California Wildlife Habitat Relationships System

California Department of Fish and Wildlife California Interagency Wildlife Task Group

HOUSE SPARROW Passer domesticus

Family: PASSERIDAE Order: PASSERIFORMES Class: AVES

B547

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

An introduced resident; common throughout most of California in urban and cropland habitats and other areas of human habitation, especially near livestock. In montane regions, occurs only locally at larger settlements (Garrett and Dunn 1981), and not at all at higher elevations (Gaines 1977b). Most abundant near stables, outdoor restaurants, and other habitation with nest sites and dependable food sources. Formerly more abundant; has declined in numbers since 1920's (Grinnell and Miller 1944), apparently because of reduction in abundance of waste grains available at stables and in horse manure during coincident pre-automobile period and irruptive phase of introduced population cycle (Bent 1958)

SPECIFIC HABITAT REQUIREMENTS

Feeding: Primarily a seedeater; also eats fruits, other plant materials, and some insects. Nestlings fed insects and seeds (Bent 1958). Often feeds on grains in fields and at stables, and scavenges human food scraps. Gleans most food from ground, but also gleans from foliage.

Cover: Trees, shrubs, cavities, human structures provide cover. Apparently prefers to roost in nest hole or similar cavity, but also uses dense foliage of trees, shrubs, vines (Summers-Smith 1963). When not breeding, often roosts in flocks. While nesting, female roosts on nest.

Reproduction: Usually builds nest in a hole, crevice, or cranny in a building, nest box, or tree, or in old nest of other cavity nester. Sometimes nests in hole in cliff, or in dense branches of tree, shrub, or vine. Nest usually more than 3 m (10 ft) above ground (Summers-Smith 1963, North 1973a); recorded as high as 15 m (50 ft) (Bent 1958).

Water: Probably requires drinking water daily, as do most seedeaters (Bent 1958).

Pattern: Requires human-made structures for nest sites, and waste grains or other food sources from human habitation.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: Not migratory. Most long-range movement apparently is dispersal by young in fall (Summers-Smith 1963, North 1973b, Will 1973). Montane population may move downslope for winter, as does in southern Asia (Summers-Smith 1963).

Home Range: Nonbreeders reported ranging as far as 3.2 km (2 mi) from roosts to feed in New York (Weaver 1939), Oklahoma (North 1973b), and Illinois (Will 1973). Nesters in Illinois

seldom travelled more than 30 m (100 ft) from nest (Will 1973).

Territory: In Illinois and Wisconsin, territory varied from 0.5 to 6 m (1.5 to 20 ft) in diameter around nest, averaging 14.7 m² (158 ft²) in area; defended all year (Owen 1957). Territory in English urban areas included only nest and a small area around it (Summers-Smith 1963).

Reproduction: Nesting in California begins in March, occasionally earlier (Bent 1958). Typically a monogamous, social breeder, nesting in a loose colony (Summers-Smith 1963). Usually lays 3-5 eggs per clutch, rarely up to 8; often raises 2 or 3 broods per yr. Incubation 10-14 days, by female. Altricial young tended by both parents and leave nest at 14-17 days. Breeds first at 1 yr (Summers-Smith 1963, Harrison 1978).

Niche: Detrimental to many native bird species; competes aggressively for nest sites, not only evicting adults, but also destroying eggs and nestlings. Species commonly evicted include cliff swallow (Samuel 1969), bluebirds (Clark 1968), wrens, swallows, house finch (Bent 1958). In Kansas, important predators included snakes, which mostly ate eggs, and domestic cats and small mustelids, which fed mostly on nestlings (Murphy 1978).

Comments: Introduced from Europe into eastern U.S. about 1850. First recorded in California (San Francisco Bay area) in early 1870s. Apparently came west with railroads. Has not successfully colonized natural habitats distant from human habitations (Grinnell and Miller 1944, Ehrlich et al. 1988).

REFERENCES

- Bent, A. C. 1958. Life histories of North American blackbirds, orioles, tanagers, and allies. U.S. Natl. Mus. Bull. 211. 549pp.
- Clark, A. M. 1968. The English sparrow: is he as villainous as this report indicates? Audubon Bull. 148:27-28.
- 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.
- 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.
- Kendeigh, S. C., ed. 1973. A symposium on the hose sparrow (Passer domesticus) and European tree swallow (P. montanus) in North America. Ornithol. Monogr. No. 14. 121pp.
- Murphy, E. C. 1978. Breeding ecology of house sparrows: spatial variation. Condor 80:180-193.
- North, C. A. 1973a. Population dynamics of the house sparrow, Passer domesticus (L.), in Wisconsin. Pages 195-210 in S. C. Kendeigh and J. Pinowski, eds. Productivity, population dynamics, and systematics of granivorous birds. Polish Scientific Publishers, Warsaw. 410pp.
- North, C. A. 1793b. Movement patterns of the house sparrow in Oklahoma. Pages 79-92 in S. C. Kendeigh, ed. A symposium on the house sparrow (Passer domesticus) and European tree sparrow (P. montanus) in North America. Ornithol. Monogr. No. 14. 121pp.
- Owen, O. S. 1957. Observations on territorial behavior in the English sparrow. Bull. Ecol. Soc. Am. 38:101-102.
- Samuel, D. E. 1969. House sparrow occupancy of cliff swallow nests. Wilson Bull. 81:103-
- Sappington, J. N. 1977. Breeding biology of house sparrows in north Mississippi. Wilson Bull. 89:300-309.
- Summers-Smith, J. D. 1963. The house sparrow. W. Collins & Sons, London. 269pp.
- Weaver, R. L. 1939. Winter observations and a study of the nesting of English sparrows. Bird-Banding 10:73-79.

Weaver, R. L. 1943. Reproduction in English sparrows. Auk 60:62-74.
Will, R. L. 1973. Breeding success, numbers, and movements of house sparrows at McLeansboro, Illinois. Pages 60-78 in S. C. Kendeigh, ed. A symposium on the house sparrow (Passer domesticus) and European tree sparrow (P. montanus) in North America. Ornithol. Monogr. No. 14. 121pp.

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