

Key to the Bats of Nevada

A millimeter ruler is required in order to use this key. Select the appropriate alternative from each couplet (starting with 1a and 1b). Follow the number for the next pair of choices at the end of each statement, repeating the process until a name is reached instead of a number. Ear length is measured from the notch at the base of the ear. Forearm lengths (FA) are measured from wrist to elbow. Information enclosed in parentheses is helpful but not essential.

- 1a. Nose leaf present 2
- 1b. Nose leaf absent 3

- 2a. Ear length greater than 25 mm; FA 48-53mm *Macrotus californicus*
- 2b. Ear length less than 17 mm *Choeronycteris mexicana*

- 3a. Tail extends one-third or more beyond rear edge of membrane 20
- 3b. Lacks a free-tail; tail never extends more than barely beyond rear edge of membrane 4

- 4a. Dorsal fur lighter at base (pale blonde) than tips (brown); pig-like nose; Ear 25-33mm; FA 50-55mm *Antrozous pallidus*
- 4b. Dorsal fur darker at base than tips 5

- 5a. Ear length 30mm or more 6
- 5b. Ear length less than 25mm 8

- 6a. Conspicuous pair of white spots on shoulders and one on rump, contrasting w/ black dorsal fur; FA 48-51mm *Euderma maculatum*
- 6b. Lacking white dorsal spots on shoulders and rump 7

- 7a. Prominent pair of lumps above nose on each side of muzzle; no pair of leaf-like structures projecting forward from leading edge of ears over face; FA 40-45mm *Corynorhinus townsendii*
- 7b. Lumps on nose absent, not pig-like; prominent pair of leaf-like skin flaps projecting from leading edge of ears over face (lappet-brows); FA 42-49mm; ears 33-45 *Idionycteris phyllotis*

- 8a. Anterior half of dorsal surface of tail membrane heavily furred 9
- 8b. Dorsal surface of tail membrane mostly naked or very scantily furred 12

- 9a. Distinct white patches of fur at dorsal bases of wrists and elbows; dorsal surface of tail membrane fully furred 10
- 9b. No white patches of fur at dorsal bases of wrists and elbows; dorsal surface of tail membrane ranging from half to fully furred 11

- 10a. Light ears distinctively edged in black; FA 46-58mm; dorsal hairs dark gray, tipped with white (hoary) frosting *Lasiurus cinereus*
- 10b. Light colored ear never edged in black; FA 35-45mm; dorsal hairs reddish, never dark gray, but may be tipped white; fur bright reddish in males, tending toward lighter brownish to grayish in females *Lasiurus blossevillii*

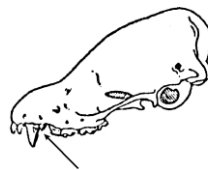
- 11a. Body fur yellowish brown; ears completely pale, no edging; FA 46-48mm *Lasiurus xanthinus*
- 11b. Body fur black or dark brown and distinctly silver-tipped; ears dark with pale leading edge; FA 40-43mm *Lasionycteris noctivagans*

- 12a. Tragus short, blunt and rounded 13
- 12b. Tragus sharp and pointed 14

- 13a. Black face mask and ears; FA < 35mm (27-33mm); Smallest bat in Nevada *Parastrellus hesperus*
- 13b. First upper premolar at least half as tall as canine (fig 13); FA > 40 (42-51mm); Calcar keeled *Eptesicus fuscus*

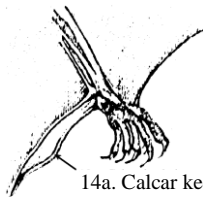


13b. Premolar 1/2 as tall as canine,
Eptesicus fuscus

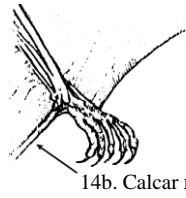


13. Premolar less than 1/4 as tall as canine,
Myotis sp.

14a. Calcar keeled 15
 14b. Calcar not keeled 17

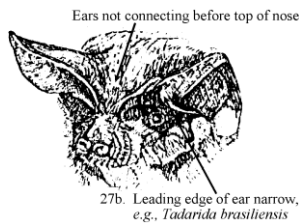
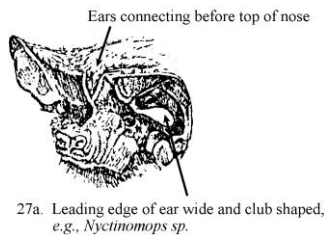


14a. Calcar keeled,
e.g. *Myotis volans*



14b. Calcar **not** keeled,
e.g. *Myotis velifer*

15a. FA \geq 37mm (37-41mm); Underside of wing furred to elbow *Myotis volans*
 15b. FA 29-36 mm; body fur medium to very light tan or reddish brown with clearly darker face mask 16
 16a. Thumb large (> 4.2mm); tail extends beyond tail membrane (2mm); forehead (braincase) gently sloped; fur slightly shiny or glossy;
FA 31-36mm..... *Myotis ciliolabrum*ⁱⁱ
 16b. Thumb length less than 4.2mm; tail does not extend beyond tail membrane; forehead steeply sloped (braincase rises abruptly from rostrum);
Fur color dull; FA 28-36mm..... *Myotis californicus*ⁱⁱ
 17a. Distinct fringe of hair on edge of tail membrane; ears dark and 12-22mm; FA > 40mm (40-46mm) *Myotis thysanodes*
 17b. Lacks fringe hairs on tail membrane..... 18
 18a. Ears >20 mm (20-24), FA 37-40 mm. Ears, wing, tail memb blackish and opaque *Myotis evotis*
 18b. Ears \leq 18 mm..... 19
 19a. FA usually < 40 mm 20
 19b. FA usually > 40mm; conspicuous bare patch between shoulder blades *Myotis velifer*
 20a. FA 36-41mm; usually 1 upper premolar; ear darker than dorsal fur *Myotis lucifugus*
 20b. FA 32-38mm; always 2 upper premolars; ear pale, same color as dorsal fur *Myotis yumanensis*
 21a. No vertical wrinkles on upper lips; FA > 70mm..... *Eumops perotis*
 21b. Deep vertical wrinkles on upper lips; FA < 70mm 22
 22a. Edge of ear widening to become club-shaped above and behind eye; ears connecting before reaching top of nose 23
 22b. Edge of ear narrowing to a point above and behind eye; ears not connecting before reaching top of nose; FA 36-46mm ... *Tadarida brasiliensis*



23a. FA 44-50 mm..... *Nyctinomops femorosaccus*
 23b. FA 58-64 mm..... *Nyctinomops macrotis*

Illustrations: calcars, and free-tailed bat ears -- Christine Setter in Schmidly, D.J., 1991. *Bats of Texas*, Texas A&M University Press, 188pp.,
 bat skulls -- Hall, E.R., 1981. *The Mammals of North America, Volume 1*, John Wiley and Sons, New York, 600pp.

ⁱⁱ Some individuals overlap in characters and may be hybrids. Those with thumbs clearly less than 4mm or more than 5mm typically exhibit the remaining diagnostic characters of *Myotis californicus* and *Myotis ciliolabrum*, respectively.
 See the Key to the *Myotis* of Arizona for additional details.