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# EXTRALIMITAL SAGE SPARROWS ON THE CENTRAL VALLEY FLOOR NORTH OF THE TULARE BASIN WITH NOTES ON SUBSPECIES STATUS AND IDENTIFICATION

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The Sage Sparrow (*Amphispiza belli*) is a rare vagrant on the floor of California's Central Valley north of Fresno County. The few sight records are augmented by specimens from the Central Valley catalogued as three subspecies in the Museum of Vertebrate Zoology (MVZ) at the University of California, Berkeley: Bell's Sage Sparrow (*A. b. belli*) and two interior forms, *A. b. canescens* (breeding in the southern Central Valley and Mojave Desert) and *A. b. nevadensis* (breeding in the Great Basin). However, we follow Patten and Unitt's (2002) revision of the subspecies by regarding *canescens* as a synonym of *nevadensis*, here referred to as Interior Sage Sparrow. Although the specimens have been identified to subspecies, some sight records have not. Of the 37 records we have located for the Central Valley north of Fresno County, seven were not identified to subspecies. We echo Tim Manolis's appeal (editor's note in Stovall 1998) that birders should photograph and/or identify each extralimital Sage Sparrow to subspecies in order to clarify the status of each in the Central Valley and elsewhere. In this paper we summarize the records and provide tips to encourage and facilitate identification of these two distinctive subspecies.

In the Central Valley the Interior Sage Sparrow breeds, with some remaining year round, in saltbush (*Atriplex* spp.) and other lowland scrub in the Tulare Basin and adjacent western low foothills as far north as the Panoche Hills in Fresno County (Grinnell and Miller 1944, Martin and Carlson 1998). After breeding, the birds disperse upslope into chaparral dominated by chamise (*Adenostoma fasciculatum*), sagebrush (*Artemisia californica*), and black sage (*Salvia mellifera*) where Bell's Sage Sparrow is resident. Johnson and Martin (1992) found no evidence of interbreeding between the two subspecies. On the basis of measurements, specimens of interior Sage Sparrows from north of the breeding range in the Tulare Basin and southern San Joaquin Valley have been attributed to *nevadensis* and not *canescens*; differing externally only in average measurements, they are indistinguishable in the field or from photographs (C. Cicero pers. comm.). As there is no evidence that these Interior Sage Sparrows (*canescens*) disperse northward, it is likely that these birds occurring north of the breeding range in the Central Valley are vagrants from populations breeding in the Great Basin. Interior Sage Sparrows from the Great Basin are highly migratory, while those nesting in the southern San Joaquin Valley and Tulare Basin are partial migrants, some moving as far south as the lower Colorado River valley and the Salton Sea (Martin and Carlson 1998, Patten and Unitt 2002). Of the winter specimens from the southern San Joaquin Valley in the MVZ, 5 have been identified as *canescens*, 4 as *nevadensis*. The degree to which locally nesting Interior Sage Sparrows vacate the Central Valley in winter is unknown. Of 28 specimen and sight records from north of the breeding range, 20 are for winter (December–February) and three are for fall migration: 8 and 22 September and 5 October (MVZ data, D. Yee, J. Gain, J. Trochet, J. Davis pers. comm., Stovall 1998).

In contrast, Bell's Sage Sparrow has been described as sedentary (Johnson and Marten 1992) or migratory only in the northernmost section of its range (Glenn to

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Shasta counties), though it may disperse elevationally in other areas (Martin and Carlson 1998). On the floor of the Central Valley, outside the subspecies' breeding range in the surrounding hills, there are three records for spring migration (22 March–18 April) and three for fall migration (18–28 September; MVZ data, T. Manolis, editor's note in Stovall 1998, J. Trochet, J. Davis pers. comm.), suggesting these birds were from the northern, migratory populations. The only winter record is from Chico, 31 December 1972–26 January 1973 (T. Manolis, editor's note in Stovall 1998). If these extralimital birds were primarily dispersing downslope, a higher percentage of records should be for winter. In the Central Valley, most extralimital Sage Sparrows of both subspecies were found in atypical habitat, primarily annual grasslands, but also in ruderal vegetation along roads within agricultural landscapes.

As there are records of both Bell's and Interior Sage Sparrows in the Central Valley, in the future any Sage Sparrow in the region should be scrutinized in detail, and, if possible, documented with photos. With care, and consideration for seasonal wear, these subspecies are readily distinguishable in the field. Especially when in fresh plumage (fall and winter; the species has only a single annual molt), Bell's Sage Sparrow (lower photo on this issue's back cover) is quite dark on the mantle and crown, with less contrast between the crown and facial markings. The chest spot is dark gray, standing out prominently on the white chest. The dark brown tail does not contrast markedly with the back. The streaks on the back are indistinct and can be hard to see without a close view.

Interior Sage Sparrows are much lighter than Bell's Sage Sparrows, with lighter gray mantles, more distinct streaking on the back and flanks, smaller bills, and lighter, less distinct malar stripes and chest spots (upper photo on this issue's back cover). Though paler than on Bell's Sage Sparrow, the malar stripe on interior birds tends to contrast more with the light gray crown. The tail though paler than in Bell's, on unworn birds, contrasts well with the lighter gray-brown back.

The two photos on this issue's back cover contrast an Interior Sage Sparrow in fresh plumage photographed on Sherman Island, Sacramento County, California, 22 November 2011 with a Bell's Sparrow in worn plumage photographed along Rayhouse Road, Yolo County, 19 May 2007. Thus the comparison is of the subspecies when their differences are muted. Bright sunlight (typical of the Sage Sparrow's habitat) as well as plumage wear may make Bell's Sage Sparrow seem paler than it is and be a source of confusion. In the field, observers should consider the factor of light as it affects perception of the paleness or darkness of the plumage.

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## LITERATURE CITED

- Grinnell, J., and Miller, A. H. 1944. The distribution of the birds of California. Pac. Coast Avifauna 27.
- Johnson, N. K., and Marten, J. A. 1992. Macrogeographic patterns of morphometric and genetic variation in the Sage Sparrow complex. *Condor* 94:1–19.
- Martin, J. W., and Carlson, B. A. 1998. Sage Sparrow (*Amphispiza belli*), in *The Birds of North America* (A. Poole and F. Gill, eds.), no. 326. The Birds of North America, Inc., Philadelphia.
- Patten, M. A., and Unitt, P. 2002. Diagnosability versus mean differences of Sage Sparrow subspecies. *Auk* 199:26–35.
- Stovall, B. M. 1998. A record of one of the pale, interior forms of Sage Sparrow for Butte County. *Central Valley Bird Club Bull.* 1:12.



“Featured Photos” by © John Sterling of Woodland, California: Interior Sage Sparrow (*Amphispiza belli nevadensis*), Sherman Island, Sacramento County, California, 22 November 2011 (top); Bell’s Sage Sparrow (*Amphispiza belli belli*), Rayhouse Road, Yolo County, California, 19 May 2007 (bottom).