

# We put up a bat detector for five years,

# THIS IS WHAT WE FOUND



#### WHAT?

We installed a bat echolocation detector to record bat calls as they flew by during the night.

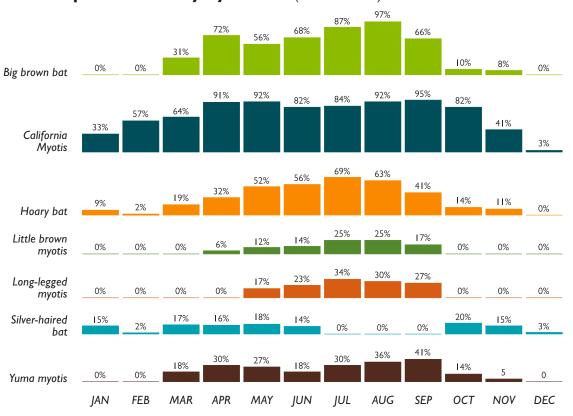
## WHERE?

The Family Farm on the south end of Woodland Park Zoo.

#### WHY?

Not enough is known about local bats. Detectors help us learn more without disturbing them.

# Bat Species Activity by Month (2020-2024) in Woodland Park Zoo's Family Farm



What patterns related to bat detections throughout the year do you notice in the graph? In our area, female bats have their pups in the summertime. Mating occurs in fall, then most species hibernate or migrate away each winter. Those bats return to the area in late spring. You may see months of higher or lower bat detections that align with those activity patterns. Or you may see different trends for some species!



# WHAT IS **ECHOLOCATION?**

Echolocation is how bats "see" in the dark. Bats in the Pacific Northwest produce sound waves by contracting their larynxes (voice box) and emitting the sounds through their mouths. These sound waves bounce off an object, echoing back to the bat telling it what it is looking at.



# WHAT IS A BAT **DETECTOR?**

A bat detector is a microphone that detects ultrasound (sound frequencies that are too high for humans to hear). Some bat detectors, like the device placed at the zoo's Family Farm, record bat calls and allow us to analyze the species that made the calls. Other bat detectors can convert bat echolocation calls to frequencies that are audible to humans.



#### WHAT DOES THIS MEAN?

Many bat species are here in Seattle and some may even hunt in your backyard! Recording bat calls tells us where they are and which species are around, though not how many. There are 10 bat species found in western Washington, and we've detected 7 of them right here at the zoo!



# WHY DOES IT MATTER?

All bats in the Pacific Northwest are insectivorous and are the main predators of nocturnal insects including moths and beetles, many of which can be agriculture pests. Bats currently face many threats such as habitat destruction, global climate change and white-nose syndrome. Learning about bats, such as where they hunt and roost in cities, is the first step to finding out how we can help them.

The detector was installed and is maintained by Bats Northwest and Woodland Park Zoo; the data analysis is conducted by John Bassett and Albert Meerscheidt of Bats Northwest.

## WANT TO LEARN MORE?

You can observe and share about bat activity in your area by participating in our Bat Activity Trends program. Follow the link in this QR code to learn how! Visit these websites to explore our local bats and learn what you can do! zoo.org/batactivity | batsnorthwest.org | wdfw.wa.gov/bats





