

First Breeding record for “Oregon” Dark-eyed Junco on the floor of the Central Valley

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On 18 May 2000, following three to four weeks in which I had become increasingly suspicious of local breeding, I found a nest of “Oregon” Dark-eyed Junco (*Junco hyemalis*) near the Willow Slough Trail of the Cosumnes River Preserve in southern Sacramento County. The nest contained four fairly large, fairly well-feathered young. From a discreet distance I observed the adult juncos feed the young repeatedly and the female fly out with a fecal sac. This appears to be the first documented nesting by Dark-eyed Junco in the Central Valley. An earlier possible nesting may have occurred at Lodi Lake in San Joaquin County on 6 July 1989 (Bailey, et al., 1989) based on a report of a juvenile junco, still with downy tufts on the head. The nearest known nesting sites include low on the east side of Mount Diablo, Contra Costa County, where nesting is regular (Steve Glover, pers. comm.), and near Vallejo in southwestern Solano County, where at least semi-regular nesting has occurred since the late 1970s (Robin Leong, pers. comm.).

The nest itself was built of grass stems, possibly of creeping wild rye (*Leymus triticoides*), lined with finer grass and sedge stems and blades, and measured 53 mm high, with maximum and minimum external diameters of 110 mm and 101 mm respectively. The cup diameter varied from 75 to 68 mm and its depth was 47 mm. Leaves of valley oak (*Quercus lobata*) abscised last autumn appear to have been placed around and upon the rim of the structure for about three-quarters of its circumference. Nest sanitation appeared more typical of cardueline finches, with remains of several defecations on the rim. The nest was built on the ground mostly beneath a small, long fallen oak branch which formed a partial superstructure for a luxuriant growth of wild pea (*Lathyrus jepsonii*, var. *californicus*), with a minor component of bindweed (*Convolvulus arvensis*). Shading the area were several valley oaks about 10-15 meters tall and 11-47 cm dbh, and several meter tall shrubs of poison oak (*Toxicodendron diversilobum*). A handful of 30-60 cm chicory plants (*Cichorium intybus*) not yet in bloom completed the flora in the immediate vicinity of the nest. The nest was 3.0 meters from a trail that receives heavy weekend use by people. The nesting occurred at the portion of the trail known as “the Point.” This is an area of small to medium valley oaks with a smattering of large cottonwoods (*Populus fremontii*) and a single coast live oak (*Quercus agrifolia*) (though some have identified this tree as *Q. wislizenii*, an interior live oak, or more probably a hybrid). There is about the perimeter of the grove a middle story consisting of saplings of valley oak, Oregon ash (*Fraxinus latifolia*), white alder (*Alnus rhombifolia*) and box elder (*Acer negundo*). Poison oak is of limited distribution in the grove. Dense ground cover is extensive but not continuous. Slender sedge (*Carex praegracilis*) is by far the most important component. Other ground cover plants include Santa

Barbara sedge (*Carex barbae*), asparagus (*Asparagus officinalis*), dock (*Rumex* sp.), sticktight or beggar's tick (*Bidens frondosa*), field mint (*Mentha arvensis*), yellow nut sedge (*Cyperus* sp.), creeping wild rye, *Lolium* and, less commonly, other nonnative annual grasses, seedlings of the various trees present, and many others. Elevation at the nest site is six feet. Some idea of the sum of these components is conveyed by Figure 1.

The young fledged between the evening of 18 May and the morning of 21 May. At least three volant, stub-tailed juveniles were noted on the latter date. By 28 May, the tails appeared to be full length. Three young were also seen 8 June, still begging food from their parents. John Schick (pers. comm.) reported finding four juveniles on 10 June.

The source population of these juncos could reasonably be any of three. These may be *J. h. thurberi* birds of the Sierra Nevada (Amador County and Calaveras County populations appear closest geographically) or *thurberi* from the inner Coast Range of Napa County (nearest known regular nesting location is Quail Ridge near Lake Berryessa, fide Andrew Engilis, Jr.). These may also be *J. h. pinosus*, whose nearest breeding stations are on the east slopes of Mount Diablo, Contra Costa County. These locations are a bit closer than any known breeding sites of *thurberi*. Alternatively, the male and female may be from different populations. Unfortunately, the female evaded the mist nets and all measurements of the male fell into the zones of overlap (Miller 1941, Pyle 1997). For the captured adult, the back color was between Tawny and Russet and the sides nearest Cinnamon (Ridgway 1912), but I am unqualified to make racial distinctions solely on the basis of subtle color differences.

