

# *Lava Beds National Monument*

## *Teacher Information*

### **Unit 1**

#### ***Bat Attitudes***

Many people have misconceptions about bats which help to create fear of these creatures. This also causes some cultures to destroy bats and their habitats. Knowledge is crucial to understanding these misconceptions and where they come from. As students learn about bats they will, perhaps, come to fear them less. Below are some common bat myths that we have debunked to help you teach your class basic bat information, along with some fun facts to share. We have included Bats in Question: The Smithsonian Answer Book to help you have on the spot answers for unusual questions your class may ask.

#### **Myths:**

1. Bats are birds

- Although bats and birds both fly, they are not closely related. Birds belong to the Aves class, while bats are part of the Mammalian class. Birds are able to fly because they have hollow bones and feathers, while bats have fur and lightweight versions of mammal bones which are marrow-filled.

2. Bats are blind or bats can see in the dark

- Bats have eyes that are much like our own. While they cannot see in the dark they are able to navigate in total darkness using echolocation. This sophisticated echolocation allows bats to avoid obstacles such as: people, trees and cave walls. It is unlikely that a bat would intentionally fly into a person or their hair.

3. Bats are sick/have rabies

- Bats can have rabies like most other mammals. The idea that most bats have rabies came from early studies that seemed to show that bats could survive with rabies for long periods of time. This led to the suspicion that bats would be able to transmit the disease to other animals for long periods of time. This idea was broadcast worldwide and received much publicity. Later studies showed that less than ½% of bats become infected with rabies. While at least 99.5% bats do not have rabies, most rabies cases in the United States are associated with bats. Bats have very small teeth, and, if someone is bitten by a bat they may not notice. If you have further questions about rabies, reliable information can be found on the Center for Disease Control's website [www.cdc.gov](http://www.cdc.gov).
- According to the Bat Conservation International: "You should never attempt to handle a bat. It might become frightened and bite in self-defense. Any bat that can be caught might be sick, and a bite from any animal may require vaccination against rabies as a safety measure. You do not need to fear even a sick bat if you simply leave it alone".



#### 4. Bats will drink your blood

- While the Vampire Bat is a real type of bat which drinks blood, they usually feed on animal blood, commonly chickens or cattle. They live in South America which means that your students will not encounter any blood feeding bats at Lava Beds National Monument.
- Out of over 900 species of bats, only 3 of them drink blood. Most species of bats eat insects (680 species), followed by fruit (236 species), Nectar (52 species), Meat (10 species), and Fish (5 species).



Range of Vampire Bats

#### 5. Bats are vampires/turn into Dracula

- In many cultures, vampires are people who return from the dead to feed on the blood of living people. While folklore throughout the world has long associated bats with the souls of the dead and with demons, Gary McCracken author for Bat Conservation International has found no Old World mythology in which vampires take the form of a bat. The idea of bats turning into a vampire seems to be a new concept first written about in Bram Stoker's book, Dracula, published in 1897.

#### 6. Bats only fly at night

- Not all bats fly at night. Some, like the Australian Fox bat, are active during the day. This means that they are diurnal. Nocturnal species of bats sleep during the day and fly at night. This allows them to hunt for food with less competition from other diurnal animals. Additionally, some bats hunt at night because the food they eat is only available at after dark, such as moths and certain types of flower.

#### Fun Facts

- Bats are the only mammals that fly ("flying" squirrels do not actually fly they glide).
- Bats make up 25% of all types of mammals!
- There are 14 different species of bats at Lava Beds National Monument.
- All bats at Lava Beds feed on insects
- The common vampire bat not only flies it can also run.
- Some species of bats have been known to live as long as thirty years.
- Approximately forty species are native to North America.

#### For Further Reading

<http://animaldiversity.ummz.umich.edu/site/index.html>

<http://www.pitt.edu/~slavic/courses/vampires/images/bats/vambat.html>

[http://animaldiversity.ummz.umich.edu/site/accounts/information/Desmodus\\_rotundus.html](http://animaldiversity.ummz.umich.edu/site/accounts/information/Desmodus_rotundus.html)

Center for Disease Control. Bats and Rabies. 26 August 2008. 19 January 2009