

News Article

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Bats – Friends or Foes?

If you have experienced the occasional bat in the house, you may be asking whether bats are really friends or foes. Some people are just not a fan of bats – they think they're kind of creepy. But, bats also have many good qualities that make them an essential component of our ecosystem.

Bats are a flying mammal, and several myths surround bats. They rarely, if ever, attack people. There is a slight chance of someone encountering a rabid bat, but the great majority of bats that may invade a home are not rabid.

There are twelve resident species of bats in Indiana, including the big brown bat and the little brown bat (*Myotis* spp.) – the two species most likely to end up in a home. Most roost in caves, hollow trees and other natural shelters, but the big brown bat and little brown bat commonly roost and breed within buildings. The Indiana bat (*Myotis sodalis*) is both a state and federally endangered species.

Bats primarily eat insects, and one of their favorite entomological delicacies is mosquitoes. So, if you hate mosquitoes, thank a bat for its eating habits. Researchers at the University of Wisconsin-Madison (Wray et al., 2018) found that bats may indeed be effective exterminators of the aggravating insects, and that little brown bats eat more mosquitoes than big brown bats. Bats have been well documented as suppressors of some agricultural insect pests.

The Indiana Department of Natural Resources' webpage on bats indicates, "Indiana bats feed entirely on night-flying insects. Bats can eat up to 3,000 insects per feeding. They locate insects by emitting high-pitched sounds and waiting for an echo, which allows them to zoom in on a bug's location. The fat reserves accumulated by devouring insects during summer and fall allow the bat to sustain itself during hibernation."

There are annoyances and potential dangers to bats in a home. The scratching and squeaking sounds are annoying. Their droppings and urine stain surfaces and produce objectionable odors. Exits from home will exhibit staining or smudging around and below the exit, and old, dried droppings in an attic may look like coffee grounds. Extreme caution should be exercised when cleaning old droppings, including the use of a respirator and disposable plastic gloves.

The long-term accumulation of these droppings in attic spaces has been associated with the respiratory disease Histoplasmosis. Fungal spores are produced by decomposed droppings after 2-5 years or longer that can lead to the disease. This is also a danger with accumulated bird droppings over time.

For more information about Histoplasmosis, find information at the Centers for Disease Control and Prevention website: <https://www.cdc.gov/fungal/diseases/histoplasmosis/index.html>.

Brian J. MacGowan, Purdue Extension wildlife specialist, recently wrote about excluding bats from structures. "This process is typically called 'venting' where access points (both in use and potential) are identified, most are sealed off, and the remaining points are fitted with one-way doors that allow bats to leave but not reenter," he said.

"It is always a good idea to limit exposure to wildlife animals as much as possible," said MacGowan. "For bats, venting in the end of summer and fall and preventing reentry is a logical first step."

"If you have bats and want to solve the problem now is the time to contact professionals who can help," he said. "Unfortunately, most nuisance wildlife control operators don't do bat work because it requires specialized equipment and the difficulty of it." Because of that, MacGowan said control will not be cheap for the customer. Many people construct bat houses to attract bats. While beneficial, he said artificial bat houses will not attract bats from an attic.

While it is wise to exclude bats from our home, a great need for conservation still exists. The Indiana bat is facing challenges, including loss of habitat and white-nose syndrome.

Indiana DNR states that white-nose syndrome is hurting the Indiana bat population and has now been found in 38 caves in Indiana. "Although researchers are scrambling to find a solution for this disease, we are likely years from practical applications of such a solution in the wild. Now more than ever, conservation efforts that benefit bats are imperative," they said.

Find more details, including important attic cleaning tips, in Purdue Extension's publication on bats, available at the Education Store: www.edustore.purdue.edu. Much of the information I've shared has been sourced from that publication. Additionally, find a recent article on bats from MacGowan at: <https://www.purdue.edu/fnr/extension/bats-in-the-belfry/>.