

# Hoary Bat

**SCIENTIFIC NAME:** *Lasiurus cinereus* comes from the Greek words *lasios*, meaning “shaggy,” and *urus*, meaning “tail,” and the Latin *cinereus*, meaning “ash-colored.”

**DESCRIPTION:** The hoary bat is one of Arizona’s most handsome and recognizable bats. It has thick, soft fur that is distinctively colored with a mix of dark brown and gray with contrasting white-frosted tips. The tail membrane is heavily furred. This bat has black-edged, rounded ears, a dark nose and a creamy yellow band around the face and throat.

The hoary bat is large, with a 16-inch wingspan and a 3-inch body. It weighs 20–35 grams, the equivalent of a snack box of Sun-Maid raisins. One of the more aggressive bats, the hoary bat is all teeth when captured, and makes a shrill, hissing alarm call.

**DISTRIBUTION:** The hoary bat is found throughout most of Canada south to southern Argentina and Chile. It is North America’s most widespread bat and Hawaii’s only native land mammal, but it does not occur in Alaska.

**HABITAT:** In Arizona, the hoary bat occupies a wide variety of wooded habitats throughout the state, including lowland desert, juniper scrub, riparian forest and ponderosa pine, at elevations ranging from 485 to 8,800 feet.

**BIOLOGY:** The hoary bat is one of four species of foliage-roosting tree bat found in Arizona. Individual hoary bats primarily prefer to spend the day hanging from branches, where they resemble dead leaves.

Although typically solitary, members of this species congregate in groups during seasonal migrations. The hoary bat is a strong bat with a swift, direct



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ILLUSTRATION BY ZACKERY ZDINAK

flight — one of few bat species capable of long-distance travel. These bats migrate in spring and fall, and appear in higher concentrations in parts of the country during these times. Large numbers of male hoary bats have been captured in early summer near Portal, Ariz., possibly indicating a migration corridor.

Although we have good evidence of seasonal migration of hoary bats in North America, we know less about how and where hoary bats spend the winter. They have been found hibernating on tree trunks and in woodpecker holes, on occasion.

Females give birth to twins, typically, although litters ranging from one to four pups are possible. Young are born in mid-May to late June. The young are left to hang next to leaves or twigs while the female hoary bat forages at night.

Hoary bats emit low-frequency echolocation calls (20–28 kilohertz), just above the typical human hearing range of 20 kilohertz. Echolocation at such comparatively low frequencies is useful for detecting and tracking flying insects at long distance. These bats prefer to eat

moths, but are also known to eat beetles, grasshoppers, termites, dragonflies and wasps. Predators of this species include hawks and owls. Hoary bats probably have a lifespan of seven years.

**STATUS:** Male hoary bats are relatively common in appropriate areas in Arizona during summer months. Females, however, are rarely encountered. In the United States in summer, males tend to occupy Western states, and females occupy Eastern states. Seldom found in urban settings, hoary bats are less likely to be encountered by the public than other species.

**MANAGEMENT NEEDS:** Hoary bats are frequently killed at wind turbines during autumn migration. Research to understand why tree-roosting bats such as the hoary tend to collide with wind turbines is needed to help guide conservation and mitigation strategies. 🦇

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