To speculate shamelessly, I think these birds, if not intergrades, are most likely *pinosus*. This race expanded its range to the north and northeast, colonizing urban and suburban areas, well after the turn of the twentieth century (San Francisco in about 1914 and about 1917 for the Berkeley Hills) (Grinnell 1915, Ray 1916, Allen 1917). Miller (1941) appears to have first noted its occasional breeding on Mount Diablo, where the race is now well established (Steve Glover, pers. comm., Contra Costa County Breeding Bird Atlas web site). Miller (1941) further states that this taxon is more tolerant of xeric conditions than is *thurberi*. This ecological tolerance, the direction of historical range expansion, and closer geographic proximity favor choosing this potential source population as most likely.

As of 3 May 2001, a pair of juncos appear to be on territory in the immediate vicinity of the nest locality described here.

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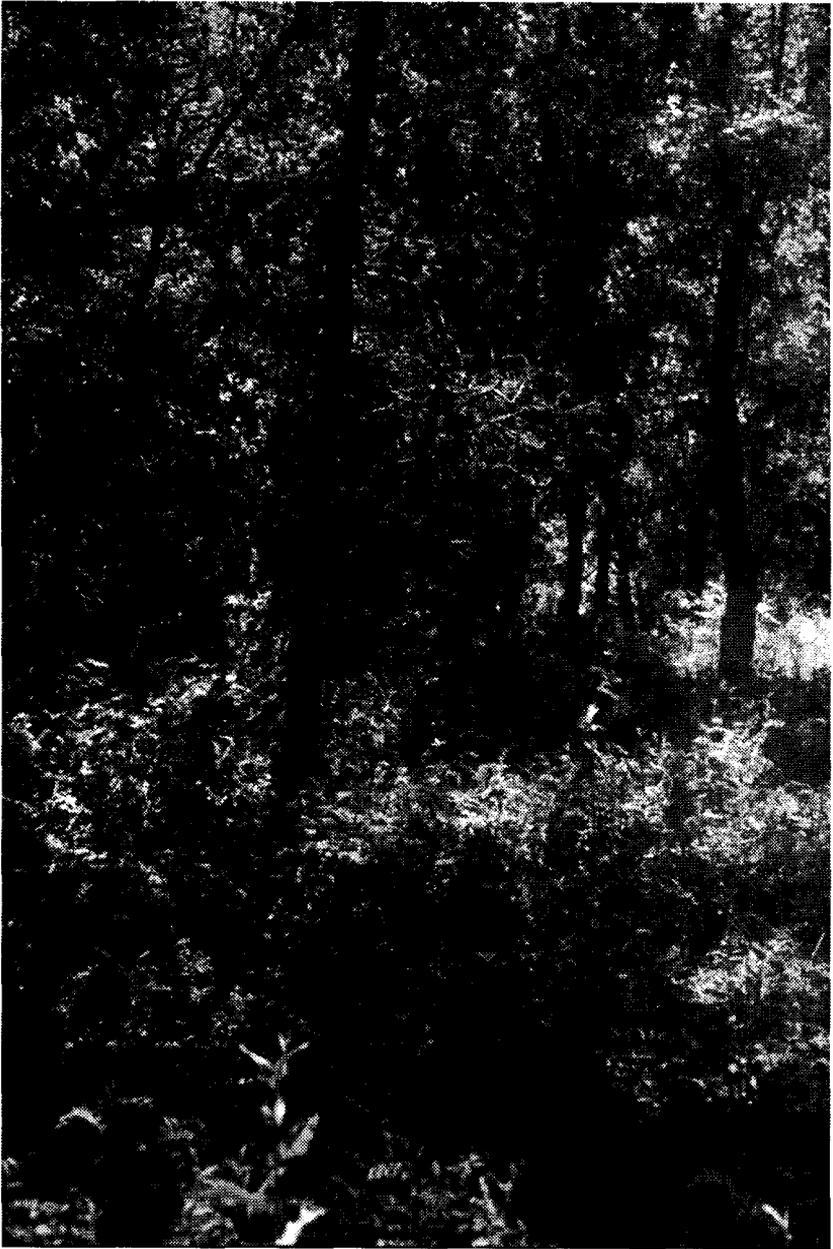


Figure 1. Habitat at nest site of Dark-eyed Juncos (*Junco hyemalis*) at the Cosumnes River Preserve, Sacramento Co., May 2000.

photo by John Trochet