

NEWSPAPER ARTICLES

Bats and Barn Owls: Safe and Effective Pest Control (March 22, 2025)

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Using rodent bait and insecticides may help control mice, gophers, and mosquitos, but using them can have consequences for our pets, beneficial insects, and the environment. A better way to control these pests can be to invite and encourage bats to take care of the insects and barn owls to help control rodents such as mice, gophers, and ground squirrels.



Bats are the only true flying mammals and range from bumble bee-sized up to flying fox bats that have a wing span of 6 feet. There are more than 1,400 species of bats in the world, with 25 species in California. There are five main colony-type species in the Central Valley: the big brown bat, the little brown bat, the Mexican free-tailed bat, the Yuma myotis bat, and the pallid bat. Some bats in South America, Africa, Asia, and Australia eat fruit, nectar, and pollen. Many plants depend on bats for pollination. There are bats that feed on blood. They are not actually vampire bats because they actually suck blood, but make a scratch in an animal such as deer, wild pigs, and cattle

and lick the blood. They live in Mexico and Central and South America.

The bats in our area are insectivores. They fly at night, finding insects using echolocation. Some, such as the big and little brown bats, consume flying insects such as mosquitos and moths. Others, such as pallid bats, prefer crawling insects such as crickets and beetles. Bats consume about half of their body weight, which can be an average of 1,000 to 3,000 insects every night.

The five above-mentioned bat species can be attracted to an area by installing a bat house. Bat houses can cost around \$30.00 to \$100.00, depending on the maker and the size. You can find plans for bat houses online or in publications such as *Songbird, Bat, and Owl Boxes* from the University of California Agriculture and Natural Resources. Each house can hold 50 to 300 bats, depending on how many chambers the house has.

Some people are reluctant to encourage bats near their homes due to concerns about rabies and other health issues. Like all mammals, bats can contract rabies, but in random testing, only 0.5% of bats have been found to be rabid, and 99% of rabies deaths worldwide are caused by dog bites. Bats are clean animals, like cats, but their guano can be a problem unless you regularly clean it up and use it for fertilizing your plants. When putting a bat box near your house, choose a spot that faces north or east, 8-20 feet off the ground, with enough space for them to drop down and fly away.

If gophers, mice, or other rodents are an issue on your property, barn owls might be a good natural way to control those populations. They have been used in vineyards, orchards, and other croplands since at least the 1800s. While traveling in Central California, you may see some barn owl boxes on poles in many fields and vineyards. A California study of barn owl pellets in agricultural lands found that the diet consists of pocket gophers, mice, and voles. One nest of a mating couple and their young ate 843 pocket gophers, 578 voles, and 1540 mice. In urban areas, they feed more on mice, rats, and gophers.

Barn owls are medium-sized raptors at 12-16 inches high and with a wingspan of 39 to 49 inches. They have sharp talons for grasping prey and hooked beaks made to tear the meat of larger animals. Their heart-shaped faces have soft feathers which funnel sound to their small ears. Their large eyes, made for seeing in the dark, make them excellent nocturnal predators. They also rely on their hearing to help find their prey. Barn owls have light, soft feathers, which help make their flight so silent that they can hear little rodents running, but rodents can't hear them approach. The call of barn owls is a long, hissing, loud scream. If you hear the common soft "hoo-hoot" sound, it is not a barn owl but probably a great horned owl.



A nesting couple will lay six to eight eggs once or twice a year. The eggs hatch in about one month. The mother will sit on the eggs and tend to the hatchlings for two weeks after they hatch, while the father brings food back to the nest. After that, there is so much demand for food from the growing family that the mother has to join the father in providing food for the family. The owlets will be ready to fly and hunt for themselves after two months.

Barn owl boxes can be purchased ready-made online for \$200-\$300, kits for about \$150, or there are plans available online or in the book previously mentioned. They should be placed 8-20 feet off the ground on the side of a building or on a pole facing away from busy roads, railroads, or other hazards.

Bats and owls can be a valuable ally for farmers and homeowners who wish to practice biological pest control and reduce the use of pesticides. Home gardeners can encourage these natural predators to take up residence in their own backyards with just a little research and relatively minimal effort.

Questions? Call the Master Gardeners:

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