

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

WESTERN BLUEBIRD

Sialia mexicana

Family: TURDIDAE
B380

Order: PASSERIFORMES

Class: AVES

Written by: S. Granholm
Reviewed by: L. Mewaldt
Edited by: R. Duke

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Fairly common to common year-round throughout much of California, excluding the higher mountains and eastern deserts. Breeds in open woodlands of oaks, riparian deciduous trees, or conifers with herbaceous understory. In winter, uses more open habitats as well. Sparse to open-canopied, mature, valley foothill and montane hardwood and valley foothill hardwood-conifer habitats are optimal. A variety of other coniferous habitats are used, primarily open-canopied mature forests, especially edges. In winter, leaves higher portions of nesting range and becomes more widespread in lowlands. East of the Sierra Nevada crest, breeds south to Lake Tahoe Basin and in Owens Valley, Inyo Co. Rare in eastern deserts of southern California, but breeds in small numbers from Panamint Mts. to Clark Mt., and winters fairly commonly in the Colorado River Valley (Grinnell and Miller 1944, McCaskie et al. 1979, Garrett and Dunn 1981).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Primarily eats insects, including grasshoppers, caterpillars, beetles, and ants; also eats earthworms, snails, and other small arthropods (Bent 1949). Flies out from low perch to capture prey on ground or herbage; sometimes hovers before pouncing. Also hawks aerial insects. Perches on low branch of tree or shrub, fence, or tall herb; often adjacent to medium to large opening in wooded or brushy habitat. In nonbreeding season, supplements diet with berries of mistletoe, poison-oak, elderberry, and other species. Presence of mistletoe berries may govern local occurrence in winter (Pitelka 1941, Grinnell and Miller 1944).

Cover: Requires trees and shrubs for cover. Typically rests in tree when not foraging, but also uses fence or shrub. Uncommon in habitats without at least a few trees or large shrubs, even in winter. Nests and roosts in cavity in tree or snag.

Reproduction: Usually nests in old woodpecker hole in snag, tree, or stump; also uses other cavity or nest box (Scott et al. 1977). Occasionally uses nest of cliff swallow or other species (Bent 1949). Nests in Monterey Co. were 1.5 to 12 m (5-39 ft) above ground (Bent 1949).

Water: Drinks water freely and regularly (Gander 1960, Smyth and Coulombe 1971), but may not require water when berries are available.

Pattern: Frequents open woodlands. Requires suitable nesting and roosting cavity, usually in a snag or tree near open habitat for foraging; also low perches to search for prey. Availability of snags frequently limits population density (Ross 1933, Raphael and White 1978, Ehrlich et al. 1988).

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: A resident in much of its California range, but undergoes local and irregular movements in many areas. In Sierra Nevada, small flocks move upslope in late summer and fall (Gaines 1977b). Withdraws from higher mountains in winter, and may move into lowland areas not occupied while breeding. None recorded on Farallon Islands (DeSante and Ainley 1980).

Home Range: Home range in Arizona ponderosa pine forest varied from 0.3 to 0.8 ha (0.7 to 1.9 ac) and averaged 0.46 ha (1.13 ac) (Balda 1975). Breeding density in this habitat was 15 pairs per 40 ha (100 ac) (Haldeman et al. 1973). Wilson (1978) found 37 per 100 ha (15 per 100 ac) at Morongo Valley, San Bernardino Co. in winter. Miller and Stebbins (1964) noted flocks of up to 25-50 individuals in winter at Joshua Tree National Monument. Anderson (1970) reported a wintering population of 8-20 per 40 ha (100 ac) in an Oregon white oak forest.

Territory: No data found, but probably equal to home range.

Reproduction: Breeds from April into July. A monogamous, solitary nester. Clutch size 3-8, average 5. Frequently double-brooded. Incubation lasts 13-14 days. Altricial young tended by both parents. Male may tend fledglings while female renests. Probably breeds first at 1 yr (Harrison 1978).

