

Bats in Peril

Bats are the only mammals that can truly fly. They play a very important role in ecosystems around the world. They help eliminate pests for farmers. They also help ensure that rainforests stay healthy. Bats face many threats though. This means ecosystems across the globe are threatened too.

There are more than 1,000 species of bats. The majority of bats are insectivores. This means that insects make up most of their diet. There are also bats that are nectar-eaters and fruit-eaters. A small number of bat species are blood-eaters. The common vampire bat is a blood-eater.

Nectar-eating bats and fruit-eating bats play a critical role in desert and tropical ecosystems. They are considered a “keystone species.” This means they help ensure a rich diversity of plant life and food for other animals. Nectar-eating bats help pollinate plants in these environments. Fruit-eating bats help spread seeds in their rainforest environment. They also help restore rainforests that have been chopped down by spreading seeds over large areas. Bats are sometimes called the “farmers of the tropics.”

Bats that are insectivores help farmers around the world with pest control. They eat insects that can damage agricultural crops. One pest that bats like to eat is called the corn earworm moth. This type of moth causes an estimated \$1 billion a year in crop damage.

Bats can eat large amounts of insects during their nightly feeding period. For example, the famous bat colony that lives in Austin, Texas eats between 10,000 and 20,000 pounds of insects each night. The Austin colony is composed of 1.5 million Mexican free-tailed bats. The colony roosts under the Congress Avenue Bridge in downtown Austin during the summer months. It is the largest urban bat colony in North America. Many tourists come to watch the bats leave their roost in the evening.

Habitat loss is the biggest threat facing bats worldwide. Bats in North America are also in peril due to white-nose syndrome. This disease attacks bats while they are hibernating during the winter. It is caused by a white fungus that infects a bat’s muzzle, ears, and wings. White-nose syndrome is a deadly wildlife disease. Millions of bats in North America have died from the disease since it was first identified in 2006.

Wind turbines are a growing threat to bats as well. The spinning blades are dangerous for bats. Scientists also believe that the air pressure produced near wind turbines can damage the lungs of bats. Conservationists are studying whether sound can be used to deter bats from flying near wind turbines. Many bats have extremely sensitive hearing. Broadcasting high-frequency sounds might help keep them away from wind farms.

Large numbers of bat species are at risk of disappearing forever. Scientists believe that almost 80 species of bats are endangered or critically endangered. They also believe that over 900 species of bats are at risk of becoming endangered. Conservation organizations are working hard to save bats around the world. Although some people fear bats, they are an important part of the natural world. Protecting bats helps protect the environment.

Questions

1. What is an insectivore?
2. Why are fruit-eating bats important to rainforests?
3. How many pounds of insects can the Austin, Texas bat colony eat each night?
4. What is white-nose syndrome?

Vocabulary List

Each of the vocabulary words below are used in the reading passage. As you read the passage, pay attention to context clues that suggest the word's meaning.

1. ecosystems
2. eliminate
3. critical
4. pollinate
5. roosts
6. habitat
7. hibernating
8. deter

Context Clues

Using context clues from the sentences in the passage, underline the correct meaning of the word in boldface.

1) “They play a very important role in **ecosystems** around the world”

- a. farming b. life cycles c. biological communities d. markets or economies

2) “They help **eliminate** pests for farmers”

- a. remove; get rid of b. attract or encourage c. identify; recognize d. develop

3) “Nectar-eating bats and fruit-eating bats play a **critical** role in desert and tropical ecosystems”

- a. unusual; different b. scolding or condemning c. secret; unknown d. very important or vital

4) “Nectar-eating bats help **pollinate** plants in these environments”

- a. harvest or gather b. fertilize; deposit pollen c. destroy or pollute d. locate; find

5) “The colony **roosts** under the Congress Avenue Bridge”

- a. flies often b. eats or feeds c. hunts; searches d. rests; lives

6) “**Habitat**loss is the biggest threat facing bats worldwide”

- a. home territory or environment b. food c. hearing or sound d. communication

7) “This disease attacks bats while they are **hibernating** during the winter”

- a. hunting or feeding b. moving; migrating c. sleeping; lying dormant d. having pups

8) “studying whether sound can be used to **deter** bats from flying near wind turbines”

- a. move around; redirect b. capture or catch c. discourage or prevent d. vaccinate