

Black-chinned Sparrow *Spizella atrogularis*

The Black-chinned Sparrow is one of North America's least-studied birds, yet it is one of the commonest species on the steep chaparral-covered slopes so widespread in San Diego County's foothills and mountains. Rugged topography seems to be nearly as much a feature of the Black-chinned Sparrow's habitat as chaparral. The birds are inconspicuous except for the male's song, an accelerating trill with a mechanical quality unique among California's breeding birds. The Black-chinned Sparrow is a summer visitor almost exclusively, being very rare in winter and even as a migrant away from its breeding habitat.

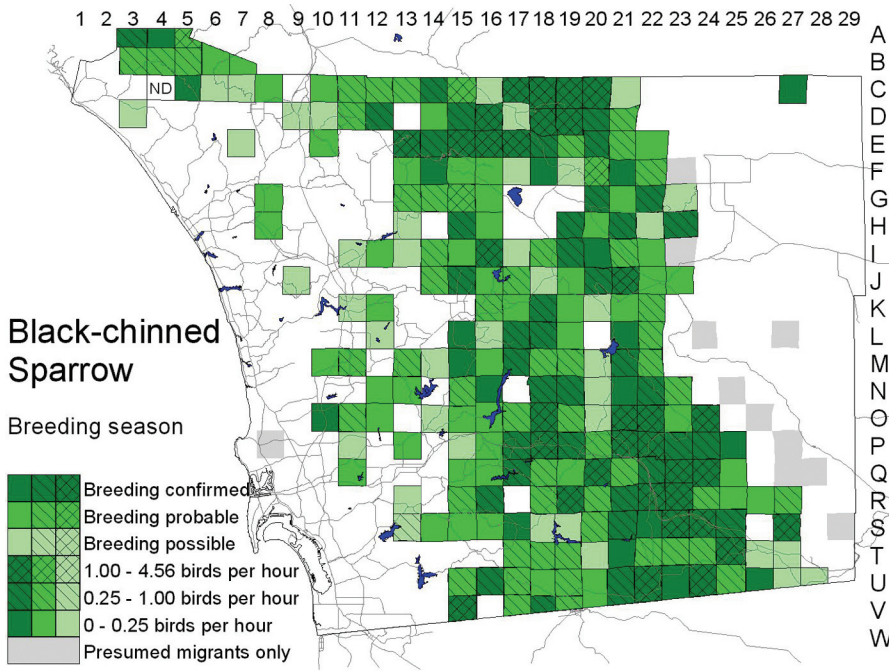
Breeding distribution: The Black-chinned Sparrow occurs widely in San Diego County's foothills and mountains above 1500 feet elevation. Gaps are due to extensive grassland, as in Warner Valley, or forest, as in the Cuyamaca Mountains. The largest concentrations appear to be between 2500 and 5500 feet elevation on south-facing slopes, e.g., 60 in Noble Canyon (O22) 6 June 1997 (R. A. Hamilton), 48 on Otay Mountain (V15) 25 May 1999 (D. C. Seals), and 46 along the Pacific Crest Trail from Kitchen Creek to Fred Canyon (R23) 17 May 1998 (L. J. Hargrove). In prime habitat the population is so dense that up to four territorial males are within earshot of each other and sing in rotation (L. J. Hargrove). Though the big sagebrush is not typically defined as chaparral, and the Black-chinned Sparrow is absent from the Great Basin where this shrub dominates, in San Diego County the sparrow uses this plant commonly. The Black-chinned Sparrow's use of coastal sage scrub, though, is only marginal. Outlying sites nearer the coast



Photo by Anthony Mercieca

correspond to more isolated chaparral-covered hills, such as San Onofre Mountain (D3; one on 3 June 2000, R. and S. L. Breisch), the San Marcos Mountains (G8/H8; up to three on 31 May 1999, J. O. Zimmer), Frank's Peak/Mt. Whitney (J9; one on 25 May 1998, J. O. Zimmer), Black Mountain (M10; three on 9 May 1999, K. J. Winter), the western edge of steep hills on Miramar (O10; feeding young on 10 June 1998, G. L. Rogers), and Cowles Mountain (Q11; up to four on 7 and 29 April 1997, N. Osborn). The lowest elevation to which breeding Black-chinned Sparrows descend appears to be about 500 feet, as in Sycamore Canyon (O12; seven on 6 May 1999, G. L. Rogers). A few pairs edge into coastal sage scrub, occupying small patches of chamise within the sage scrub or stands of denser, leafier shrubs like redberry and laurel sumac (M. A. Patten).

Along the desert slope the edge of the Black-chinned Sparrow's breeding range tracks the edge of the chaparral closely. The notable exception is in the stunted pinyon



Black-chinned Sparrow

Breeding season

- Breeding confirmed
- Breeding probable
- Breeding possible
- 1.00 - 4.56 birds per hour
- 0.25 - 1.00 birds per hour
- 0 - 0.25 birds per hour
- Presumed migrants only

woodland of the Santa Rosa Mountains, where the species is rare and possibly sporadic. There is one record, of a pair with three fledglings at 5700 feet elevation 1.25 miles south-southeast of Rabbit Peak (C27) 4 June 2001 (R. Thériault).

