

## Missouri

### GOING BATTY: Cave Gate Will Protect Endangered Gray and Indiana Bats

*Bats are crucial to healthy ecosystems and human economies, but habitat loss and a deadly fungus are putting bat populations at risk. Here in Missouri, The Nature Conservancy and our partners are helping bats by installing a gate at one of the most important bat caves in the state.*

#### Why do we need bats?

Bats benefit crops, keep forests healthy, prevent disease, and make people more comfortable - all just by eating! Bats are the only major predator of night-flying insects, such as beetles, mosquitoes, and many crop pests. Missouri's population of gray bats alone eats about 540 tons of insects each year. This natural pest control prevents crop loss without the use of pesticides - nationwide, it's estimated that bats save the agriculture industry about \$3 billion.

On the flip side of the food chain, bats are a food source for owls, snakes, and other animals, and bat droppings provide nutrients for many forms of cave life.

#### Why do bats need our help?

Gray and Indiana bats are federally endangered species. Their decline is largely due to habitat loss, human disturbance, and a devastating disease known as white-nose syndrome.



Installing the cave gate. Photo © Doug Ladd/TNC

#### CHIEF THREATS TO MISSOURI BATS

**Disease:** White-nose syndrome was detected in a New York bat colony in 2006. It has since spread to 19 states and 4 Canadian provinces. The disease is caused by a non-native fungus which disrupts bats' physiological functions, often resulting in a 90-100% mortality rate.

**Habitat loss:** Caves that are altered or vandalized can become unsuitable for bat colonies.

**Human disturbance:** Bat colonies can be disturbed when people enter caves or light fires near cave entrances. Hibernating bats may wake up too early, resulting in starvation, and startled roosting bats can sometimes panic and drop their babies.

## What is The Nature Conservancy doing?

In April 2012, a 30-ton steel gate was installed at the entrance of a cave in the Missouri Ozarks.

The gate will prevent people from illegally entering the cave, while allowing bats to easily fly into and out of the entrance. The cave is an important hibernaculum for endangered gray and Indiana bats.

This project is the result of partnerships with the Missouri Department of Conservation, the National Park Service, the Missouri Department of Natural Resources, Bat Conservation International, AmeriCorps, and Karst Solutions.

## What can you do?

Don't enter or camp near caves that may have hibernating or roosting bat colonies. After visiting any cave, properly clean your gear to prevent spreading the fungus (visit [www.fws.gov](http://www.fws.gov) for decontamination protocols). If you own property where bats live, contact the Missouri Department of Conservation for tips on protecting the colony.

Consider investing in The Nature Conservancy's work with a tax-deductible gift.

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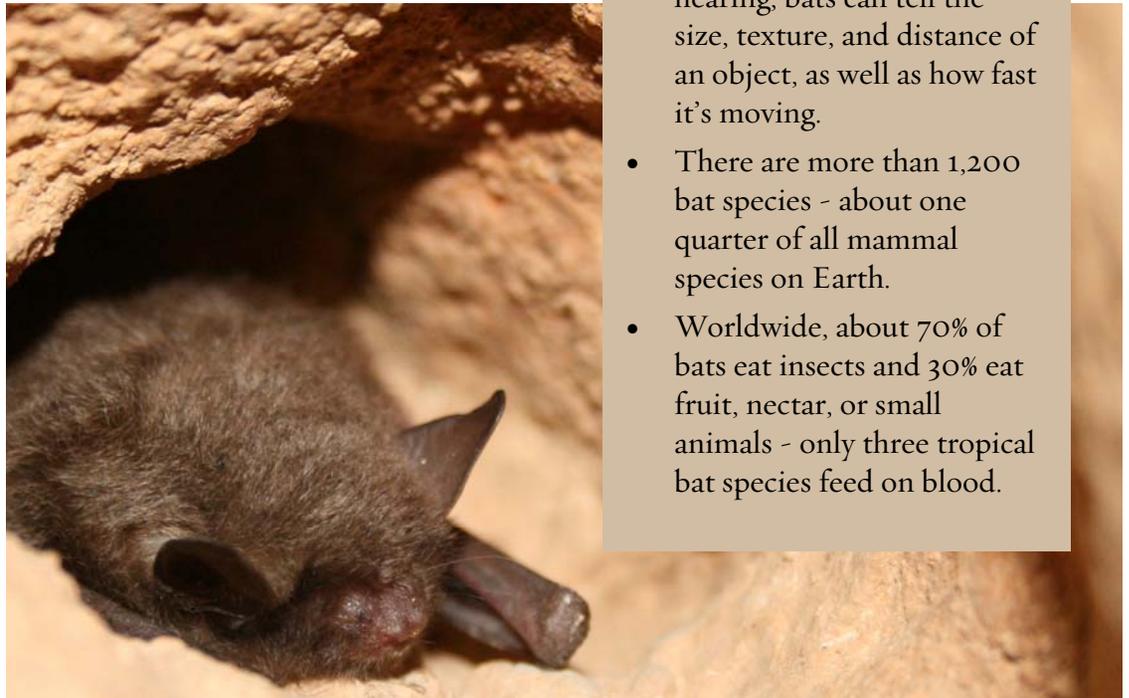
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The Nature Conservancy's mission is to conserve the lands and waters on which all life depends.



Gray bat in flight. Photo © USFWS



An Indiana bat in hibernation. Photo © Ann Froschauer/USFWS

## BAT BASICS

- Bats are important for pollination, seed-dispersal, and pest control.
- Bats are the only mammals that can fly.
- Contrary to popular belief, bats have good eyesight.
- Bats are the only land mammals that use echolocation. By emitting sounds and using their keen hearing, bats can tell the size, texture, and distance of an object, as well as how fast it's moving.
- There are more than 1,200 bat species - about one quarter of all mammal species on Earth.
- Worldwide, about 70% of bats eat insects and 30% eat fruit, nectar, or small animals - only three tropical bat species feed on blood.