

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

SAVANNAH SPARROW

Passerculus sandwichensis

Family: EMBERIZIDAE
B499

Order: PASSERIFORMES

Class: AVES

Written by: D. Dobkin, S. Granholm

Reviewed by: L. Mewaldt

Edited by: R. Duke

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Breeds commonly east of Cascade-Sierra Nevada crest and along entire California coast, though very locally on southern coast. Occurs primarily in grassland, saline emergent wetland, and wet meadow habitats. Coastal breeders restricted to saline emergent wetlands and, in northern California, to moist grasslands within the fog belt. In the interior, breeding occurs mostly in valleys, in moist grasslands and meadows. Montane valleys are occupied locally, as are hay fields. Breeds locally on western slope of Cascade Range, in upper Kern Basin, Kern Co., and at Baldwin Lake in San Bernardino Mts. Mostly withdraws from Great Basin in winter; common then in most other foothill and lowland areas throughout the state. At Salton Sea, winters uncommonly in desert riparian habitat, primarily in saltcedar scrub at river mouths. East of Sierra Nevada, winters locally north through Owens Valley. Belding's savannah sparrow, *P. s. beldingi*, lives year-round in scattered southern coastal wetlands (Grinnell and Miller 1944, McCaskie et al. 1979, Garrett and Dunn 1981).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Eats mostly grass and other seeds, insects, snails, and spiders. Invertebrates predominate in breeding season, seeds are more important remainder of year. Scratches and gleans on ground, and picks food directly from low plants (Bent 1968).

Cover: Cover provided mostly by herbage in grasslands, wet meadows, salicornia wetlands, and by associated scattered shrubs and rocks. Requires dense ground cover in breeding season. In winter, seeks similar cover in a variety of moist and dry grasslands, croplands, and in low vegetation along beaches and shorelines.

Reproduction: Nests in a hollow on ground; usually concealed by overhanging vegetation. Builds cup nest of grasses, sedges, salicornia, with an inner lining of fine grasses, rootlets, and hairs (Harrison 1978).

Water: Observed to bathe and drink (Norris 1960, Bartholomew and Cade 1963), but can survive on a diet of seeds without drinking water (Bartholomew 1972).

Pattern: Breeds mostly in dense, moist grasslands, wet meadows, and salicornia wetlands, with or without scattered shrubs or clumps of tall herbs. At least in interior, ground cover mostly less than 10 cm (4 in) high. In winter, occupies moist and dry grasslands, but prefers dense, short ground cover; also occurs in low vegetation in croplands and along beaches and shorelines.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: Wintering populations arrive from August to October, depending upon the subspecies, and depart in April or May. Montane breeding populations mostly move downslope to winter.

Home Range: In Georgia, Norris (1960) estimated a short-term winter home range at 3.2 ha (8ac). Winter density averaged 10-12 individuals per ha (4-5 per ac) and varied up to 74 per ha (30 per ac).

Territory: In Michigan pasture and fallow farmland, Potter (1972) recorded 62 territories averaging 0.11 ha (0.26 ac) and varying from 0.01 to 0.29 ha (0.03 to 0.71 ac); 27 territories without nests averaged 0.08 ha (0.21 ac), and 35 territories with nests averaged 0.12 ha (0.30 ac). In Wisconsin, Wiens (1969) reported 91 territories averaging 0.69 ha (1.7 ac) and varying from 0.16 to 1.74 ha (0.4 to 4.3 ac). On beach dunes in Nova Scotia, Welsh (1975) reported 13 territories averaging 0.17 ha (0.43 ac) and varying from 0.09 to 0.33 ha (0.23 to 0.81 ac).

Reproduction: Breeds from April into July, with a peak in May and June. Lays 2-6 eggs, usually 4 or 5 per clutch; often double-brooded. Incubation 10-13 days; altricial young fledge in 7-14 days. Incubation and brooding mostly by female (Bent 1968, Harrison 1978, Ehrlich et al. 1988).

Niche: Subject to predation by hawks, snakes, and small mammals. May be semicolonial, polygynous, roost in small groups on ground, or form small flocks in winter, especially in saline emergent wetland (Ehrlich et al. 1988).

Comments: Belding's savannah sparrow, *P. s. beldingi*, frequents pickleweed in a few scattered saline emergent wetlands from Santa Barbara Co. south. Only a few thousand individuals remain, but numbers may stabilize if these restricted and vulnerable habitat remnants are protected (California Department of Fish and Game 1989). *P. s. rostratus*, the large-billed savannah sparrow, a winter visitant to saline emergent wetland at Salton Sea and southern coast, is a California Species of Special Concern (Grinnell and Miller 1944).

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B499

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