

### Brewer's Sparrow *Spizella breweri*

Brewer's Sparrow may not be much to look at, but its song is a show-stopper: a series of trills at varying high pitches and tempos, continued at length. The birds often sing in chorus, creating a surreal sound. They sing even in their winter range—fortunately for San Diegans, because it is as a winter visitor and migrant that Brewer's Sparrow occurs primarily in San Diego County. It is overwhelmingly a bird of the Anza-Borrego Desert but occurs locally in small numbers on the coastal slope, mainly in habitats mimicking desert scrub. Field work for this atlas generated much new data on Brewer's Sparrow, recording a winter invasion on an unprecedented scale and the first confirmed breeding of the species in San Diego County.

**Winter:** As a winter visitor, Brewer's Sparrow is widespread in the Anza-Borrego Desert, especially in broad washes and on valley floors where there are good numbers of shrubs as well as open sandy ground. The species' abundance, though, varies greatly with rainfall. The numbers reported in the winter of 1998–99, the year after a wet El Niño, were 20 times higher than in any of the three following dry winters. The difference even from 1997–98 would have been almost as great if not for the flock of 300 northwest of Carrizo Marsh (O29) 21 January 1998 (M. C. Jorgensen). In the peak year concentrations ranged up to 231 at Borrego Springs (G24) 20 December 1998 (P.



Photo by Anthony Mercieca

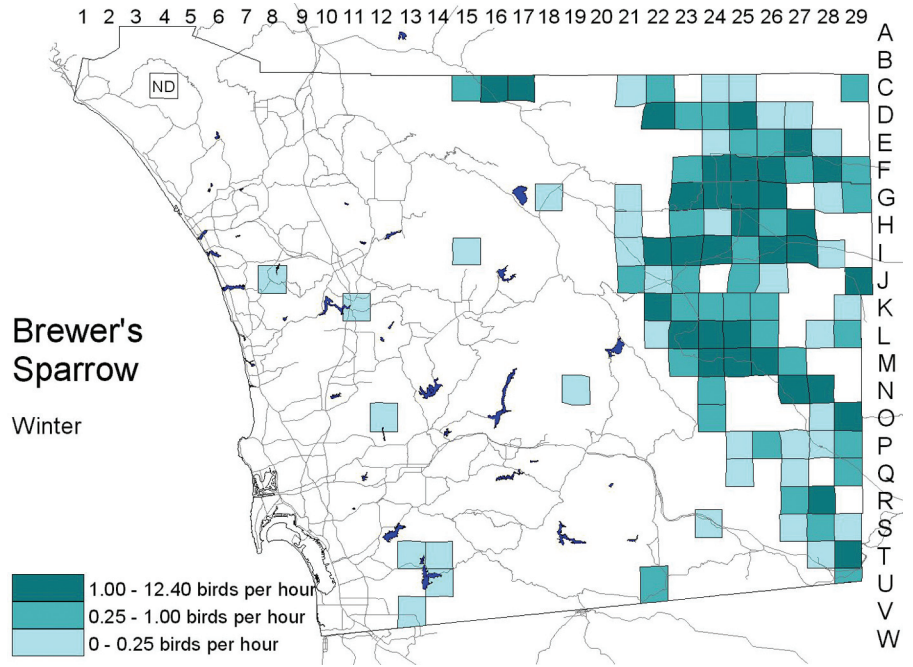
D. Ache) and 200 near Yaqui Well (I24) 31 January 1999 (R. Thériault). The Anza-Borrego Christmas bird count implies substantial year-to-year variation in numbers of the Brewer's Sparrow, but the figure in 1998–99 was still at least 15 times higher than in any year back to the count's inception in 1984. In most years the species is seen inconsistently at any given site; it probably wanders nomadically.

Brewer's Sparrow also occurs in semidesert scrub on the south-facing slopes of Dameron and Oak Grove valleys, in the coastal drainage basin of the Santa Margarita River. The species was common there in 1998–99 (up to 34 in Dameron Valley, C16, 12 December 1998, K. L. Weaver) and still occurred in small numbers in later

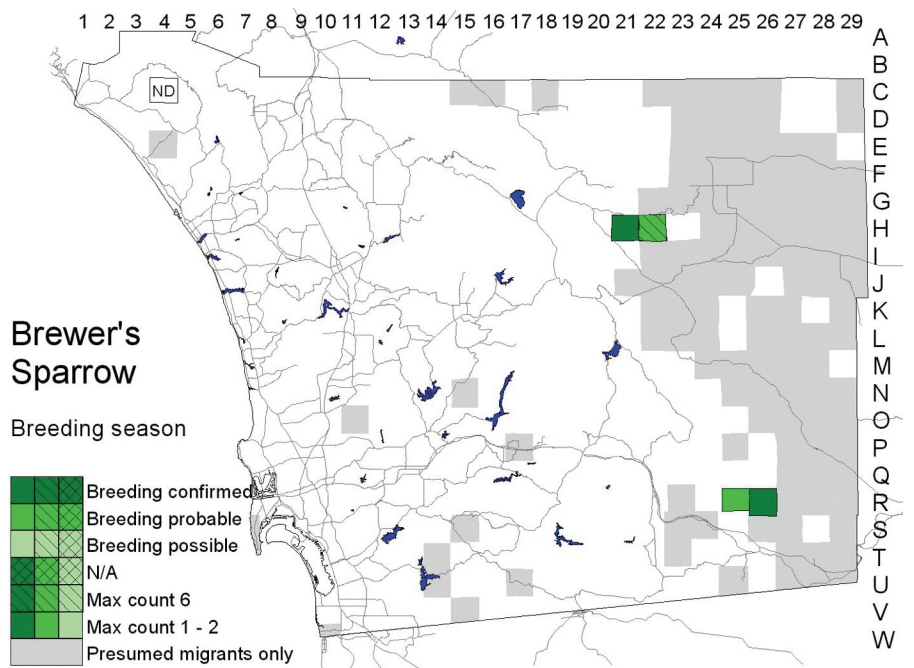
years. The only report of a large number elsewhere on the coastal slope was from near Campo (U22), site of 20 on 23 January 1999 (C. R. Mahrtdt). Locations of scattered Brewer's Sparrows elsewhere on the coastal slope were mostly from pockets of exceptionally arid scrub on south-facing slopes, such as Pamo Valley (I15, three on 10 December 1998, O. Carter) and the region of Otay Lakes (four records of single birds, P. Unitt, S. Buchanan).

