

intensified altitudinal migration, since transients from the north "pile up" at the Breaks as long as possible before flying on down to the more slowly cooling deserts below Zion Canyon. The autumn bird population at Cedar Breaks is further increased by post-nesting migrants from nearby Austral and Transition Zone areas.

Such a pronounced concentration of birds renders observation of departure dates relatively easy, especially when autumn is heralded by a rather sudden drop in temperature, as it was this year. A definite migration wave started from the Breaks between September 30 and October 8, reached the middle altitudes of 7000 to 8000 feet (upper portions of Zion National Park) between October 1 and 20, and arrived in Zion Canyon from October 2 to 30, beyond which the wave spread out and became relatively lost in the flocks of various species stopping along the way at their respective winter ranges. It was noted that practically all but the permanent residents left the Breaks within a week, but in traveling south 29 miles and down-hill 6300 feet the wave had spread over a time interval of a month or more.

An attempt to secure accurate data on any one species was not very successful, but the following observations on Townsend Solitaire (*Myadestes townsendi*) may have some value. This species was last noted at Cedar Breaks on October 7. At middle altitudes, where there is a fairly constant resident population, the last of the large and apparently migratory wave was noted on October 19, and at low elevations in Zion Canyon the first arrival was heard on October 28. The last date has little significance, since most of the solitaires terminate their migration in the juniper forests of the higher Upper Sonoran Zone, only a few coming down to the lower edge of the Upper Sonoran in Zion Canyon.—C. C. PRESNALL, *Zion National Park, Utah, November 6, 1934.*

An Influx of Dickcissels into Central Colorado.—Over a period of many years only an occasional Dickcissel (*Spiza americana*) has been seen in Boulder County, Colorado. The writer, in five years of observation, had not seen one here until this past summer. During the summer of 1934, however, the species became abundantly established about the fields east of Boulder, and within a mile of town. I first observed singing males on June 28 and 29, two different individuals being seen; but they had probably arrived much earlier.

On July 7, on a short automobile trip especially for a census of the Dickcissels, fifteen singing males were observed on the telephone wires and road-side fences along a route of approximately six miles. In other words, in one summer the species attained an abundance in a new region nearly as great as that in its expected haunts farther east; for, during the past three summers, it was not reported near Boulder at all.

I have been wondering if the long period of drought (or unusually dry weather during the spring migration last year) may not have forced the species west. The immediate environment of Boulder is now favorable to the species, because, being irrigated, it is less subject to drought conditions than the region to the east. A letter from Mr. J. Earle Wycoff, Shenandoah, Iowa, suggests a confirmation of this theory. He informs me that on a trip from Boulder, Colorado to Iowa last summer, through Nebraska, only a few Dickcissels were seen. This theory of a sudden westward movement is in line, too, with the recent suggestion of Dr. W. P. Taylor (*Ecology*, 15, 1934, pp. 374-379) that extreme conditions rather than average conditions are of major importance in animal (or plant) distribution. Information from others who have observed the occurrence of Dickcissels during 1934 would be appreciated.—GORDON ALEXANDER, *Department of Biology, University of Colorado, Boulder, Colorado, November 3, 1934.*

Records of Green-tailed Towhees in the San Francisco Bay Region.—Previous to the present writing there have been but two records of Green-tailed Towhee (*Oberholseria chlorura*) in the region of San Francisco Bay. These are to be found in Pacific Coast Avifauna No. 18, page 125: A single bird was observed by W. O. Emerson in Golden Gate Park, San Francisco, May 9, 1884; and one was secured in a river bottom near San Jose during the winter of 1889 or 1890 and recorded by John Van Denburgh.

Since these records there have been two more. Donald D. McLean obtained a Green-tailed Towhee on April 30, 1933, on Silver Creek grade, about four miles south-east of Evergreen, Santa Clara County, on the slope of Mount Hamilton. On September 25, 1934, the writer trapped one of these birds in the University of California Botanical Garden, Strawberry Canyon, near Berkeley. This towhee was kept for three