

California Wildlife Habitat Relationships System
California Department of Fish and Wildlife
California Interagency Wildlife Task Group

YUMA MYOTIS

Myotis yumanensis

Family: VESPERTILIONIDAE
M023

Order: CHIROPTERA

Class: MAMMALIA

Written by: J. Harris

Reviewed by: P. Brown

Edited by: S. Granhom, R. Duke

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The Yuma myotis is common and widespread in California. It is uncommon in the Mojave and Colorado Desert regions, except for the mountain ranges bordering the Colorado River Valley. Found in a wide variety of habitats ranging from sea level to 3300 m (11,000 ft), but it is uncommon to rare above 2560 m (8000 ft). Optimal habitats are open forests and woodlands with sources of water over which to feed.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Feeds on a wide variety of small flying insects found by echolocation. This species usually feeds over water sources such as ponds, streams, and stock tanks. Prey includes moths, midges, flies, termites, ants, homopterans, and caddisflies (Easterla and Whitaker 1972, Black 1974, Whitaker et al. 1977, 1981). The Yuma myotis is an efficient forager, sometimes returning to the roost with a full stomach 15 min after dusk (Barbour and Davis 1969). These bats respond to temporary patches of prey, such as ant swarms (Vaughan 1980), although many authors report that regular foraging routes are followed.

Cover: The Yuma myotis roosts in buildings, mines, caves, or crevices. The species also has been seen roosting in abandoned swallow nests and under bridges. Separate, often more open, night roosts may be used.

Reproduction: Maternity colonies of several thousand females and young may be found in buildings, caves, mines, and under bridges. Warm, dark sites are preferred. Individuals are clustered tightly in the warmest sites when temperatures are low. If temperatures exceed 40°C, bats seek cooler locations, and individuals roost farther apart.

Water: The Yuma myotis has a relatively poor urine concentrating ability, and frequently is observed drinking.

Pattern: Distribution is closely tied to bodies of water, which it uses as foraging sites and sources of drinking water. Open forests and woodlands are optimal habitat.

SPECIES LIFE HISTORY

Activity Patterns: Nocturnal. Hibernates. This species emerges soon after sunset in many areas (Barbour and Davis 1969), but Jones (1965) reported that peak activity was 1-2.5 hr after sunset. Warm temperatures are preferred, and activity may be extended on warm nights. Winter habits are poorly known, but this species apparently hibernates.

Seasonal Movements/Migration: Probably makes local or short migrations to suitable hibernacula. Individuals that spend the summer at high elevations probably move downslope.

Home Range: No data found.

Territory: Territoriality has not been reported. Probably not territorial at feeding or roosting sites; roosts in large groups.

Reproduction: The Yuma myotis, like other California bats, mates in the fall. Dalquest (1947) reported that the season of births lasted from late May to mid-June with a peak in early June. It is likely that some young are born in July in some areas. A single litter of 1 young is produced yearly. The species may live up to 8.8 years (Cockrum 1973).

Niche: The Yuma myotis may be found feeding and roosting with other bat species, such as *Tadarida brasiliensis* and *Antrozous pallidus*.

Comments: This species is difficult to distinguish from *M. lucifugus*, with which it may occasionally hybridize (Harris 1974, Parkinson 1979).

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