

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

BREWER'S SPARROW

Spizella breweri

Family: EMBERIZIDAE
B491

Order: PASSERIFORMES

Class: AVES

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

A common summer resident and breeder east of the Cascade-Sierra Nevada crest, in mountains and higher valleys of Mojave Desert, and in those bounding southern end of the San Joaquin Valley. Breeds in treeless shrub habitats with moderate canopy, especially in sagebrush. Now mostly absent from former breeding grounds in southwestern California (Garrett and Dunn 1981). Breeds locally above pinyon-juniper belt (McCaskie et al. 1979), and apparently on western slope of Sierra Nevada (Verner and Boss 1980). Common in winter in open desert scrub and cropland habitats of southern Mojave and Colorado deserts, usually in areas with some herbaceous understory. Occurs as a rare fall transient west of Sierra Nevada, and as an uncommon fall transient and rare spring transient in southern coastal districts (Grinnell and Miller 1944, McCaskie et al. 1979, Garrett and Dunn 1981).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Eats mostly insects and spiders in summer and seeds of grasses and forbs in winter. Picks seeds from ground, gleans and pursues insects on ground; occasionally feeds in low shrubs (Bent 1968).

Cover: In summer, often finds cover in sagebrush in extensive stands with moderate canopy unbroken by trees, usually 0.5-1.3 m (1.5-4.0 ft) in height. Similar shrub habitats, such as bitterbrush, are used to a lesser extent. In nonbreeding season, uses a variety of brushlands of similar structure (Grinnell and Miller 1944), plains, and fields (Garrett and Dunn 1981).

Reproduction: Nest is a cup of dry grass stems, forbs, and rootlets lined with fine grasses, rootlets, and hairs (Harrison 1978). Nest usually located in center of a sagebrush or other shrub up to 1.2 m (3.9 ft) above ground, but usually less than 0.3 m (1 ft). Rarely nests on ground.

Water: Commonly drinks and bathes, but may not require free water (Linsdale 1938). Apparently can meet water needs by eating insects (Ohmart and Smith 1970), and can subsist on dry seeds for 3 wk (Ehrlich et al. 1988).

Pattern: Breeds in extensive shrub stands with moderate canopy, especially sagebrush. Winters in open desert scrub and similar habitats, plains, and fields.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: Breeding populations present mostly May through August. Not known whether wintering populations represent California breeders or migrants

from elsewhere. Present for wintering mostly September through April. Migrants elsewhere in California occur mostly in September and October and April and May. May move upslope postbreeding.

Home Range: An individual chased by Linsdale (1938) remained within an area 150 yd in diameter (136 m), suggesting its breeding home range. In Wyoming sagebrush, density was 30-40 pairs per 40 ha (100 ac). In Montana, Best (1972) found 45-50 pairs per 40 ha (100 ac) in unsprayed sagebrush, and 15-33 pairs per 40 ha (100 ac) in the first yr after herbicide spraying that killed all sagebrush. Gashwiler (1977) reported 27-36 pairs per 40 ha (100 ac) in Oregon sagebrush. In successional brushfields in Sierra Co., Bock and Lynch (1970) reported 3.6 pairs per 40 ha (100 ac). In the same area, Savidge (1978) found 45 pairs per 40 ha (100 ac) in unsprayed brush, and 22.3 pairs per 40 ha (100 ac) in a matched plot sprayed heavily with herbicide.

Territory: No data found.

Reproduction: Breeds primarily from May through August with a peak in June. Usually lays 3 or 4 eggs per clutch, occasionally 5. Incubation 11-13 days; altricial young fledge in 8-9 days (Harrison 1978, Ehrlich et al. 1988).

Niche: Wyoming sagebrush habitat was abandoned after herbicide spraying (Schroeder and Sturges 1975). Density declined after spraying in Montana sagebrush (Best 1972), and in successional brushfields in Sierra Co. (Savidge 1978). Apparently an uncommon cowbird host (Ehrlich et al. 1988).

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