

**Mexican long-tongued bat, *Choeronycteris mexicana****Elizabeth D. Pierson & William E. Rainey*

**Description:** *Choeronycteris mexicana* can be distinguished from most other California bats by a leaf-like projection on the tip of the nose (i.e., the leaf-nose is a distinguishing trait of the Family Phyllostomidae). It can be distinguished from the other phyllostomid found in southern California, *Macrotus californicus*, by its long, narrow rostrum and small ears. In parts of its range outside California, it also co-occurs with *Leptonycteris curasoae* and *Leptonycteris nivalis*. While both these species also have a long rostrum, both lack a tail, which is present in *C. mexicana*. *C. mexicana* has a forearm of 43-48 mm, a tail length of 6-10 mm, and an adult weight of ca. 20 g (Barbour and Davis 1969).

**Taxonomic Remarks:** *Choeronycteris* is a monotypic genus in the Family Phyllostomidae. It was first described in 1844, from a type locality in Mexico (Tschudi 1844-1845). It has at times been considered congeneric with *Musonycteris*, but recent treatments concur that it should be considered a separate genus (Arroyo-Cabrales et al. 1987, Koopman 1993).

**Distribution:** *C. mexicana* reaches the northern limits of its range in the southwestern United States. The bulk of its distribution is in Mexico (including Baja California and the Tres María Islands), reaching as far south as El Salvador and Honduras. There are records from southern California, southern Arizona, southwestern New Mexico, and the southern tip of Texas (Hall 1981, Arroyo-Cabrales et al. 1987, Schmidly 1991), with a single specimen from southern Nevada (Constantine 1987). Maternity colonies are known from Arizona and New Mexico. With rare exceptions, this species is apparently present in Arizona only from April to October (Hoffmeister 1986).

Available museum records and recent sightings (K. Miner pers. comm.) suggest the species distribution in California is limited primarily to San Diego County. Records from the Department of Health Services indicate it could be expected over a somewhat wider area, but is confined to southern California (D. Constantine pers. comm.). The only records for San Diego County are from fall and winter, suggesting seasonal movement, perhaps from inland sites to warmer coastal areas.

**Life History:** *C. mexicana* has been found in groups of 40-50, but generally forms colonies of a dozen or fewer (Hoffmeister 1986). Births occur in June through early July in Arizona and New Mexico. Females give birth to single, precocial young, which may weigh as much as 30 percent of the mother's weight.

*C. mexicana* appears to be primarily nectivorous, although its diet also includes fruit, pollen and probably some insects (Gardner 1977). It has been observed feeding at flowers of cultivated *Agave* and columnar cacti in San Diego County (K. Miner pers. comm.).

**Habitat:** *C. mexicana* occurs in a wide variety of habitats from arid thorn scrub to tropical deciduous forest and mixed oak-conifer forest (Arroyo-Cabrales et al. 1987). Although Barbour and Davis (1969) state the species is found primarily in deep, moist desert canyons in southeastern Arizona and western New Mexico. It is fairly common in the Chiricahua Mountains in the early summer (P. Brown pers. comm.). Barbour and Davis (1969) also found *C. mexicana* in oak (1,600 m) and in Ponderosa pine (1,900 m) habitat.

Preferred roosting sites appear to be mines, caves and rock fissures (Huey 1954a, Banks and Parrish 1965, Barbour and Davis 1969, Hoffmeister 1986). Animals do not cluster in the roost, are alert and

wary, and tend to roost in partially lit settings. When disturbed they will fly into sunlight rather than to a darker part of the roost structure. This species has also been found in buildings, particularly in southern California (Huey 1954a, K. Miner pers. comm.).

**Status:** Class II. This species is being placed on the Special Concern list because it appears to have such a limited distribution in southern California, and because records of occurrence are so rare. Most of the records for this species result from an event, interpreted as a “flash invasion”, which occurred in September 1946 (Olson 1947, Huey 1954a). At the time, *C. mexicana* was observed at a number of localities in San Diego County. It has not been observed again in the same numbers. Nevertheless, there are recurrent fall and winter reports of this species foraging in private gardens in San Diego County (K. Miner pers. comm.).

Since *C. mexicana* is primarily a cave dwelling species, it is, like other cave dwelling bat species, extremely vulnerable to human disturbance at its roosts. Behavioral observations suggest it is especially sensitive and wary (Barbour and Davis 1969).

