

## Key to the Bats of California\*

### Phyllostomidae: (Leaf-nosed bats)

*Macrotus californicus*: California leaf-nosed bat. Forearm 48-58 mm. Leaf structure on nose. Very large ears. Large eyes. Grey pelage. No other leaf nosed bat has large ears.

*Choeronycteris mexicana*: Mexican long-tongued bat. Forearm 43-45 mm. very long rostrum with leaf structure on tip. Small tail extends less than halfway to the edge of interfemoral membrane. Sooty Grey to brownish. Only nectar-pollen feeder in California.

### Molossidae: (Free-tailed bats)

*Eumops perotis*: Western mastiff bat. Forearm 72-82 mm. Largest bat in America. Ears joined at mid-line. Free tail. Underslung jaw. Small colonies. Looks similar to *Tadarida brasiliensis*, but much larger.

*Tadarida brasiliensis*: Mexican free-tailed bat. Forearm 36-46 mm. Last inch of tail free from the interfemoral membrane between back legs. Silverish brown color. Very wrinkled lips. Often forms large colonies.

*Nyctinomops femorosaccus*: Pocketed free-tailed bat. Forearm 44-50 mm. The membranous femoral pocket that this bat is named for is hard to distinguish. Last inch of tail free from interfemoral membrane. Ears joined at base. Dark brown to gray both above and below, with basal half of hairs nearly white.

*Nyctinomops macrotis*: Big free-tailed bat. Forearm 58-64 mm. Last inch of tail is free from interfemoral membrane. A large, dark bat; color varies from light reddish brown to dark brown or almost black, with the basal half of hair nearly white. Glossy fur.

### Vespertilionidai: (Mouse-eared bats)

*Antrozous pallidus*: Pallid bat. Forearm 48-60 mm. Light tan color. A large bat with very large ears and eyes. Usually find Jerusalem cricket parts associated with the roost.

*Plecotus townsendii*: Townsend's big-eared bat. Forearm 39-44 mm. Huge ears. Horseshoe shaped lump on nose. Hangs from the ceiling like a dead leaf. Usually find moth parts associated with the roost. This bat will abandon a roost immediately if disturbed by humans.

*Lasiurus blossevillii*: Western red bat. Forearm 38-42 mm. Males a brick red, females are rusty. Hairs are tipped with white. Solitary, foliage roosting bat.

*Lasiurus cinereus*: Hoary bat. Forearm 51+mm. Yellowish face Greyish, white tipped fur on rest of body. Largest bat in the Bay Area. Solitary, foliage roosting bat.

***Lasiurus xanthinus***: Southern yellow bat. Forearm 45-48mm. Yellow, gray tipped fur. Dorsal side of interfemoral membrane furred. Short ears.

***Lasionycteris noctivagans***: Silver-haired bat. Forearm 39-43 mm. Larger than myotis. Hair black or chocolate brown, tipped with silver. Can also be confused with *Lasiurus cinereus*, but is smaller and does not have a yellow face.

***Euderma maculatum***: Spotted bat. Forearm 45-51 mm. Striking appearance with huge pink ears and black or dark brown fur with 3 white spots on back, white ruff. Cannot be confused with any other bat. Very rare.

***Eptesicus fuscus***: Big brown bat. Forearm 45-52 mm. Larger than myotis. Long, glossy chocolate colored fur. Often bad tempered. Tragus blunt. The tragus is pointed in all myotis species.

***Parastrellus hesperus***: Canyon bat (formerly known as the western pipistrelle). Forearm 25-30 mm. Very small bat; usually under 3 grams. Blunt tragus and dark mask. Usually lighter in color than myotis.

***Myotis evotis***: Long-eared myotis. Forearm 36-41 mm. Ear 19-25 mm. Large black ears extend 5 mm beyond nose. Forms colonies of <30.

***Myotis thysanodes***: Fringed myotis. Forearm 40-46 mm. cinnamon brown with dark mask. Largest of the myotis species. Fringe of stiff hairs along free edge of tail membrane.

***Myotis californicus***: California Myotis. Forearm 32-38 mm. Easily confused with other myotis species. Very small with a tiny foot. Keeled calcar. Hair bases much darker than tips.

***Myotis volans***: Long-legged myotis. Forearm 36-42 mm. Tibia 16.5-19 mm. Short, rounded ears, long fur, small foot, well developed keel on calcar and fur on underside of wing membrane as far out as the elbow.

***Myotis yumanensis***: Yuma myotis. Forearm 32-36 mm. Dull brownish color with buffy colored belly. Forms large colonies. No keel on calcar. Easily confused with *Myotis californicus* and *Myotis lucifugus*. Larger than *californicus*. Slightly smaller than *lucifugus* and has duller fur.

***Myotis velifer***: Cave myotis. Forearm 37-47 mm. Large myotis with a well developed sagittal crest on skull. Calcar not keeled. Light brown to nearly black.

***Myotis lucifugus occultus***: Arizona myotis. Forearm 36-41 mm. Large sagittal crest. Large teeth. Brightly colored tawny ocher fur. Most individuals have only one small premolar behind each upper canine; when two are present, one is crowded out of the toothrow.

***Myotis ciliolabrum***: Western small-footed bat. Forearm 30-35 mm Very small bat with a tiny foot. Often confused with *Myotis californicus*. Flattened skull and a keeled calcar. Color can vary from a pale yellow or tan to dark brown. Black facial mask; ears, wings and interfemoral membrane almost black.

\*Descriptions compiled from the records of Drs. E.D. Pierson and William Rainey, with additional descriptions from *Bats of America*, Barbour & Davis, 1969, The University Press of Kentucky.