

FOCUS

wild arizona



Key Words

Insectivore: an animal that eats insects and other small bugs

Nectar: a juice-like liquid made by flowers

Pollinate: to help plants reproduce by moving pollen from one flower to another

Species: different types of animals

With Halloween just around the corner, there are few animals that generate more attention this time of year than bats. Dracula stories and vampire movies have done a great job showing bats as deadly animals. Yet this reputation is undeserved.

It is true that bats, like all mammals, can carry rabies. Any bat that is on the ground and does not fly away may be sick and should be left alone. However, a healthy bat is extremely important to nature.

There are 28 **species** of bats in Arizona. That is over half of all the species found in the United States and Canada! Most of these bats are **insectivores**. These bats can eat half their body weight in insects each night. As a result, they help remove many nuisance insects, like mosquitoes that could carry West Nile virus or moths that could damage crops.

Do the math:

Assume that a bat must eat half of its body weight in insects every night. If a bat weighs 16 grams and a moth weighs 0.4 grams, how many moths can one bat eat in one night?

How many moths could it eat in one month (30 days)?

There are two species of bats in Arizona (Mexican long-tongued bat and the lesser long-nosed bat) that feed on the **nectar** from flowers, just like hummingbirds. When these bats feed, they also **pollinate** the flowers, helping to create more flowers and plants.

Do the math:

If a bat can pollinate flowers on 12 different saguaro cacti in one night, how many cacti will the bat pollinate in one month (30 days)?

Bats are mammals, a group of animals with hair or fur. There are approximately 4,000 mammal species in the world. Over 1,000 of these are bats.

All bats (and other animals) have two names. The common name is the name that most people use to refer to the animal, like “mountain lion.” Sometimes, however, an animal may have more than one common name: a mountain lion, for example, is also known as a cougar or puma. Therefore, all animals have a scientific name, which is only given to that particular species. The scientific name is made up of two words that describe the animal. These words usually come from languages like Latin or Greek. For example, scientists call a mountain lion *Felis concolor*, which is Latin for “cat having the same color”



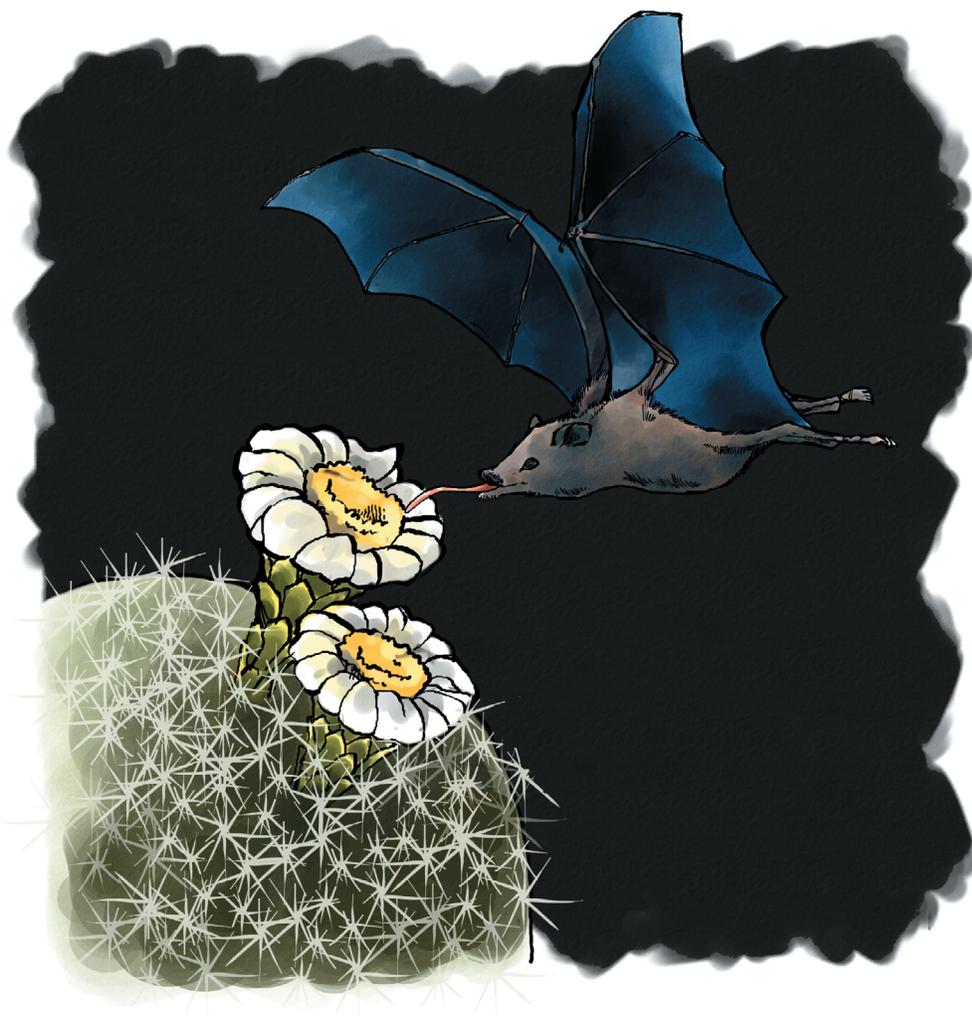
(an adult mountain lion is all one color, without spots or stripes).

The chart below shows some words that scientists use to create scientific names for bats.

Some common words used to name bats:	
<i>ciliolabrum</i>	= hairy lips
<i>pallidus</i>	= pale
<i>fuscus</i>	= brown
<i>phylotis</i>	= leaf ear
<i>lasiurus</i>	= hairy tail
<i>plecotus</i>	= twisted ear
<i>macrotis</i>	= large ear
<i>cinereus</i>	= ash-colored
<i>maculatum</i>	= spotted
<i>volans</i>	= flying
<i>nivalis</i>	= snowy
<i>xanthinus</i>	= yellowish

Below are three bat species found in Arizona. Can you match their scientific name with the common name? (Hint: use the chart to help you.)

Spotted Bat	<i>Lasiurus xanthinus</i>
Big Brown Bat	<i>Euderma maculatum</i>
Western Yellow Bat	<i>Eptescius fuscus</i>



Just for fun:

Pretend you have just discovered a bat near your house. As the first person to see this bat, you have the opportunity to name it. Use the words in the chart to develop a creative scientific name for this bat. Once you have named your bat, draw a picture of it. If you would like to send your drawing to the Arizona Game and Fish Department, please mail it to Eric Proctor, Arizona Game and Fish

Department IEED, 2221 W. Greenway Road, Phoenix, AZ 85023. Please send your name, school grade level, address, phone number and e-mail address (if you have one) with your submission. ✎

■ This feature is part of the Arizona Game and Fish Department's Focus: Wild Arizona program, a free education program for teachers, parents, students or anyone interested in learning about wildlife and habitat. Visit our Web site, azgfd.gov/focuswild, to find exciting lessons and resources.

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