

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

WESTERN MEADOWLARK

Sturnella neglecta

Family: ICTERIDAE
B521

Order: PASSERIFORMES

Class: AVES

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

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

A common resident throughout most of the state, except in higher mountains. Occurs in herbaceous and cropland habitats with sufficient ground cover for concealment. Where such habitats form understory open wooded and brushy habitats also used. Among cultivated crops, particularly favors alfalfa. May move upslope in small numbers postbreeding, sometimes reaching treeline (Gaines 1977b). Highest breeding elevation apparently about 2400 m (8000 ft), in eastern Sierra Nevada. Usually leaves montane portions of breeding range in winter (Grinnell and Miller 1944, McCaskie et al. 1979, Garrett and Dunn 1981).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Annual diet about 63% animal matter, mostly insects, spiders, sowbugs, snails, and 37% grass and forb seeds and grains (Bryant 1914). Nestlings fed almost entirely insects (Orians and Horn 1969). Animal matter forms 96% of diet in summer, but only 45% in winter (Bent 1958, Martin et al. 1961). Occasionally eats carrion (Hubbard and Hubbard 1969) and eggs of other ground-nesting birds (Creighton 1974). Feeds in open, grassy areas, gleaning food from ground or low plants; also turns over objects and probes in soft earth.

Cover: Requires relatively dense, grassy vegetation tall enough for concealment (Grinnell and Miller 1944). Uses trees, fences, shrubs, mounds for lookout and song perches.

Reproduction: Nest hidden in depression in ground among grasses and forbs.

Water: Drinks water in captivity (Pierce 1974), and wild individuals drink and bathe.

Pattern: Requires relatively dense, grassy habitat with vegetation tall enough to provide cover, along with a few low perches. Scattered trees and shrubs may be present, but not required.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: Not migratory over most of its California range. Some upslope movement postbreeding, and montane populations move downslope to foothills and lowlands to winter.

Home Range: Breeding home range essentially same as territory (Lanyon 1957).

Territory: In Wisconsin, territory varied from 1.2 to 6.1 ha (3-15 ac), and mostly were 2.8 to 3.2 ha (7-8 ac) (Lanyon 1956b). Four territories in Iowa were 4.1, 8.5, 9.7, and 13.0 ha (10, 21, 24, and 32 ac) (Kendeigh 1941a).

Reproduction: Breeding season lasts from February into late August. Monogamous or polygynous (Lanyon 1956b) and a solitary nester. Clutch size usually 5, range 3-7. Typically 2 broods raised yearly (Lanyon 1957). Incubation lasts 13-15 days. Altricial young tended by both parents. Young leave nest at about 12 days, before able to fly; fed by parents for about 2 wk longer. Probably breeds first at 1 yr (Harrison 1978).

Niche: Roosts on ground in small groups. Heavy grazing, especially in summer, is detrimental to habitat, but light or winter grazing apparently has little effect (Wiens 1973). Raptors commonly prey on adults, and a variety of avian and mammalian predators prey on young. Apparently only uncommonly parasitized by cowbirds (Friedmann 1963, Ehrlich et al. 1988). Forms larger flocks in winter.

REFERENCES

- Bent, A. C. 1958. Life histories of North American blackbirds, orioles, tanagers, and allies. U.S. Natl. Mus. Bull. 211. 549pp.
- Bryant, H. C. 1914. A determination of the economic status of the western meadowlark (*Sturnella neglecta*) in California. Univ. Calif. Publ. Zool. 11:377-510.
- Creighton, P. D. 1974. Nest predation and interference by western meadowlarks. Auk 91:177-178.
- Ehrlich, P. R., D. S. Dobkin, and D. Wheye. 1988. The birder's handbook. Simon and Schuster, New York. 785pp.
- Friedmann, H. 1963. Host relations of the parasitic cowbirds. U.S. Natl. Mus. Bull. 233. 276pp.
- 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.
- Harrison, C. 1978. A field guide to the nests, eggs and nestlings of North American birds. W. Collins Sons and Co., Cleveland, OH. 416pp.
- Harrison, C. J. O., ed. 1978. Bird families of the world. Harry N. Abrams, Inc., New York. 264pp.
- Hubbard, J. P., and C. L. Hubbard. 1969. Meadowlarks feeding on road-kills. Wilson Bull. 81:107-108.
- Kendeigh, S. C. 1941a. Birds of a prairie community. Condor 43:165-174.
- Lanyon, W. E. 1956a. Ecological aspects of the sympatric distribution of meadowlarks in the north-central states. Ecology 37:98-108.
- Lanyon, W. E. 1956b. Territory in the meadowlarks, Genus *Sturnella*. Ibis 98:485-489.
- Lanyon, W. E. 1957. The comparative biology of the meadowlarks (*Sturnella*) in Wisconsin. Nuttall Ornithol. Club Publ. No. 1. Cambridge, MA. 67pp.
- Lanyon, W. E. 1962. Specific limits and distribution of ash-throated and Nutting flycatchers. Auk 79:183-207.
- Martin, A. C., H. S. Zim, and A. L. Nelson. 1961. American wildlife and plants, a guide to wildlife food habits. Dover Publ., Inc., New York. 500pp.
- 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.
- Orians, G. H., and H. S. Horn. 1969. Overlap in foods and foraging of four species of blackbirds in the Potholes of central Washington. Ecology 50:930-938.
- Pierce, A. M. 1974. Energetics and water economy in the western meadowlark, *Sturnella neglecta*. Ph.D. Thesis, Univ. California, Irvine. 148pp.
- Wiens, J. A. 1973. Interterritorial habitat variation in grasshopper and savannah sparrows. Ecology 54:877-884.us) social systems. Ecol. Monogr. 31:285-312.
- Payne, R. B. 1969. Breeding season and reproductive physiology of tricolored and red-winged blackbirds. Univ. Calif. Publ. Zool. 90:1-114.
- Skorupa, J. P., R. L. Hothem, and R. W. DeHaven. 1980. Foods of breeding tricolored

blackbirds in agricultural areas of Merced County, California. *Condor* 82:465-467.
Terres, J. K. 1980. *The Audubon Society encyclopedia of North American birds*. A.
Knopf, New York. 1100pp.

B521

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.