Niche: Competition from European starlings and house sparrows has reduced eastern bluebird populations in parts of the eastern U.S., and threatens western bluebirds. Construction of nest boxes with smaller entrance holes (Scott et al. 1977) has allowed a partial population recovery of eastern bluebirds. Western bluebirds also compete for nest sites with violet-green swallows, house wrens, and other native species; generally are more capable of defending nest against native species (Bent 1949). Competition with woodpeckers for nest sites may be strong (Miller and Bock 1972).

REFERENCES

- Airola, D. A., ed. 1980. California wildlife habitat relationships program: Northeast Interior Zone. Vol III. Birds. U.S. Dep. Agric., For. Serv., Lassen Natl. For., Susanville. 590pp.
- Anderson, S. H. 1970. The avifaunal composition of Oregon white oak stands. *Condor* 72:417-423.
- Balda, R. P. 1975. The relationship of secondary cavity-nesters to snag densities in western coniferous forests. U.S. Dep. Agric., For. Serv., Reg. 3, Wildl. Habitat Tech. Bull. No. 1. Albuquerque, NM. 37pp.
- Bent, A. C. 1949. Life histories of North American thrushes, kinglets, and their allies. U.S. Natl. Mus. Bull. 196. 454pp.
- DeSante, D. F., and D. G. Ainley. 1980. The avifauna of the South Farallon Islands, California. *Studies in Avian Biol.* No. 4. Cooper Ornithol. Soc., Lawrence, KA. 104pp.
- Ehrlich, P. R., D. S. Dobkin, and D. Wheye. 1988. *The birder's handbook*. Simon and Schuster, New York. 785pp.
- Gaines, D. 1977b. *Birds of the Yosemite Sierra*. California Syllabus, Oakland. 153pp.
- Gander, F. F. 1960. Western bluebirds in my garden. *Audubon* 62:70-71, 83.
- 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.
- Haldeman, J. R., R. P. Balda, and S. W. Carothers. 1973. Breeding birds of a ponderosa pine forest and a fir, pine, aspen forest in the San Francisco Mountain area, Arizona. Pages 1-21 in S. W. Carothers, J. R. Haldeman, and R. P. Balda, eds. *Breeding birds of the San Francisco Mountain and the White Mountains, Arizona*. Mus. North. Ariz. Tech.

Ser. 12. 54pp.

- Harrison, C. 1978. A field guide to the nests, eggs and nestlings of north American birds. W. Collins Sons and Co., Cleveland, OH. 416pp.
- Jackman, S. M., and J. M. Scott. 1975. Literature review of twenty three selected forest birds of the Pacific Northwest. U.S. Dep. Agric., For. Serv., Reg. 6, Portland, OR. 382pp.
- McCaskie, G., P. De Benedictis, R. Erickson, and J. Morlan. 1979. Birds of northern California, an annotated field list. 2nd ed. Golden Gate Audubon Soc., Berkeley. 84pp.
- Miller, A. H., and C. E. Bock. 1972. Natural history of the Nuttall's woodpecker at the Hastings Reservation. *Condor* 74:284-294.
- Miller, A. H., and R. C. Stebbins. 1964. The lives of desert animals in Joshua Tree National Monument. Univ. California Press, Berkeley. 452pp.
- Pitelka, F. A. 1941. Distribution of birds in relation to major biotic communities. *Amer. Midl. Nat.* 25:113-137.
- Raphael, M. G., and M. White. 1978. Avian utilization of snags in a northern California coniferous forest. U.S. Dep. Agric., For. Serv., Reg. 5, San Francisco. Prog. Rep. 18pp.
- Ross, R. C. 1933. Western bluebird nesting in wall tile. *Condor* 35:73-74.
- Scott, V. E., K. E. Evans, D. R. Patton, C. P. Stone, and A. Singer. 1977. Cavity-nesting birds of North American forests. U.S. Dep. Agric., For. Serv., Wash. DC. Agric. Handb. No. 511. 112pp.
- Smyth, M., and H. M. Coulombe. 1971. Notes on the use of desert springs by birds in California. *Condor* 73:240-243.
- Wilson, D. L. 1978. Thirtieth winter bird population study. *Amer. Birds* 32:41.

B380

Life history accounts for species in the California Wildlife Habitat Relationships (CWHR) System were originally published in: Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California. Updates are noted in accounts that have been added or edited since original publication.