Bats

Over the years, bats have been stigmatized by folklore and misinformation. It is not their goal in life to be tangled in your hair, suck your blood or give you rabies. They simply want to go about their business of feeding, roosting, and reproducing in the areas they have grown accustomed to over generations. There are 986 species of bats worldwide and in each case, they are key members of the ecosystems they live in. They are also interesting to scientists because they are the only mammals that can truly fly. Arizona has 28 different species of bats. Most are insectivorous and may consume more than one-half their body weight in insects each night.

Bats eat insects, pollinate plants, and disperse seeds. Arizona's insectivorous bats feed on mosquitoes, beetles, flying ants, roaches, moths, centipedes, crickets, grasshoppers, cicadas, and other insects that humans consider pests. A few Arizona species feed on pollen and nectar of agave, saguaro, organ pipe, and other cactuses. This feeding behavior not only benefits the bats, but cross pollinates the flowers, which in turn, diversifies the gene pools of these plants. Many bats are known to feed on nectar, fruit, pollen, and insects.

A large colony can eat literally tons of insects annually. Other bat species are important pollinators of native plants. Many bats live in large colonies. If the colony is in your attic or other building, this can cause unwanted noise and pose potential health risks to people living in close proximity.

Before attempting to manage nuisance bats, it is essential to verify that bats are actually the cause. The only way to permanently rid a building of bats is to eliminate all possible entrances. Repellents and traps are not permanent control methods. Bat-proofing a building is the only efficient and permanent way to eliminate bat problems.

Bats should not be excluded from roosts when females are raising pups. This is generally May through August in Arizona. Mothers often leave young bats in the roost when foraging at night. If bats are excluded during this time, the pups will be inadvertently trapped inside the roost and killed. Some bats also hibernate in buildings during the winter months. Winter exclusions should be performed only if it can be determined that no bats are hibernating in the building. If bats are present during the winter months, exclusion should be postponed until the spring.

Bats may enter buildings through openings such as louvers, vents, broken windows, worn-out siding or holes around eaves and cornices. Other problem areas are faulty ridge vents, crevices in the soffit and fascia, chimneys that have slumped away from buildings, loose flashing, and the interiors of abandoned chimneys. Smaller bat species can crawl through slits as narrow as 3/8 of an inch. Therefore, it is essential to seal all openings that are 1/4 inch or larger.

Examine buildings for bat activity at twilight to determine where bats are entering and exiting the roost. Look for brown stains at the roost openings caused by oils on the bats' fur rubbing off on the outside surface of the building. Guano (droppings) may also be visible beneath roost openings. Generally, most bats will leave the roost at dusk and within 30 minutes after the first bat exits. Observing the building within an hour after dusk is the best way to locate openings used by bats as they fly out.

The next step is to screen all potential openings with fiberglass window screen fastened in a way that allows bats to escape but not re-enter. Fiberglass screen material is available at home improvement or hardware stores. Do not use wire screening as it is not flexible. The top and sides of the screen should be affixed to the building at the roost exit and the bottom left open creating a one-way door. Bats will exit the roost and crawl down and out from under the screen, but when they return and attempt to land, their re-entrance is blocked by the screen. Leave the netting up for 5–7 days, and observe the bats exiting at night to see that progressively fewer bats are leaving each night and not using alternative openings.

Seal all holes after you are sure all bats are gone. Construction adhesive or caulking can be injected in cracks, crevices or any smaller entrances. Larger crevices may need to be stuffed with fiberglass screening before being caulked over. Large openings should be covered with sheet metal or with 1/4-inch mesh hardware cloth if ventilation is necessary. Foam is very messy to work with and can kill animals that come into contact with it; it should only be used in very complex or hard-to-reach areas. Bats, unlike many rodents, will not chew their way back into a roost.

In areas where bat populations are high and other suitable roosts are limited, homeowners should consider installing one or more bat houses. These simple structures are commercially available. Local ranchers are also installing wildlife escape ramps which allow bats and other small animals to climb out of livestock watering tanks in case they become trapped.

Many people are concerned that rabies is transmitted by bats. Rabies is an infectious viral disease that invades the central nervous system of humans and other warm blooded animals. Most often it is noticed in dogs, cats, foxes, raccoons, skunks, coyotes, bats, and livestock. Worldwide, 30,000 fatal human rabies cases occur per year. Ninety-nine percent of these are from dogs. However, any bat moving slowly enough that you could catch is very likely sick. Contact Arizona Game and Fish or Yavapai County Animal Control if you find such an animal.

Additional Resource:

Bat Conservation International, Conserving the world's bat populations.

University of Arizona - *AZ1675*
Bats

January 28, 2024

Adapted from original Backyard Gardener publications by Jeff Schalau, Agent, Agriculture & Natural Resources, University of Arizona Cooperative Extension, Yavapai County