

FEATURED PHOTO

AN APPARENT RED-BACKED JUNCO, *JUNCO HYEMALIS DORSALIS*, IN CALIFORNIA

KIMBALL L. GARRETT, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, California 90007; kgarrett@nhm.org

The Dark-eyed Junco (*Junco hyemalis*) is a highly variable songbird found over much of North America. Winter junco flocks in California are dominated by birds of the Oregon Junco subspecies group (with *J. h. thurberi* being the most widespread), but small numbers of Slate-colored Juncos (*J. h. hyemalis* and *J. h. cismontanus*) and more rarely Pink-sided Juncos (*J. h. mearnsi*) and Gray-headed Juncos (*J. h. caniceps*) also occur; the White-winged Junco (*J. h. aikenii*) has been documented at least four times (Patten et al. 1998, Wright 2019). Different mixes of these same subspecies groups, all of which had been considered full species at times in the past, can be found in winter over much of western North America.

A particularly interesting junco taxon is the Red-backed Junco (*J. h. dorsalis*). Originally described by Henry (1858) as a full species, *Junco dorsalis*, it has subsequently been treated as a subspecies of the Yellow-eyed Junco, *J. cinereus*, now *J. phaeonotus* (AOU 1886), as one of two subspecies of the Gray-headed Junco, *J. caniceps* (AOU 1945, 1957), or as part of the highly variable Dark-eyed Junco (AOU 1982 to present). *Junco h. dorsalis* breeds from the Hualapai Mountains of northwestern Arizona (pers. obs; Corman and Wise-Gervais 2005) across the Mogollon Rim region to the mountains of central and southern New Mexico and the Guadalupe Mountains of far western Texas (Miller 1941). An area of intergradation between *dorsalis* and *caniceps* is known from the Kaibab Plateau and south rim of the Grand Canyon in Arizona (Miller 1941, Monson and Phillips 1981), and intergrades are also recorded in the Zuni Mountain region of northwestern New Mexico (Miller 1941). This subspecies is generally sedentary or a short-distance elevational migrant, but it occasionally moves from fall through early spring into mountain ranges up to 300 km away from the breeding range. These include the Santa Catalina, Santa Rita, Pajarito, Huachuca, and Chiricahua mountains of southeastern Arizona, the Sandia Mountains of New Mexico, and the Chisos Mountains of western Texas (AOU 1957, Monson and Phillips 1981); such movements involve the crossing of expanses of lowland habitat. Sightings within the lowlands well away from the breeding range appear to be rare, but photo-documented occurrences include two birds south of Tubac, Santa Cruz Co., Arizona, 20 November 2020 (<https://ebird.org/checklist/S76472005>), one in urban Tucson, Pima Co., Arizona, 15 December 2020 (<https://ebird.org/checklist/S77534915>), one in the northwestern Tucson suburbs 30 November–1 December 2009 (<https://ebird.org/checklist/S5596517>), and at least five in El Paso, El Paso Co., Texas, between 4 October and 15 November 2020 (e.g., 25 October 2020; <https://ebird.org/checklist/S75395142>).

On 6 November 2020 I observed and photographed a bird that showed the traits of *dorsalis* at an urban park in Palmdale, Los Angeles Co., California. Domenic Massari Park (elevation 811 m; 34° 34' 15" N, 118° 01' 50" W) consists almost exclusively of lawns and turf-covered athletic fields, with numerous planted pines (*Pinus* sp.), plane trees (*Platanus* sp.), and other non-native landscape trees. The park is surrounded on three sides by housing tracts, with an expanse of disturbed native creosote bush–Joshua tree desert woodland to the north.

The junco associated loosely with a flock of Lark (*Chondestes grammacus*), Chipping (*Spizella passerina*), White-crowned (*Zonotrichia leucophrys gambelii*), Savannah (*Passerculus sandwichensis*), and up to three Clay-colored (*S. pallida*)

FEATURED PHOTO



FIGURE 1. The pale throat is evident in this image from 6 November 2020, as is the entirely blackish culmen.

Photo by Kimball L. Garrett



FIGURE 2. A few chestnut feather tips are visible on the top of the crown, a feature that Miller (1941) found in only 1.7% of the specimens of *dorsalis* he examined.

