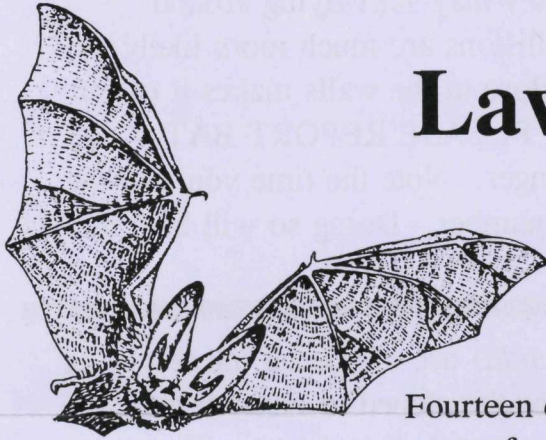


Lava Beds

National Monument

National Park Service

Lava Beds Bats



Kinds of Bats at Lava Beds

Fourteen different species of bats inhabit Lava Beds National Monument, most of which are cave-dwelling, insect eaters. However, some species dwell in trees or buildings. There are seven species of *Myotis* as well as the Silver-haired, Big Brown, Hoary, Pipistrelle, and more. Two of the more interesting bats are Townsend's big-eared bat and Brazilian free-tailed bat.

Some Bat Behavior

Most of the Lava Beds bats, including Townsend's big-eared bat, hibernate during winter, many of them dropping their body temperatures to near freezing. These bats may be found in some of the monument caves hibernating in large clusters. Others, such as the Brazilian free-tailed bat, are active all year, migrating to warmer areas of Central and South America.

Hibernating bats mate in the fall before hibernating. The females store the males' sperm in their bodies, keeping it alive throughout the winter. Delayed fertilization occurs when hibernation ends in the spring. In late spring to early summer, the females form maternity colonies in which they give birth to and raise their young. These colonies are often seen in the caves in the summer. Males roost alone or in small groups.

Migrating bats, such as the Brazilian free-tailed bat (*Tadarida brasiliensis*), mate in February and March, with ovulation occurring in late March. Each female bears one young, most within a two-week period in June. The young roost in nearly solid masses at densities in excess of 500 per square foot! Each mother remembers the location of her own young to within a few inches. As the mothers return from feeding, each baby recognizes its mother's voice, rears up, and calls to aid in its location. The final identification is aided by unique odors. Males do not migrate with the females.

What You Should Do

Many people are frightened by the old wives tale that bats will fly into their hair and become entangled. Bats are not dangerous. If you see one or a colony of them, DO NOT shine your light on them. Be as quiet as possible and leave the area. Try not to go where you saw the bats if possible. When you make noise and move abruptly, the bats become more frightened and confused, trying to escape the area. They may start flying around chaotically. Needless to say, bat-human collisions are much more likely. Moving away quietly, slowly, and staying close to the walls makes it easier for disturbed bats to avoid these collisions. PLEASE REPORT BAT SIGHTINGS to the visitor center or to a ranger. Note the time you saw the bats, their locations, and their approximate number. Doing so will help us protect and learn more about them.

Threatened or Endangered?

Townsend's big-eared bats (*Plecotus townsendii*) are of special interest to us at Lava Beds. This species is a candidate for threatened or endangered status. These bats are extremely sensitive to human disturbance. They are also the gentlest bat that has yet been studied. It is important that you be very careful when you encounter these bats. Disturbances may cause them to vacate an area completely, including moving or abandoning their young. Because of these serious consequences, we must close caves to public use when maternity colonies are found. Please obey the closure signs, keeping in mind that these bats are trying to protect and raise their young. (Entering a closed cave is punishable by fine and/or imprisonment.)

Caves occupied by thousands of Brazilian free-tailed bats should not be entered. Ammonia fumes from guano decomposition can reach levels lethal to human beings. There is also danger of contracting airborne rabies in these caves.

The "Winged Pesticide"

Some bats leave their caves as early as two hours before sundown, and their flights are among the most spectacular sights in nature. All of the bats inhabiting Lava Beds are of the sub-order Microchiroptera. They use echolocation (sonar) to "see" in the dark and to catch their elusive prey. Their echolocation capabilities are so refined that they are able to chase and catch tiny flying insects while maneuvering around plants, rocks, etc. Incredible numbers of moths, mosquitos, and other insects are the forage of the Lava Beds bats. They play a vital role in the checks and balances of nature, acting as a natural form of insect control for you and the many farmers in this area.

Please help us protect these beneficial, but shy and secretive creatures.

Yvonne McMillan, 1995

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