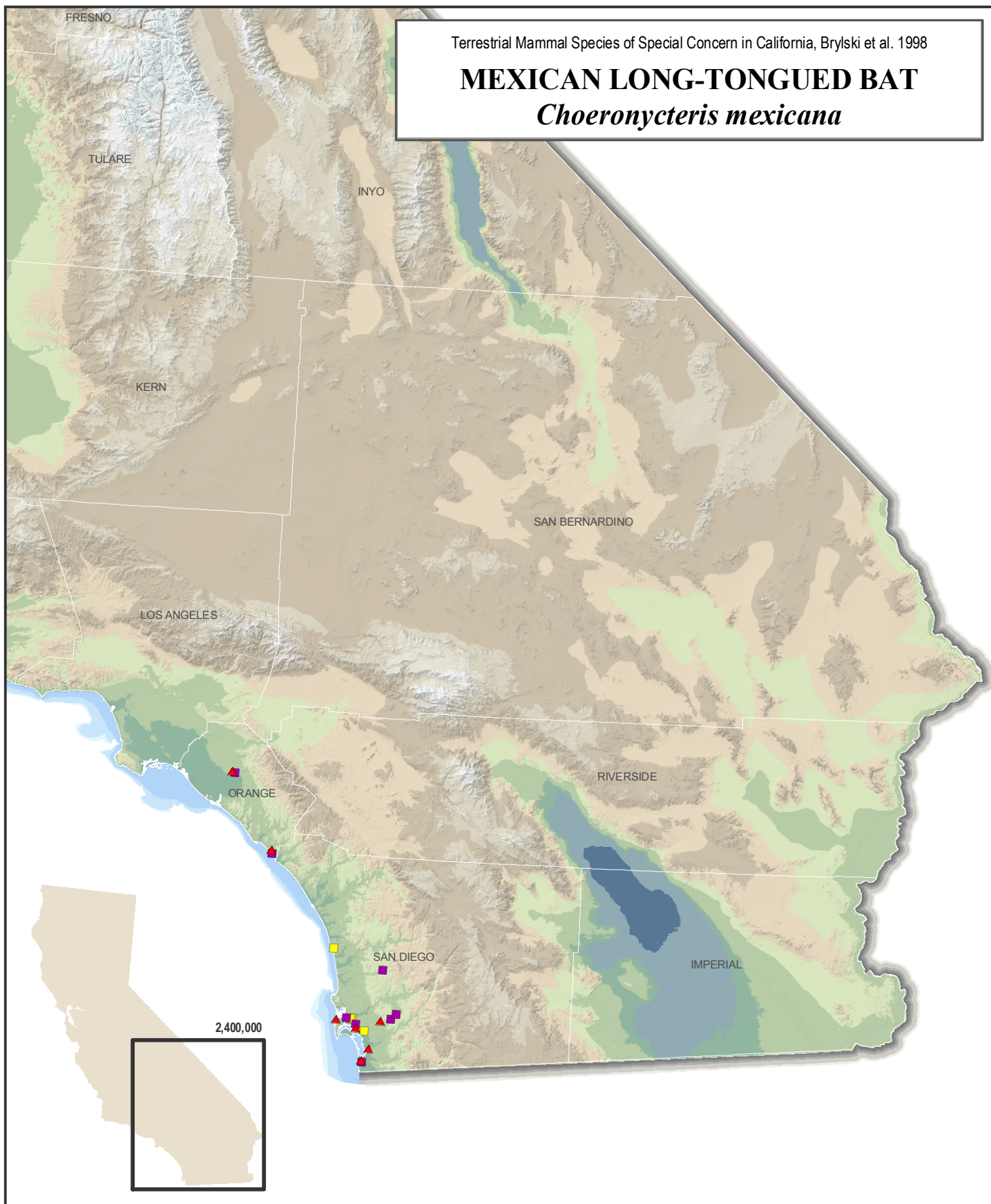
Not enough is known about *C. mexicana* in California to identify threats specific to this species in southern California.

**Management Recommendations:** A more concerted effort needs to be made to establish the spatial and temporal distribution of *C. mexicana* in southern California. Recently identified localities should be regularly monitored to determine seasonal occurrence. The species of plants being used by the animals for foraging need to be identified. This information could then be used to search for additional localities.

Terrestrial Mammal Species of Special Concern in California, Brylski et al. 1998

## MEXICAN LONG-TONGUED BAT

*Choeronycteris mexicana*



Locations verified by authors  
(captures, observations, museum records)

- Post - 1978
- 1978 and before

- ▲ Constantine 1998
- CNDDDB 1979 -1998
- CNDDDB 1978 and before