Photo by Mark Scheel

FEATURED PHOTO

sparrows along fence lines bordering turf athletic fields that were closed to entry and not closely mown. During the time it was present it was the only junco in the park. Additional photos were obtained by a number of observers between 6 and 9 November (see this issue's back cover, as well as Figures 1 and 2). It was looked for by several birders but not seen on 10 November or thereafter. The bird may have been present before the initial date, as this park received no coverage reported via <https://eBird.org> earlier in the fall of 2020.

This individual was clearly a Gray-headed Junco (in the sense of AOU 1957, including the subspecies *caniceps* and *dorsalis*) given the entirely gray body and bright reddish patch on the back. However, it differed clearly from the regularly occurring subspecies *caniceps* as follows and as shown in the photo on this issue's back cover and in Figures 1 and 2: (1) the bill was relatively large and long and extensively slaty along the entire culmen and upper sides of the maxilla; the remainder of the maxilla and the mandible varied in appearance from pale gray to pale pinkish-gray, depending on the lighting. (2) The shade of gray on the underparts was relatively pale, especially on the throat and lower belly, which could appear almost whitish in some lighting. (3) Perhaps because the head was a relatively pale gray, the blackish loreal region was especially conspicuous. (4) The back patch appeared to be a brighter shade of red than in a typical *caniceps* and perhaps more extensive. In the field and various photographs the eyes appeared dark brown. Not assessed on this bird were additional morphological characters examined in specimens by Miller (1941), including overall size and the extent of white on the rectrices.

The Palmdale bird showed no rufous on the tertials and greater secondary coverts, but Miller (1941) found this character in only 3.9% of specimens of *dorsalis*; Miller showed that this occurrence of red in the wings is not the result of hybridization with the Yellow-eyed Junco, which always shows extensive rufous there. A few chestnut feather tips were visible on the crown (Figure 2); Miller (1941) found this character in 1.7% of *dorsalis*, but more frequently (6.2%) in *caniceps*.

Although the subspecies determination must remain putative in absence of a specimen, the characters shown by this bird suggest it represents the first well-documented occurrence of *dorsalis* in California. But there are two prior unpublished reports from California that might represent it. A bird reported in eBird at Lee Vining, Mono Co., on 28 May 2010 (but apparently found earlier) was documented with photos that suggest *dorsalis* but are insufficient to verify it (see <https://eBird.org/checklist/S21744704>). Another was photographed by Callyn D. Yorke at Glen Helen Regional Park in Devore, San Bernardino Co., 29 December 2014 (<http://avconline.avc.edu/cyorke/fieldnotes/SanBernardinoCounty.html#dec29>) without any accompanying description. Both of these individuals appear to show dark along the culmen, exceeding the extent expected in *caniceps* or *caniceps* × *dorsalis* intergrades (Miller 1941), but the photographs do not show sufficient detail of the bill, and other plumage characters are inconclusive.

In contrast to *dorsalis*, *caniceps*, the most morphologically similar taxon, is a rare but regular winter visitor over much of California, and has summered in easternmost California in the Grapevine Mountains of Inyo Co. and on Clark Mountain, San Bernardino Co. (Grinnell and Miller 1944). A hybrid Gray-headed × Oregon population from these ranges as well as the Argus, White, Inyo, and Panamint mountains, and portions of adjacent southwestern Nevada was given the name *mutabilis* by van Rossem (1931). Note that breeding range of *dorsalis* comes within 65 km of the California border in the Hualapai Mountains of Mohave County, Arizona, where it has been noted since at least 1993 (pers. obs.; Corman and Wise-Gervais 2005). This range also hosts a small population, established since 2009, of another bird species that has yet to be found in California—the Olive Warbler (*Peucedramus taeniatus*; <https://eBird.org/checklist/S57573006>; <https://eBird.org/checklist/S23447783>)—not to mention numerous Canyon Towhees (*Melospiza fusca*), also unrecorded in Cali-

FEATURED PHOTO

fornia. It is of interest that most of the well-documented lowland records of *dorsalis* in southern Arizona and westernmost Texas are from October and November of 2020, an interval encompassing the occurrence at Palmdale. This could be due to a rapid increase in observers' awareness of this taxon, but more likely it suggests an environmental component to this vagrancy. National Weather Service data show the summer 2020 monsoon season to have been the driest on record across the breeding range of *dorsalis* (<https://www.weather.gov/psr/2020MonsoonReview>).