**Migration:** As a migrant, Brewer's Sparrow is as widespread in the Anza-Borrego Desert as in winter but more numerous. Exceptionally high concentrations occurred in both 1998 (up to 600 on Mescal Bajada, J25, 26 April, M. and B. McIntosh) and 1999 (up to 440 in the Borrego Valley's mesquite bosque, G25, 16 March, R. Thériault). Even in "normal" years large flocks of spring migrants are seen occasionally, such as 70 near Whitaker Horse Camp (D24) 4 April 2001 (J. O. Zimmer) and 50 along Rockhouse Trail (D25) 15 April 2000 (K. J. Winter). Also, a few are seen in spring at the places on the coastal slope where the species winters (six in Dameron Valley, C16, 10 April 1999, K. L. Weaver; two in Proctor Valley, T14, 29 April 1998, P. Unitt). Coastal migrants away from wintering areas are rare (maximum four in Rancho Jamul, S15, 21 April 2001, P. Unitt, C. Woodruff) but scattered as far northwest as Las Pulgas Canyon, Camp Pendleton (E4, one on 26 April 2001, S. Brad). Numbers decline through the first half of May; 15 May 1999 (two in Indian Gorge, O27, P. R. Pryde) may be the latest date for a migrant, close to the species' latest date of 11 May for the Imperial Valley (Patten et al. 2003). Two in Miller Valley (S24) 22 May 1999 (L. J. Hargrove) and two near Sentenac Ciénaga (J23) 28 May 1998 (R. Thériault) may have been prospective breeders, in light of the discovery of the species' nesting in 2001.

In fall, Brewer's Sparrow begins arriving in early September (4 September 1988, one along Carrizo Creek near Arsenic Spring, T28, P. Unitt). It is most frequent along the coast at this season, sometimes associating with flocks of Chipping Sparrows.



**Breeding distribution:** Though Stephens (1919a) wrote that a few Brewer's Sparrows breed on the eastern slope of San Diego County's mountains, and collected a specimen at 6000 feet elevation in the Cuyamaca Mountains 21 May 1893 (SDNHM 1012), the first confirmation of the species' nesting in the county came in 2001. On 13 May 2001, in a stand of the big sagebrush in Montezuma Valley just southwest of Ranchita (H21), B. E. Bell, G. Rebstock, and I found a singing male, a highly agitated presumed female, and her completed but still empty nest, 1-2 feet above the ground in sagebrush. A follow-up visit on 31 May revealed the nest deserted and the birds gone from the area. Less than 1 mile to the east, in sagebrush just southeast of Ranchita, Brewer's Sparrows occurred in



late April 1999, 2000, and 2001, with up to six, including two singing males, 29 April 2001 (P. D. Jorgensen). In the Manzanita Indian Reservation (R25), G. Rebstock and J. Determan noted a single agitated Brewer's Sparrow 6 May 2001. Less than 2 miles to the east in upper McCain Valley (R26), J. R. Barth found one carrying an insect 17 May 2001, then found two juveniles at the same site 11 and 13 June 2001. Finally, M. B. Mulrooney reported a singing male in a large patch of big sagebrush along Indian Creek in the Laguna Mountains (N22) 21 May 2002. Over 80 years later, Stephens' assessment of the Brewer's Sparrow's breeding in San Diego County has been verified, extending the species' breeding range significantly south of its previously established limit in the San Bernardino Mountains.

The only previous summer record of Brewer's Sparrow in San Diego County is of one singing at 850 feet elevation along Marron Valley Road (V17) 7 August 1991 (C. G. Edwards).

**Nesting:** The one Brewer's Sparrow nest known from San Diego County was typical for the species in being placed under the crown of a big sagebrush.

**Conservation:** Brewer's Sparrow is suffering a decline in its core breeding range in the Great Basin (Rotenberry et al. 1999) and has been extirpated from former breeding sites in the Los Angeles region (Garrett and Dunn 1981). No change is evident in the Anza-Borrego Desert, however, where the species' winter habitat is little modified and the historical record is slight. Brewer's Sparrow has been known in winter on the coastal slope since L. M. Huey collected two at San Diego 15 January 1914 (SDNHM 34563-4) but has apparently always been rare. Nevertheless, runaway urbanization threatens the sage scrub used by wintering Brewer's Sparrows both in the Proctor Valley/Otay Lakes area and in Dameron Valley.

**Taxonomy:** All specimens from San Diego County are *S. b. breweri* Cassin, 1856, except for one from San Luis Rey (G6) 14 February 1962 (Rea 1967, DEL 27230), the only reported California specimen of *S. b. taverneri* Swarth and Brooks 1925. This larger, darker, grayer, more heavily streaked form breeds north of nominate *breweri*, largely in northwestern Canada, and apparently winters primarily in the Chihuahuan Desert of mainland Mexico.