

FIELD GUIDE TO NORTH AMERICAN MAMMALS

Western Mastiff Bat
(Eumops perotis)

ORDER: Chiroptera
FAMILY: Molossidae

Western mastiff bats live in rugged, rocky canyons typical of the arid Southwest, where they inhabit crevices in vertical cliffs. Because of their relatively large body size and narrow wings, these bats are unable to take off from a flat surface, and must instead freefall from a height to initiate flight. Hanging upside-down in a crevice, it can let go, gain airspeed as it drops, and flap away for its nightly hunt for insect prey. If an individual is on the ground, it will scramble up a tree or other object to get high enough to be able to launch itself into flight. In the early 1900s, they often roosted in buildings in southern California, but this may not be the case today.

Also known as:
Greater Mastiff Bat, Bonnetted Bat

Sexual Dimorphism:
Males are larger than females.

Length:
Average: 175 mm
Range: 159–187 mm

Weight:
Range: 45.5–73 g



Eumops perotis – upper left (with *E. underwoodi*)
Credit: painting by Wendy Smith from Kays and Wilson's *Mammals of North America*, © Princeton University Press (2002)



FIELD NOTES

DATE: _____ LOCATION: _____

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Pocketed Free-tailed Bat
(*Nyctinomops femorosaccus*)

ORDER: Chiroptera
FAMILY: Molossidae

A small fold, or "pocket" in the wing membrane of the free-tailed bat, near its knee, gives this bat its common name. Pocketed free-tailed bats have large ears and long wings, and fly rapidly, generally pursuing insects on the wing. They eat many kinds of insects, but seem to prefer small moths. Small colonies, usually fewer than 100 bats, roost together in caves, crevices in rocky cliffs, or buildings. Females have a single pup each year, not twins.



Credit: painting by Wendy Smith from Kays and Wilson's Mammals of North America, © Princeton University Press (2002)

Sexual Dimorphism:
None

Length:
Average: 109 mm
Range: 99–118 mm

Weight:
Range: 13.8–17 g



FIELD NOTES

DATE: _____ LOCATION: _____

Big Free-tailed Bat
(Nyctinomops macrotis)

ORDER: Chiroptera
FAMILY: Molossidae

The big free-tailed bat has long, narrow, tapering wings. The length and shape of the wings give it speed and enable it to fly long distances, but its flight is not as maneuverable as that of bats with shorter, broader wings. These bats live in rugged habitats in the Southwest in the summer and migrate to Mexico in the winter. When they are foraging, they emit echolocation calls that sound like clicks to human ears. Most bats use calls that are beyond the range of human hearing. The bats forage, mostly for large moths, in total darkness, not leaving their day roosts until well after sunset. Their tails extend well beyond the tail membrane (uropatagium), the membrane that stretches between the hind legs.

Sexual Dimorphism:

Males are slightly larger than females.

Length:

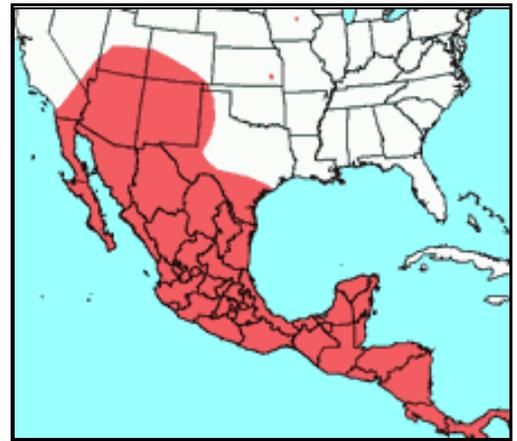
Range: 145–160 mm males; 120–139 mm females

Weight:

Range: 22–30 g



Credit: painting by Wendy Smith from Kays and Wilson's Mammals of North America, © Princeton University Press (2002)



FIELD NOTES

DATE: _____ LOCATION: _____



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Brazilian Free-tailed Bat
(Tadarida brasiliensis)

ORDER: Chiroptera
FAMILY: Molossidae

Conservation Status: Near Threatened.

Millions of Brazilian free-tailed bats spend their summers in the southwestern United States. Gigantic colonies summer in Bracken Cave, Texas; Carlsbad Caverns, New Mexico; and even within the city of Austin, Texas, under the Congress Avenue Bridge. They are a spectacular sight spiraling out of their day roosts like great, dark, swirling clouds when they emerge in the evening to forage. The bats eat untold numbers of insects each night, sometimes catching their prey at altitudes of a mile or more. They typically migrate to central and southern Mexico in the winter, where they live in smaller colonies. They mate there, and fly north again – as far as 1,300 km – between February and April. Females give birth to a single pup, in June, and nurse it for about six weeks. Although they number in the millions, conservation is a concern, because they raise their young in a limited number of caves, and because pesticides can accumulate in their body tissues.

Also known as:
Guano Bat, Mexican Free-tailed Bat

Sexual Dimorphism:
Males may be about 5% longer than females but females weigh about 5% more than males.

Length:
Average: 95 mm
Range: 85–109 mm

Weight:
Range: 10–15 g



Credit: painting by Wendy Smith from Kays and Wilson's Mammals of North America, © Princeton University Press (2002)



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