

Names: \_\_\_\_\_

## Bats are Pollinators

Bats are pollinators. Many bats eat nectar and fruit, making them good pollinators. Pollination by bats is called **chiropterophily** (*ker OP ter o fill ee*).

### What makes bats good pollinators?

Bees have hairy bodies that pick up pollen, but bats' bodies are covered with fur. Lots of pollen gets stuck in this fur and is then moved to other plants.

Bats fly long distances. They can carry pollen from one flower to another flower far away. This is important for plants that don't grow close to each other. Bats can pollinate hundreds of flowers in just one night.



Bats have very long tongues! They can suck nectar that is deep inside a flower. That also means that they pick up pollen that other animals can't get to. A Tube-lipped Nectar bat's tongue is longer than its whole body!



## How do bats find flowers at night?

Some flowers need to be pollinated at night. Many of the flowers that bats pollinate, like the Saguaro cactus, open only at night and close up during the day.

In the dark, bats use their sense of smell to find what they are looking for. Scientists have found that bats like the **odors** of garlic, mushrooms, and rotten cabbage. Some flowers produce odors like these to **attract** pollinators, and bats follow their noses to fly to them.

Bats also use their sense of sight to find flowers. Some flowers are white, so bats can see them clearly. Other flowers are not bright. Other animals cannot see them so they are saved for the bats to pollinate.



**Echolocation** is a way of finding or locating things by sound. This is useful in the dark. The bat makes a noise, and that noise bounces off something else. Some flowers are bell-shaped. The shape of the flower makes a strong echo sound for the bat to hear.

## Why is pollination by bats important?

More than 500 species of plants depend on bats to pollinate their flowers.

Bats pollinate many fruits, including banana, mango, papaya, and guava. Bats are also pollinators for vanilla and cacao plants. Cacao fruit is what chocolate is made of!



bat eating from a banana flower



cacao flower



cacao pods (fruit)



vanilla flower



mango



guava

Some plants are *only* pollinated by bats. These plants are important parts of **ecosystems**. An ecosystem is a community of plants and animals that depend on each other. For example, Saguaro cactus plants provide food and water for many animals in the dry desert. They



also provide shelter and protection for birds that build their nests in the cactus.

## How are some bats and plants interdependent?

Bats and plants depend on each other. Two **species** of bats, the Lesser Long-nosed bat and the Mexican Long-tongued bat, **migrate** each spring to find plants with just the right nectar. They travel a thousand miles or more from Mexico to Arizona, New Mexico, and Texas in the United States.

The bats **hover** to **slurp** up nectar from cactus flowers. The Lesser Long-nosed bat's face is perfectly shaped to fit into the cactus blossoms. As pollen collects on the bats' fur, it is carried from flower to flower. Some of that pollen is left over on the bats' faces. They use their long tongues to clean their faces for extra **nutrition**. The bats come back to the cacti when the fruit is ripe to eat that, too.



Different animals are a good match for pollinating different plants.

## Glossary

**chiropterophily:** pollination by bats, pronounced *ker OP ter o fill ee*

**odors:** smells

**attract:** to cause something or someone to be interested

**echolocation:** finding or locating things by sound

**ecosystem:** a community of plants and animals that depend on each other, and their environment

**species:** a kind of something

**migrate:** to move from one area to another

**hover:** to stay in one place in the air

**slurp:** to make a sucking noise while eating or drinking something

**nutrition:** healthy food

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