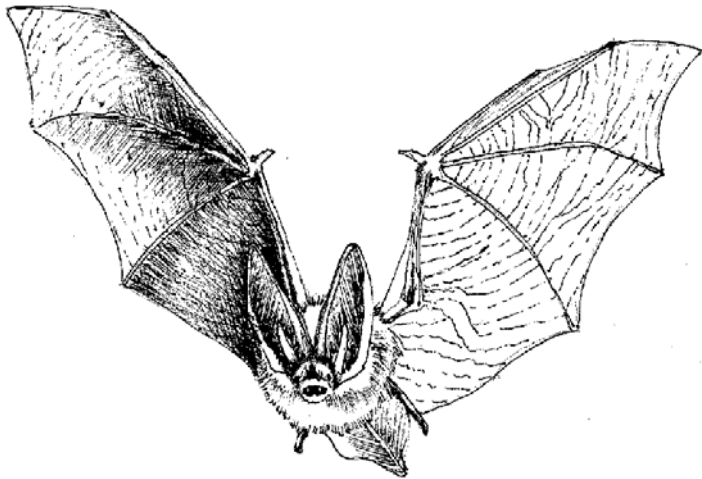




Bats



Bats at Lava Beds

Fourteen different species of bats inhabit Lava Beds National Monument. They all belong to the sub-order Microchiroptera, and seven of these belong to the genus *Myotis*. All eat insects and the majority live inside caves, although a few species dwell in trees or buildings. The most studied bat species within the monument are Townsend’s big-eared bats (*Corynorhinus townsendii*) and Brazilian free-tailed bats (*Tadarida brasiliensis*).

Behavior

Echolocation

Cave-dwelling bats leave their roosts as early as two hours before sundown to search for insects using echolocation, and return at sunrise. High frequency sound waves are produced by the vocal cords and reflect off objects in their path. The reflected waves returning to the bat’s ear. This allows the bat to determine the size of prey and their distance from other objects such as buildings, people and cave entrances.

Hibernation or Migration?

Most of the Lava Beds bats, including Townsend’s big-eared bat, hibernate during the winter. During hibernation, the bat’s internal body temperature is reduced to near freezing. Some of the bats living within the monument hibernate in clusters inside the caves. The

Brazilian free-tailed bat, a summer resident at Lava Beds, is active throughout the year and migrates to warmer climates in central and southern California and northern Mexico in winter.

Reproduction

Delayed fertilization is common in both hibernating and migrating bat species. Mating occurs in late fall, and the female stores sperm until ovulation occurs the next spring. Colonies are formed during the summer maternal season, and consist only of females and pups. In some species, densities in maternal colonies exceed five hundred pups per square foot!

Benefits

Pest Control

Bats in the vicinity of Lava Beds are insectivores, and their feeding habits help to keep insect populations low. One adult Small-Footed Myotis Bat is capable of eating up to six hundred mosquitoes in an hour. Townsend’s Big-eared Bats consume moths, and the Pallid Bat occasionally eats scorpions. One way to determine if moth-eating bats have been in an area is to look at the ground or cave floor. They eat only the soft body parts of insects and leave the wings.

Pollination

In other parts of the United States and throughout the world, bats also feed upon pollen and nectar. Bats move pollen from one plant or flower to another and fertilization occurs. Saguaro, peaches, figs, agave, and wild bananas are just a few fruits which require pollination by bats.

Please Be Bat-Friendly

Bats are very sensitive to human disturbance. In summer they may vacate an area, abandoning pups before they are able to care for themselves. It is for this reason that **some of our caves are closed during the summer season when maternal colonies are present.** In winter, hibernating bats can waste precious body fat when they warm themselves up to respond to a disturbance, and can die as a result.

What To Do If You See Bats

Keep lights down. Bats are nocturnal and are accustomed to the dark. A bright light can be disturbing.

Be as quiet as possible. Talking in a low voice is better

than whispering, and try not to shuffle your feet. Bats are disturbed by a wide range of noises humans can’t hear.

Leave the area immediately, and report the sighting to the visitor center or a ranger. We will want information regarding the colony, including the cave name and the approximate number of bats. Rangers may ask you to point out the location on a cave map.

Thank you for helping protect these fascinating and important creatures!