Nesting: The Black-chinned Sparrow conceals its small cup nest in the middle level of shrubs. The species of shrub appears immaterial: in San Diego County, chamise, big sagebrush, manzanita, and flat-top buckwheat have all been noted as nest sites. The nesting schedule we observed during the atlas period agrees largely with published data (91 California egg dates 21 April–7 July, J. D. Newman in Austin 1968), but the species’ breeding season can extend slightly later: a clutch near Guatay (P21) hatched between 17 and 19 July 1995 (Cleveland National Forest data).

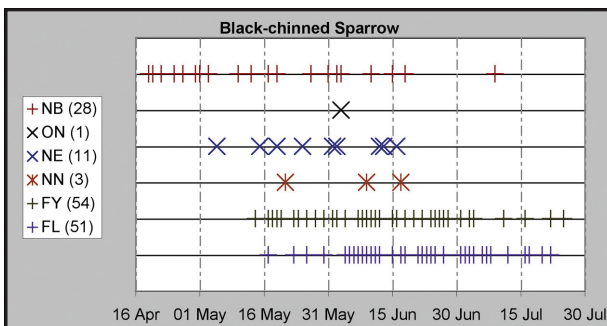
Migration: During the atlas’ term, first spring dates for the Black-chinned Sparrow ranged from 16 March (1997, two at Cowles Mountain, N. Osborn) to 26 March. The earliest date ever reported is 10 March (1983, near San Diego, AB 37:911, 1983). Since 1980 spring arrival appears to have shifted a few days earlier than previously reported (cf. Unitt 1984). The Black-chinned Sparrow is seldom seen in migration away from its breeding habitat, but

we recorded the species 12 times in spring in the Anza–Borrego Desert, mainly along the east base of the mountains, between 26 March (2001, two in Inner Pasture, N25, A. P. and T. E. Keenan) and 24 May (1997, one in Bow Willow Canyon, P27, D. G. Seay). Though some of these birds were singing, the observations were not repeated later in the season and were not concentrated in 1998, as would be expected if the species expanded its range during a wet year. Therefore I infer that these birds were migrants. Along the coast, the only records of migrants were of one in San Clemente Canyon (P8) 27 April 1999 (M. B. Stowe) and one at Point Loma (S7) on the very late date of 5 June 2001 (R. E. Webster, NAB 55:484, 2001).

As a fall migrant the Black-chinned Sparrow is equally rare, reported away from breeding habitat from 12 August to 21 October (both records from Point Loma in 1984, R. E. Webster, AB 39:104, 1985); an even later one was at Point Loma 6–28 November 1965 (AFN 20:93, 1966).

Winter: Though the Black-chinned Sparrow winters commonly in central Baja California, it is very rare at this season in San Diego County. Before 1997, there were only nine records, all from Christmas bird counts; one of the birds was collected (2 miles west of Bonita, T11, 26 December 1940, SDNHM 18245, Huey 1954). Four of the records are from the San Diego circle, one from Oceanside, two from Escondido, one from Lake Henshaw, and one from Borrego Springs. During the atlas period, we added five records, three from the foothills of central San Diego County in 1999: two in the gorge of the San Diego River above El Capitan Reservoir (M17) 23 January (R. C. Sanger), one at 2200 feet elevation on the steep west slope of Lillian Hill (M18) 7 February (P. Unitt, L. J. Hargrove, NAB 53:210, 1999), and the third 1 mile southwest of El Capitan Dam (O16) 3 January (S. Kingswood). Two records were from rugged regions of the Anza–Borrego Desert in 1998: one above Angelina Spring (I22) 21 January (P. K. Nelson), the other from 2200 feet elevation 1.1 miles south of Sunset Mountain (J26) 11 January (J. Determan, FN 52:259, 1998). The last two records, in a wet winter, recall the “extraordinary flight” of the Black-chinned Sparrow to the Kofa Mountains of southwestern Arizona in 1955–56, “a time of unusually beneficial rain” (Phillips et al. 1964).

Conservation: The Black-chinned Sparrow does not adapt to urbanization, but its rugged habitat is unattractive to development, and much is conserved in areas under the jurisdiction of the Cleveland National Forest, Bureau of Land Management, and California State Parks. The



sparrow readily recolonizes recovering burned chaparral. A study on national forest land near Pine Valley found no difference in Black-chinned Sparrow abundance between chaparral averaging 31 and that averaging six years since burning (Cleveland National Forest data). It is in thick old chaparral on north-facing slopes where the species is scarce or absent. Cowbird parasitism of the Black-chinned Sparrow occurs but appears light (Friedmann 1963). Of 31 Black-chinned Sparrow nests found around Pine Valley 1994–97 only one was parasitized (Cleveland National Forest data).

Bolger et al. (1997) listed the Black-chinned Sparrow as the most sensitive to habitat fragmentation of 20 species studied in northern San Diego. Their study design, though, assumed that the species addressed were uniformly distributed over the study area before urban-

ization, certainly not the case with the Black-chinned Sparrow. The sparrow's absence or scarcity along the coast is well attested by both historical data and its current antioceanic distribution in little-developed areas like Camp Pendleton.

Taxonomy: *Spizella a. cana* Coues, 1866, distinguished by its combination of dark plumage and small size, is the only subspecies of the Black-chinned Sparrow occurring in San Diego County. Indeed, San Diego County constitutes the core of this subspecies' range. The inland subspecies *S. a. evura* Coues, 1866, is not confirmed by specimens as a vagrant to the coast, but the individual seen on Point Loma in June may have been *evura*, which migrates later than *cana*.