## Lark Sparrow Chondestes grammacus

The Lark Sparrow is a characteristic bird of San Diego County's inland valleys. It is a year-round resident, but in winter its numbers are augmented by migrants, most noticeably in the Borrego Valley. The Lark Sparrow is common where there is ample grassland, pasture, or bare ground for foraging, yet also scattered trees or shrubs for nesting. It adapts to agriculture but retreats from urbanization.

**Breeding distribution:** The Lark Sparrow offers one of the clearest examples of an "anticoastal" distribution: a bird that is widespread except in a narrow strip along the coast. It remains at least 5 miles from the beach throughout the county. The only coastal atlas square with a Lark



Photo by Anthony Mercieca



Sparrow record during the breeding season was at the far north, along the Orange County line near San Onofre (C1), and there was only a single record even there (two on 14 June 1998, K. Lopina). Just 10 miles inland, though, the species can be common, as illustrated by 30 around lower Roblar Road in Camp Pendleton (D5) 2 July 2000 (R. E. Fischer) and 50 at Lower Otay Lake (U14) 3 July 1999 (S. Buchanan). The Lark Sparrow's center of abundance in San Diego County is the county's largest grassland, Warner Valley (G18, 107 on 19 March 1999, C. G. Edwards; G19, 65 on 25 June 2000, P. Unitt). The grasshoppers that swarm over Warner Valley in summer are the principal food Lark Sparrows feed their young.

The Lark Sparrow ranges up to San Diego County's highest elevations; mountain meadows and broken coniferous forest offer it good habitat. On the desert slope, it ranges down into San Felipe, Earthquake, and Mason valleys, then occurs in scattered patches in the Anza-Borrego Desert. Most desert locations for the Lark Sparrow are in or near orchards (north Borrego Valley) or shade trees around buildings (e.g., Ocotillo Wells). Yet, during the atlas period, the Lark Sparrow did not occupy all such habitat. It is evidently a recent colonist in the low desert. Our eight confirmations of breeding in the Anza-Borrego Desert are the first for this area (cf. Massey 1998). The earliest was in 1998, and all but two were in 2001.

In the Imperial Valley just east of San Diego County, the Lark Sparrow colonized as a new breeding species in the mid 1980s (Patten et al. 2003). Among the grapefruit orchards of the northern Borrego Valley (E24), the Lark Sparrow is already fairly common, with up to 10 on 25 May 2001 (P. D. Ache).

**Nesting:** The Lark Sparrow may nest in a tree, in a shrub, or on the ground, usually at the base of a shrub. Atlas observers reported four nests on the ground or in grass. When the Lark Sparrow nests above ground its choice of site is unspecialized; atlas observers noted laurel sumac, eucalyptus, and tamarisk, and egg collections from the county mention lemon trees.

Lark Sparrow eggs collected from San Diego County 1887-1935 range from 27 March to 6 July, and our atlas data reflect this same schedule almost exactly, with fledglings as early as 26 April (1998, Cuyamaca College, R13, J. R. Barth) and a nest with nestlings as late as 29 July (2001, Edwards Ranch, I19, D. W. Au). On 27 March in the wet spring of 1998, though, K. L. Weaver noted exceptionally early nesting in the semidesert scrub of Dameron Valley (C15): a pair of Lark Sparrows carrying small caterpillars, evidently feeding young and implying egg laying at least 11 days earlier than the previous early nest date.

Migration: There are few data on Lark Sparrow migration in





San Diego County. Away from known or probable nesting habitat in the Anza–Borrego Desert, the latest spring date is 24 April (1998, two at the east end of Clark Valley, E27, P. D. Jorgensen) or 1 May (1997, one at Tamarisk Grove—a plausible site for the species to pioneer, I24, P. K. Nelson). Near the coast our only spring records outside the breeding range were of one at Whelan Lake (G6) 18 March 1998 (D. Rorick) and one at Mt. Hope Cemetery (S10) 20 April 1997 (P. Unitt). Fall migration begins by 9 September (1977, one in the Tijuana River valley, J. L. Dunn).

Winter: In winter the number of Lark Sparrows in the Borrego Valley increases greatly. Daily counts for a single atlas square in that area run up to 75 in north Borrego Springs (F24) 17 December 2000 (N. Osborn). Totals for Anza–Borrego Christmas bird counts run as high as 154 on that same day. High numbers in the inland valleys of the coastal slope—up to 400 in a day, as in Pamo Valley (I15) 29 February 2000 (O. Carter) and at Puerta La Cruz (E18) 11 December 1999 (L. and M. Polinsky)—probably reflect both an influx of migrants from the north and the local population gathering in flocks. It seems that in winter the birds leave smaller patches of breeding habitat to flock in larger grasslands. Also, the Lark Sparrow largely vacates San Diego County's higher elevations in winter; note the lack of winter records from the Palomar and Laguna mountains, where the species breeds. From 1997 to 2002 the Lark Sparrow occurred only rarely in the coastal strip where it is absent as a breeding species. The maximum in this area was only five, at Guajome Lake (G7) 23 December 2000 (K. L. Weaver). In the Tijuana River valley (V10), the sole winter record during the atlas period was of one 19 December 1998 (P. K. Nelson).

Conservation: The Lark Sparrow responds positively to agriculture and low-density rural development. Orchards, pastures, horse corrals, and firebreaks all offer expanses of bare dirt and low weeds where the sparrow can feed. Urban sprawl, though, eliminates the Lark Sparrow. Pavement, lawns, and landscaping disfavor it. The species' disappearance from Escondido and El Cajon, for example, is clearly the result of cities replacing farms. More curious are the coastal localities where Lark Sparrow eggs were collected 1887-1935, such as Encinitas (K6), La Jolla (P7), and National City (T10). Though these have been urbanized and no longer offer Lark Sparrow habitat, they contradict the anticoastal distribution observed in recent years, which appears unrelated to urbanization because it extends seamlessly through undeveloped areas of Camp Pendleton. Bolger et al. (1997), studying birds' response to habitat fragmentation in San Diego, identified the Lark Sparrow as a species reduced in range by fragmentation. Even in winter the Lark Sparrow is retracting inland: during the atlas period it went unrecorded in Balboa Park (R9), where it was a sporadic winter visitor until the early 1980s (D. Herron), and it is no longer seen regularly in the Tijuana River Valley, where counts once ranged as high as 100 (20 December 1975, C. Lyons).

**Taxonomy:** Only the paler western subspecies *C. g. strigatus* Swainson, 1827, is known from California.