Featured Creature
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Klamath Network
Inventory & Monitoring Division
Natural Resource Stewardship & Science

Yuma Myotis
Myotis yumanensis



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Near Chiloquin, Oregon: An adult female Yuma myotis (*Myotis yumanensis*).

General Description

If you walk alongside a body of water while the sun sets on a warm day, you may see a flash of dark wings darting from one point to another, low to the ground. At first, you may think it is a fast, strange bird, but then you realize the wings belong to a water-loving, flying mammal called Yuma myotis (*Myotis yumanensis*), a bat. This bat gets its name from Fort Yuma, Arizona, where the species was recognized by western scientists.

Yuma myotis are small, weighing about as much as a nickel (4–6 grams). These golden-brown bats are in the Vespertilionidae family, also known as vesper bats. Vesper bats have small, dark eyes and simple noses. They live in temperate regions of North America.

There are many bats in the genus *Myotis*, which means mouse-eared. Sure enough, Yuma myotis look mouse-like, from their tiny, rounded ears to their small, furry bodies, but they are indeed very different than mice. They are about 65–89 mm (2.5–3.5 in) long from nose to tip of tail, about the length of a credit card. Unlike mice, though, they live much longer lives (5–8 years). They have long, soft wings that span about 238–240 mm (9.3–9.4 in). Each wing is created by a membrane spread across their elongated fingers.

Yuma myotis closely resembles the little brown myotis (*Myotis lucifugus*), another vesper family inhabitant of this region. In southern Oregon and northern California, the little brown myotis, also known as the little brown bat, is difficult to distinguish in hand from the Yuma myotis. One surefire way to tell the difference is their echolocation calls, which are different. Little brown bats also have a North America-wide distribution, unlike the Yuma myotis, which just lives in the western United States.



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Near Chiloquin, Oregon: An adult Yuma myotis being examined by bat researchers, who noted damage on the wing.

Habitat and Distribution

Yuma myotis are more closely associated with water than most bats (especially in desert environments!). They forage for the insects that are associated with streams, rivers, and ponds. They often roost in man-made structures, such as under bridges and in abandoned buildings in the warmer months. They will also roost in caves, hollow trees, and under loose pieces of bark. It is not uncommon for Yuma myotis to switch roosts during the summer. A significant stressor for these bats is disturbance to their roosting areas.

Behavior and Diet

Contrary to the popular turn of phrase "blind as a bat," most bats can see just fine. Nevertheless, echolocation is a valuable tool many bats use to help detect potential food sources, from moths to midges. Echolocation occurs when a bat emits a high-frequency sound from its mouth or nose and then listens to the echo—the echo tells the bat what is present in its surroundings. Yuma myotis effectively combine echolocation and sight to capture flies, midges, froghoppers, moths, and beetles at dusk—making for cost-effective pest control! Bats in general benefit human agricultural production, saving the U.S. agriculture industry over $3.7 billion annually in pest control costs.

Yuma myotis are generally social creatures. In the spring, many females live together in maternity roosts, but we know little about how and where Yuma myotis spend their winters.

Reproduction

Yuma myotis mate during fall. In spring to late summer, depending on the region, the female bears a single offspring, or pup. Yuma myotis pups depend on their mothers for 4–6 weeks after they are born, nursing, growing, and developing their flying skills. Once the pups become volant (able to fly), they continue learning from their mother and other bats about where to forage and how to forage efficiently.

Conservation

Since 2006, white-nose syndrome, caused by a nonnative fungus (P*seudogymnoascus destructans*), has devastated hibernating bat populations in North America. The disease is known to be lethal to many bat species, and scientists are studying its effects on Yuma myotis. In the face of this potential threat, it is essential to protect maternity roosts where the young are raised and to protect hibernation sites for overwintering.

Where to See

Yuma myotis occur in all Klamath Network parks.

Learn More

General bat information:
https://www.batcon.org/about-bats/bats-101/

White-Nose Syndrome:
https://cwhl.vet.cornell.edu/disease/white-nose-syndrome

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