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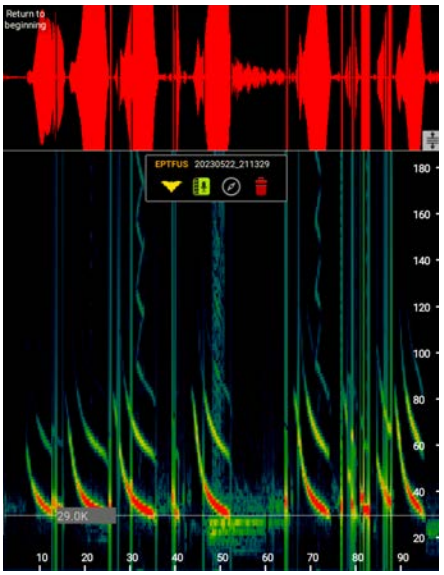
(Below) Aborrum dolo illaut dolorer ovidelecerum vellentia dis militat labo. Nam ut a dit volupti.



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THINGS THAT SHRIEK IN THE NIGHT

BY LAUREN JOHNSON, ASSISTANT COLLECTIONS MANAGER OF MAMMALS, GANTZ FAMILY COLLECTIONS CENTER

A new Field Museum initiative has taken flight this year. In an effort to document small mammal diversity across Chicagoland, Museum staff have expanded their monitoring to include bioacoustics. What they are finding is a little batty.

Bats play a significant role in our ecosystem by means of pollination, seed dispersal, and most importantly, pest control. The bats in Chicago are insectivorous and can devour thousands of pesky mosquitos every night. Despite their ubiquity and ecological significance, few studies have looked at urban bat populations, distribution, and habitat constraints through acoustic monitoring. Passive acoustic monitoring systems use special technology to record echolocations. The Field team and I are using an Echo Meter Touch 2 Pro to track bats across Chicago.

This compact, yet robust, device can track ultrasonic calls in real time and visualizes the echolocations using a built in spectrogram. The team conducts non-invasive walking transects (a straight line that cuts through a natural landscape) in select parks and as bats fly nearby, the spectrogram captures their unique calls. This data can help scientists determine which bat species are present and how they are foraging. Of the thirteen types of bats native to Illinois, eight species are commonly found around the Chicagoland area. From little and big brown bats to the flashy eastern red bat, each species has their own feeding behavior and distinctive call. Thus far, we have recorded and identified six of the eight bat species in Chicago. The data will be compiled at the end of the sampling season this fall and contribute to a larger bat monitoring program spearheaded by Liza Lehrer at the Lincoln Park Zoo's Urban Wildlife Institute, which has been ongoing since 2018.

It is important to monitor our bats, especially as populations continue to decline due to White-nose Syndrome—a deadly fungal infection that affects many species of bats—and habitat loss. Chicago bats face the unique challenge of constantly adapting to their ever changing city environment. Bats are slow to recover from population disturbance because of their low reproductive rates, and expanding urbanization threatens bat roosting sites. By gaining a clearer understanding of Chicago bats, we can be better advocates for them and secure habitats that preserve the incredible mammal diversity in Chicago.