

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

ELF OWL

Micrathene whitneyi

Family: STRIGIDAE
B268

Order: STRIGIFORMES

Class: AVES

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

A very rarely seen spring and summer resident of the Colorado River Valley. West of the Colorado River, there are records at the oases of Cottonwood Springs and Corn Springs, Riverside Co. Nests in desert riparian habitat with cottonwood, sycamore, willow or mesquite; absent from desert riparian habitat dominated by saltcedar. Formerly more numerous along length of Colorado River, but now nearly extirpated from loss of habitat. Since 1970, reported only north of Needles, San Bernardino Co., 35 km (22 mi) north of Blythe, Riverside Co., and at Corn Springs (Gaines 1977, Garrett and Dunn 1981).

SPECIFIC HABITAT REQUIREMENTS

Feeding: In Arizona, captures insects and other arthropods, rarely lizards or snakes, by stooping and sallying. Frequently sallies from perch, or hovers at foliage, flowers, or over ground (Ligon 1968). Uses perches overlooking open ground or grassland (Marshall 1956). Foraging perches typically in moderately tall cottonwood, sycamore, willow, mesquite, and saguaro cactus.

Cover: Moderately tall trees and snags, such as cottonwood, sycamore, willow, mesquite, and saguaro cactus, afford perches and woodpecker-excavated or other cavities.

Reproduction: Dependent on woodpecker-excavated holes for nest sites, usually 4.5-6 m (15-20 ft) from ground (Bent 1938). In California, has nested in cottonwood (Miller 1946) and saguaro (Brown 1903); also nests in willow, sycamore, and mesquite trees or snags of moderate height. Uses little or no nesting materials.

Water: No data found.

Pattern: Occupies desert riparian habitat of moderate to open canopy, often with a moderate to sparse shrub understory, and typically bordering desert wash, desert scrub, or grassland habitats. Taller trees with a shrub understory seem to be required (Grinnell and Miller 1944).

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, nocturnal activity.

Seasonal Movements/Migration: Usually arrives in California from Mexico in April (earliest date March 18). Probably departs by early August (Garrett and Dunn 1981).

Home Range: No data found.

Territory: Small, and centered about nest hole. Ligon (1968) found 2 pairs holding

adjacent territories with nest trees only 26 m (86 feet) apart. Not strongly inter or intraspecifically territorial (Walker 1943).

Reproduction: Eggs usually laid in May and early June. Monogamous. Clutch size usually 3 (range 1-5). Incubation, by female, lasts 24 days. Asynchronous hatching. Single-brooded. Semialtricial young. Male feeds female at nesting hole from time of pair formation until young half-grown; female passes food to young. Fledging age 28-33 days (Bent 1938, Ligon 1968).

Niche: Decline in numbers in California has resulted primarily from habitat loss from clearing and flooding for agriculture and water management, and from invasion by the introduced saltcedar. Other contributing factors include a possible reduction in nest sites resulting from a decline in woodpecker populations, and competition with European starlings for nest holes (California Department of Fish and Game 1980). In Arizona, defended favorite nest sites in sycamores from other owls, and have taken possession of newly excavated cavities of acorn woodpeckers (Phillips et al. 1964).

REFERENCES

- Bent, A. C. 1938. Life histories of North American birds of prey. Part 2. U.S. Natl. Mus. Bull. 170. 482pp.
- Brown, H. 1903. Arizona bird notes. *Auk* 20:43-50.
- California Department of Fish and Game. 1980. At the crossroads: A report on the status of California's endangered and rare fish and wildlife. Sacramento. 149pp.
- Cardiff, S. W. 1978. Status of the elf owl in California. Calif. Dep. Fish and Game, Sacramento. Nongame Wildl. Invest. Prog. Rep. W-54-R-10. 10pp.
- Gaines, D. 1977b. Birds of the Yosemite Sierra. California Syllabus, Oakland. 153pp.
- Garrett, K., and J. Dunn. 1981. Birds of southern California. Los Angeles Audubon Soc. 408pp.
- Grinnell, J., and A. H. Miller. 1944. The distribution of the birds of California. Pac. Coast Avifauna No. 27. 608pp.
- Ligon, J. D. 1968. The biology of the elf owl, *Micrathene whitneyi*. Univ. Mich. Mus. Zool., Misc. Publ. No. 136. 70pp.
- Marshall, J. T., Jr. 1956. Summer birds of the Rincon Mountains, Saguaro National Monument, Arizona. *Condor* 58:81-97.
- Miller, L. 1946. The elf owl moves west. *Condor* 48:284-285.
- Phillips, A., J. Marshall, and G. Monson. 1964. The birds of Arizona. Univ. Arizona Press, Tucson. 220pp.
- Walker, L. W. 1943. Nocturnal observations of elf owls. *Condor* 45:165-167.

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