Recent molecular studies confirm an interesting position of the Red-backed Junco within the genus. Mila et al. (2007) and Friis et al. (2016) showed that the ancestral *Junco* was Central American, with the divergence of Yellow-eyed Juncos occurring as juncos spread northward through Mexico. The more northerly Dark-eyed Juncos (now all subsumed under *J. hyemalis*) then diverged, beginning with *dorsalis*, followed by *caniceps*, then by a rapid divergence and spread of the northern forms, including the widespread *oreganus* and *hyemalis* groups. In several plumage and structural traits (pale gray ventral plumage, bright reddish dorsal patch, extensive dark on maxilla of large bill, contrasting dark loreal region) the Red-backed Junco is closer to the Yellow-eyed than to other Dark-eyed Juncos. Additionally, its relatively complex songs more closely resemble the songs of *phaeonotus* than the simpler trills of most of the Dark-eyed Juncos (Pieplow 2019). The close relationship of *dorsalis* to the Yellow-eyed Junco is further suggested by recent hybridization between the two taxa in the Big Burro Mountains in Grant Co., southwestern New Mexico, an area the Yellow-eyed has only recently colonized (M. Baumann pers. comm). No matter the taxonomic status of the Red-backed Junco, the documentation provided here adds a distinctive new taxon to California's avifauna.

I thank Jon Dunn for his thoughts on junco systematics, and thank him and Kathy Molina for reviewing an early draft of this note. Matthew Baumann kindly provided details about New Mexico and also reviewed a late draft, and careful reviews by Borja Mila and Carl Lundblad improved the note, as did Philip Unitt's careful editing. Finally, I appreciate the efforts of several birders to obtain photographic documentation of the Red-backed Junco at Palmdale.

LITERATURE CITED

- American Ornithologists' Union. 1886. The Code of Nomenclature and Check-list of North American Birds. Am. Ornithol. Union, New York.
- American Ornithologists' Union. 1945. Twentieth supplement to the *American Ornithologists' Union Check-list of North American Birds*. Auk 62:436–449; doi.org/10.2307/4079864.
- American Ornithologists' Union. 1957. Check-list of North American Birds, 5th ed. Port City Press, Baltimore.
- American Ornithologists' Union. 1982. Thirty-fourth supplement to the *American Ornithologists' Union Check-list of North American Birds*. Auk 99(supplement):1CC–16CC; doi.org/10.2307/4085886.
- Corman, T. E., and Wise-Gervais, C. 2005. Arizona Breeding Bird Atlas. Univ. New Mexico Press, Albuquerque.
- Friis, G., Alexandre, P., Rodriguez-Estrella, R., Navarro-Siguenza, A. G., and Mila, B. 2016. Rapid postglacial diversification and long-term stasis within the songbird genus *Junco*: Phylogeographic and phylogenomic evidence. Molec. Ecol. 25:6175–6195; doi.org/10.1111/mec.13911.
- Grinnell, J., and Miller, A. H. 1944. The distribution of the birds of California. Pac. Coast Avifauna 27.
- Henry, T. 1858. Description of new birds from Fort Thorn, New Mexico. Proc. Acad. Nat. Sci. Philadelphia 10:117–118.

FEATURED PHOTO

- Mila, B., McCormack, J. E., Castaneda, G., Wayne, R. K., and Smith, T. B. 2007. Recent postglacial range expansion drives the rapid diversification of a songbird lineage in the genus *Junco*. *Proc. Royal Soc. B* 274:2653–2660; doi.org/10.1098/rspb.2007.0852.
- Miller, A. H. 1941. Speciation in the avian genus *Junco*. *Univ. Calif. Publ. Zool.* 44:173–434.
- Monson, G., and Phillips, A. R. 1981. Annotated Checklist of the Birds of Arizona. Univ. Arizona Press, Tucson.
- Patten, M. A., Bailey, S. F., and Stallcup, R. 1998. First records of the White-winged Junco for California. *W. Birds* 29:41–48.
- Pieplow, N. 2019. Peterson Field Guide to Bird Sounds of Western North America. Houghton Mifflin Harcourt, Boston.
- Van Rossem, A. J. 1931. Descriptions of new birds from the mountains of southern Nevada. *Trans. San Diego Soc. Nat. Hist.* 6:325–332.
- Wright, R. 2019. Peterson Reference Guide to Sparrows of North America. Houghton Mifflin Harcourt, New York.

Accepted 14 April 2021



“Featured Photo” by © Larry Sansone of Los Angeles, California: Red-backed Junco (*Junco hyemalis dorsalis*), representing the first well-supported record for California of this subspecies that breeds largely in the mountains of Arizona and New Mexico and typically disperses only short distances from its breeding range.

