## WHITE-CROWNED SPARROW Donald Shephard



White-crowned Sparrow, juvenile left, and adult right. Photo Ron LeValley LeValleyphopto.com

We frequently see White-crowned Sparrows singing atop coyote brush as we take our evening walk to Point Cabrillo, but it surprised me to learn they sometimes sing at night. The distinctive song and appearance make it one of the surest sparrow identifications. The smart black-and-white head, yellowish beak, and clean gray throat and breast combine for a dashing look.

Our local birds do not migrate and experts regard them as a separate subspecies, *Zonotrichia leucophrys nuttalli*, one of five in North America, and the only one found exclusively in California. It inhabits a narrow band, not east of the redwood fog zone, along the coast from northwestern California to Santa Barbara County. Two other subspecies visit us in winter, *Z. l. pugetensis*, which breeds from Cambell River, Vancouver Island through northwestern California, and *Z. l. gambelii*. which ibreeds Alaska, the northern mainland of Canada, eastern British Columbia, and southwestern Alberta.

Local pairs stay near one another throughout the winter on or near their established territories while immature members of the three subspecies flock in groups of 3-10 individuals, mixed with a few Golden-crowned Sparrows. Immature birds in fall and winter look similar to adults but with brown and gray head stripes. In summer, juvenile birds display duller plumage with streaked breasts.

Typical habitat includes grass for rapid protective covering while foraging, adjacent bare ground, shrubbery to shelter a nest or provide a roost, and a source of salt or fresh water. The combination of these elements works best when in a patchy array maximizing suitability. Within coastal chaparral habitat, the shrubs most commonly used for nesting include coyote brush, sage, poison oak, bush monkey flower, and berry brambles. In urban areas they nest in exotic shrubs. They build nests with small sticks, grasses, dead leaves, pine needles, and moss, and line the cup with soft grasses, flower heads, hair, duff, and leaves. The pair takes a circuitous route when coming and going from the nest.

Males sing weakly and sporadically throughout the winter, but in January, depending upon the weather, the male's singing becomes more vigorous and prolonged, accompanied by chasing and fighting of rival males to remove them from its territory. Females trill and posture by fluttering their wings. As early as 18 days prior to the first copulation, sometime in March, the

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male will sporadically chase his mate and jab her with his bill. About 3 weeks before coition, he also sings quietly between foraging sorties, in the half-hour before dark. The female initiates copulation with a "Copulation-solicitation Display" assuming a slight crouch, tail held nearly vertical, bill pointed upward, wings extended, quivering while trilling. The male advances, his crown raised and bill lowered and agape. Unlike the migratory subspecies, which start later, courtships can last up to 6-8 weeks because early on their reproductive organs are not fully developed.

Inclement weather may delay the nesting season as much as 41 days. Generally, egg laying begins in mid-March and is completed by late June. Weather also dictates the number of broods, varying from 2 to 4.

The female incubates for periods of 20 minutes at a time so that the eggs to reach a temperature of 38° C. She then leaves the nest to forage for 10 minutes or less before going back to incubate. The male follows the female when she leaves the nest and does not stay behind to protect it. Hatching occurs after about 12 days of incubation. Nestlings hatch almost naked with little tufts of down along the feather tracts exposing transparent pink skin. They are helpless, with their eyes closed, and can make only feeble body movements. Hatchlings gape when the nest is jarred within 10 minutes of having hatched.

Both parents continue to feed the young past the time of fledging. The male may take over the job if the female works on a new nest. The male will continue to feed until the young are about 30 days old: he ignores them and even chases or fights them.

White-crowned Sparrow adult. Photo Ron

Adult pairs that remain together continue to inhabit their territory, patrolling and singing, albeit with far less fervor and jealousy, to the extent that flocks of immatures and even mateless adults can be included within their territory throughout the fall and winter.

Z. l. nuttalli, seem to have their territories enhanced to a degree when human disturbance affects their natural habitat. The presence of roads or fences increases habitat patchiness, creating the matrix of grass, bare ground, and nearby shrubbery that these birds prefer.

Predators include Common Barn Owl, Sharp-shinned Hawk, Western Scrub-Jays and American Kestrels.

Take a careful look, next time you spot this large sparrow, and see if you can identify the subspecies. White-crowned Sparrow adult. Photo Ron LeValley, LeValleyphopto.com

