



BAT FACTS FROM BATS NORTHWEST

- 1. How many kinds of bats are there?** There are more than 1100 species of bats in the world. Of these, about 200 are Megachiroptera, the large Old World "flying foxes" from Africa, Asia and the South Pacific. The remaining 900+ species are the Microchiroptera which are found worldwide except in the most extreme climates.
- 2. How big do bats get?** What is the smallest bat? Bats range in size from about 1 inch to about 1 foot from head to toe. The largest bats are the Old World fruit bats, some of which are over a foot long with a wingspan of 5-6 feet. The smallest is Kitti's Hog-nosed Bat, also called the Bumblebee Bat, which lives in Thailand and weighs less than a penny.
- 3. What do bats eat?** Bats eat a wide variety of things. Most eat some kind of insect or other invertebrate. Some eat larger prey such as small mice, lizards and even other bats. Some eat only fruit and pollen. A few species have become very specialized such as the fish-eating bat and the frog-eating bat. Probably the most specialized of all are the three species of true vampire bats that eat only blood. [Back to Top](#). All the bats of Washington and the Pacific Northwest eat invertebrates, mostly insects. They consume huge amounts, many of which we consider pest species because of the damage they do to our gardens, crops, and forests. A couple of our bats can eat larger prey. Pallid bats are known to eat scorpions and hoary bats are reported to eat small rodents or even other bats.
- 4. Do we have vampire bats?** No. Thousands of years ago there were species of vampires living in North America. But today they do not range further north than Mexico. The only vampire bats in the Pacific Northwest are in the zoo. Woodland Park Zoo in Seattle houses a small colony in their Nocturnal House, and they are well worth visiting.

- 5. How many kinds of bats do we have in the Pacific Northwest?** There are about fifteen species of bats found in Washington. These are the: Big Brown Bat, Western Pipistrelle, Silver-haired Bat, Spotted Bat, Townsend's Big-eared Bat, Pallid Bat, Hoary Bat, and seven Myotis or mouse-eared bats including the Little Brown Myotis, Yuma Myotis, California Myotis, Keen's Myotis, Long-eared Myotis, Long-legged Myotis, Fringed Myotis and Small-footed Myotis. The Western Red Bat is sometimes included on species lists but has not been confirmed for Washington. The Brazilian Free-tailed Bat is extending its range north and is now found in southern Oregon.
- 6. Do bats get tangled in your hair?** No. Bats navigate by echolocation or biosonar which is so sensitive they are capable of tracking the tiniest insect in total darkness. They can "see" a human with no problem at all. But bats do occasionally fly close to people while they are hunting. A possible reason is that the carbon dioxide that people exhale attracts mosquitoes, and the bats may be chasing them.
- 7. Are bats really blind?** No. All bat species have eyes and some have excellent eyesight. The Megachiroptera or "Old World" fruit bats rely totally on their eyesight to find food and most of these bats do not even have echolocation. Bats that hunt moving prey at night usually rely on their echolocation abilities but they still can see.
- 8. Are bats flying mice?** No. Because many bats are mouse-sized, gray and furry, people hundreds of years ago assumed they were related and often named them accordingly (i.e. Fledermaus in German). But taxonomically bats are more closely related to people than to mice. There are fossils of bats dating back to about 55 million years ago - bats complete with echolocation and very similar to the ones we know today. Rodents didn't evolve until about 25 million years ago. A look at lifestyle also points out the differences between bats and rodents. Mice will live a couple years producing large litters of babies every few weeks. Bats usually only have one baby a year but may live to be over thirty!
- 9. Will bats suck your blood?** No. Not even vampires "suck" blood. There are only three species of bats in the world that live on blood. These vampire bats all live in Central and South America. One kind prefers birds to mammals, and even the Common Vampire Bat prefers cows, sheep, pigs and horses over humans. If you were in an area inhabited by vampires and slept in the open, you could be bitten by a vampire bat. But the process is very different from the movies about Count Dracula. They would probably bite your toe or maybe your ear, not your neck. First they would lick the area, and then make a quick incision with their very sharp front teeth. Their saliva contains an anticoagulant that keeps the blood flowing and they lick it up rather than suck it. They take about one tablespoon and then leave, barely able to fly from the added weight. The danger to you? Not loss of blood but rabies, or another disease, passed to you from a previous victim.
- 10. How and why do bats roost upside down?** Bats have toes that lock in place when supporting their weight. They also have adaptations in their circulatory system that make the "upside-down" position possible. We can only guess at why. It does seem to give them access to very safe roosts such as the roofs of caves. It is also much easier to land under something than on top of something, which requires balance. And it is easy to take off from under a perch. All the bat needs to do is spread its wings and let go.

11. **How do bats catch insects in the dark?** Most bats have the ability to echolocate. They do this by emitting high frequency sounds and then using the echoes to determine what is in front of them, a sort of biological sonar. This ability is found in the Microchiroptera, (the small bats that inhabit most of the world), and in a rudimentary way in three species of the Megachiroptera, (the large fruit bats of Africa, Asia and the South Pacific). Bat echolocation can be extremely refined. Bats can vary their calls to determine size, distance, direction of movement, etc. of the insects they hunt. Some bats are able to distinguish the "Doppler Effect" from the wingbeats of a moth or detect something as fine as a human hair. Part of this ability is the acute hearing of these bats and some bats use only this sense -- listening for the footsteps of an insect in foliage or for the sound of a fish's fin breaking the surface, to find their prey. Echolocation calls vary by the species of bat and where it hunts. Most calls are well above our range of hearing, but a few are audible to us. One Washington bat, the Spotted Bat, is often recognized by its distinct and audible call. It hunts large prey in open spaces where low calls travel farther and are less detectible to the moths it hunts.
12. **What threats do bats have?** The biggest threat is now humans who either destroy bat habitat or, through ignorance, kill them outright. Bat predators include snakes, birds of prey, and small mammals, but historically, these animals probably affected bat populations less than weather. Storms can kill numbers of bats during migrations and long winters can kill even more. Currently humans are considered the biggest threat to bat populations because we can affect huge numbers by altering or destroying cave systems or cutting down old growth forests. Unfortunately our customs and folklore often depict bats as evil creatures, giving some people the excuse to go out of their way to kill them in creative ways.
13. **What are bats good for?** Bats are a vital part of the ecosystems in which they live. Many are considered "keystone species" because so many other plants and animals depend on them for survival. In each ecosystem that bats inhabit, they play an important part. Fruit-eating bats disperse the seeds of plants critical to habitats such as the deserts of the American Southwest and tropical rainforests. They are increasingly important in natural reforestation of cleared or burned areas. Nectar-eating bats pollinate many important plants, in some cases being the only pollinators. Insect-eating bats eat literally tons of insects every night. If we didn't have this natural pest control, we would be overrun with night-flying insects such as moths, beetles, flies and mosquitoes. Bats are important for what they provide as well as what they eat. Bat guano or droppings are one of the world's best fertilizers. And bat guano is also a major source of nutrients for the other life in some cave systems. We can thank bats for healthier crops and healthier people, for being major contributors to such ecosystems as rainforests, deserts, and cave systems, and for providing numerous items of use to humans such as balsa wood, mangos, carob, figs, tequila, cashews, guavas, bananas, rope fibers and fertilizer.