

Rafinesque's Big-eared Bat

Plecotus rafinesquii



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BAT CONSERVATION INTERNATIONAL



Rafinesque's big-eared bats are one of the least known bats in the southeastern United States. Like all bats, big-eared bats help make our lives more comfortable by eating millions of bugs, especially mosquitoes, every night. This bat uses its big ears and echolocation to help it find food.

Northern Pineywoods

Rafinesque's Big-eared Bat

Plecotus rafinesquii



APPEARANCE

Length: 4 inches (10 cm)

Wingspan: 11 inches (27 cm)

Distinguishing Characteristics

- Grayish-brown fur on the back
- Pale fur on the belly and breast
- Long hairs projecting beyond their toes
- Rabbit-like ears, about an inch-and-a-half long
- Two large glands on either side the nose

LIFE HISTORY

Range: Southern Indiana, Illinois, and Ohio through southeastern United States and from North Carolina west to Central Texas; most common in the coastal plain

Diet: Mostly moths, but mosquitoes, beetles and flies as well

Predators: Snakes, raccoons, opossums and cats

Sexual maturity: At nine months

Mating season: Fall

Young: Adult females have one pup each year, born in late May or early June. The pups are able to fly three weeks after birth. They shed their milk teeth by mid-July, and reach adult size in about three months.

Life span: Up to ten years in the wild for males and females

HABITAT

Rafinesque's big-eared bats roost in cave entrances, hollow trees, abandoned buildings and under bridges in the forests of southeastern United States.

BEHAVIOR

While other bat species are *crepuscular* (become active during twilight hours), Rafinesque's big-eared bats are *nocturnal* (become active when it is completely dark). Like others in the order Chiroptera, these bats are *insectivores* (eat only insects). They also hibernate during the winter. When hibernating, the males and the females share sleeping quarters. During the late

spring, however, pregnant females leave the males and non-reproductive females and establish nursery colonies to give birth and raise their young.

NOW YOU KNOW!

- You've probably heard the expression "blind as a bat." This mistaken idea is probably due to the fact that bats rely on *echolocation* to find prey. Bats listen for the echoes of high-frequency sound waves that they emit, bouncing off insects and other objects, to tell the size, shape and distance of the object. Echolocation helps them eat millions of insects every night.
- When Rafinesque's big-eared bats rest or hibernate, they coil their ears against their heads like rams' horns to reduce their ears' surface area and conserve body moisture. When disturbed, they unfold their ears.
- Biologists age bats by looking at the finger bones in their outstretched wings over a bright light. Juvenile bats' bones have clear spaces between the joints; adult bats have *ossified* joints; they have turned to bone.
- Rafinesque's big-eared bats are also known as southeastern big-eared bats, eastern big-eared bats, eastern lump-nosed bats and eastern long-eared bats. Their scientific name, *Plecotus*, is derived from the Greek words for "twist" and "ear."

RAFINESQUE'S BIG-EARED BATS AND PEOPLE

Because Rafinesque's big-eared bats feed on insects that can be harmful to agriculture, people should treasure this animal. However, their numbers seem to be declining and they have been listed as threatened since 1977. As people learn more about the role bats play in managing insect populations, perhaps they will understand the importance of protecting bat roosts.

Like all mammals, bats can contract rabies, but they are no more susceptible to the disease than raccoons, skunks or even dogs. Just like other animals, bats will bite if they feel threatened. If you find a bat on the ground (rabies immobilizes the animal sometimes), don't try to help it. Leave it alone and call a game warden. The warden will be able to take care of the animal appropriately.