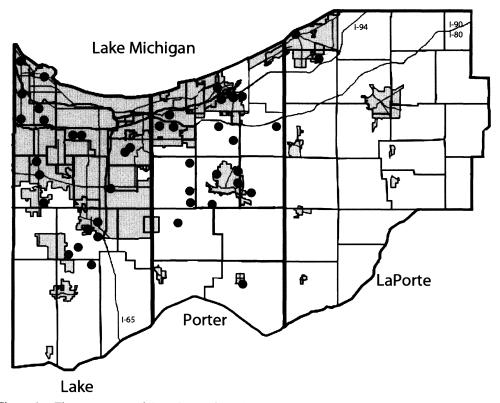


Figure 1.—The emergence of Brood XIII in Lake, Porter and LaPorte counties in northern Indiana. Township divisions are the smaller areas within each county, gray areas represent incorporated areas, interstate highways are shown as marked, and the small circles are areas where cicadas were observed or reported.

Iowa (Kritsky 2004); and intense media coverage out of Chicago provided an opportunity to map the Indiana's 2007 emergence with more precision than in the past. Both the *Chicago Tribune* and the Lake County Forest Preserve posted websites enabling the public to report the location where cicadas had been observed. These records, combined with a survey by the authors, were used in mapping the 2007 emergence.

The emergence also provided another test of the emergence model developed by Kritsky et al. (2005) to predict the first day in May when the emergence should start. News media and websites, such as CicadaMania.com, promoted interest in the model's predicted date, and this public interest resulted in postings from people in the area describing the emergence. The temperatures used for the model were from the National Oceanic and Atmospheric Association's records for O'Hare Airport. The model correctly predicted the emergence date for the suburbs that surround the airport.

The heavy emergence began on 21 May in the western suburbs of Chicago and 24 May in Hobart, Indiana, with cicadas eventually being reported from scattered locations in Lake, Porter, and LaPorte counties (Fig. 1). Most of the reports of cicadas were from Lake County, with reports from Whiting, East Chicago, Hammond, Munster, Schererville, Dyer, St. John, Cedar Lake, Crown Point, Merrillville, and Hobart. In Porter County, cicadas were observed in Portage, Lake Louise, Valparaiso, and Chesterton. The cicadas were reported only from Michigan City in LaPorte County. The county distribution of this brood has not changed in over a century; however, the 2007 emergence was quite spotty and reduced compared to the previous emergence in 1990 (Kritsky & Young 1991). Brood XIII will next emerge in the area in 2024.

ACKNOWLEDGMENTS

We thank the Lake County Forest Preserve and the *Chicago Tribune* for sharing reports from their websites. We also thank John Cooley, Dave Marshall, and Dan Mozgai of CicadaMania.com for their help with the mapping efforts.

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- Manuscript received 23 January 2009, revised 23 March 2009.