

Bats – Gardeners’ Friends
By Jim and Nancy Bliss

A bat flies silently through the dark of night, then suddenly twists and strikes. Our first thought at that kind of an image is that we are in the midst of a horror movie but the real truth is far different. Though creatures of the night they have a profound effect on the daylight world that we inhabit. American bats are truly nocturnal and many people will go through their whole life never seeing one. This deep connection with the night and stories of vampire bats (which are tiny and don’t exist in the US) have given bats a bad rap.



Mexican Free-Tailed Bat: from Songbird, Bat, and Owl Boxes Publication. Photo by Merlin D. Tuttle

For farmers and gardeners, bats are truly their friends. The benefit to US agriculture is over \$3.7 billion a year. Think of a nasty flying insect pest and bats eat them. At our home in the Gold country, bats help make evening dining on our deck possible. Though difficult to spot as they flit through the deepening dusk, each bat can eat between half to all of its body weight every night. For our evening on the deck that means about 4000 mosquitos each, providing us with a bite-free night.

Moths are another favorite food for bats which provides my garden with welcome relief. Some foraging species of bats, like the Myotis bat can even strike insects on trees, on the ground or from the leaves and branches of trees, making a whole other group of insect pests that don’t fly at night a target. When I think of how long it takes me to catch a single cabbage moth that feeds on my broccoli and cabbage, it gives me yet another reason to be thankful for bats.

While it is true that bats can carry a number of diseases, including rabies without being affected, the study of their strong immune system may provide us with new means of protection to the ever-growing number of diseases that threaten us. This also means we need to take special precautions or call the Department of Fish and Wildlife before handling them. We are far more of a threat to them than they are to us. Disruption of their habits, including shut down of mines, riparian destruction, not to mention pesticides which they ingest as they feed on our pesky insects. Predators to bats abound; hawks, owls, cats, dogs, snakes, but none of those compare to the threat humanity poses.

The diversity of bat species is astounding. There are more than 1,100 species of these mammals on the earth. They range in size from a tiny bumblebee bat to the flying foxes with a 6 foot wingspan. But in our area there are 17 to 22 species, the largest being a Western Mastiff with a 2 foot wingspan. Bats have 1 to 2 offspring a year, often having ‘nurseries’ that tend the young. They live from 6 to 11 years and are nothing like rodents (another common myth).

They are truly remarkable in their ability to use echolocation to find their prey. Some species can hear the footsteps of insects on the ground, while others can fly up to 60 miles per hour with 1,000 beats per minute. They can forage over an incredible range of territory.

Bats are amazing and diverse creatures. Personally, I think more about attracting bats than I do about the fears that all the myths have created. They need a source of open water, for they actually swoop down and scoop up water while they are flying. Shelter is also needed where they will be undisturbed by predators. Bat houses are a great DIY project and there are great sites with plans on the internet. A little time online at sites like Goldcountrybats.org or Merlin Tuttle's bat conservation site: merlintuttle.org, will provide a wealth of enjoyment and information.

For those of us who garden, bats are our friends. Frankly anything that will catch a cabbage white moth or other insect pest has my eternal gratitude and bats are a great deal more efficient than I am.

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