Townsend's Warbler Dendroica townsendi

A bird of coniferous forests in its breeding range in the Pacific Northwest, Townsend's Warbler is partial to conifers as it passes through San Diego County on its way to and from its winter range in the mountains of Middle America. The species winters commonly on the coast of central California and increasingly in southern California. It is still uncommon as a winter visitor in San Diego County but uses planted conifer, alder, and eucalyptus trees more than native oaks and willows. Its spread as a winter visitor may reflect urbanization, climate change, or both.

Migration: Townsend's Warbler occurs in San Diego County most commonly as a spring migrant. It is less abundant than some other migrant warblers, like the Orange-crowned, Wilson's, or Yellow, but occasionally concentrations are seen, such as 50 at Vallecito (M25) 29 April 1997 (M. C. Jorgensen), 20 near Little Stonewall Creek (M21) 6 May 1999 (P. D. Jorgensen), and 25 on the ridge of the Santa Rosa Mountains just south of the



Photo by Anthony Mercieca

Riverside County line (C27) 3 May 2000 (P. Unitt). On the last date, the birds were migrating northwest with other warblers from dawn to 9:00 AM, flying up the canyons out of the desert, stopping for only a few seconds in the pinyons on the ridge, then continuing their flight. Reflecting the origin of most of the migrants in western



mainland Mexico, Townsend's Warblers are more numerous in spring in the eastern half of the county than along the coast. They arrive typically in mid April; 8 April (2000, one at Ocotillo Wells, I29, R. Miller) is the earliest spring date from a location where the bird probably did not winter. Migration peaks in early May, then trails off to the end of that month. From 1997 to 2001 the latest spring date reported was 31 May (1999, one at Sentenac Ciénaga, J23, R. Thériault), though stragglers have been noted in past years through the first week of June.

An unprecedented summer record was of two singing Townsend's Warblers in sycamores along the San Luis Rey River at 2600 feet elevation 0.85 mile southeast of the San Luis Rey Day Use Area (G16) 16–23 June 2000 (W. E. Haas).

Fall migrants begin arriving in August, exceptionally as early as 28 July (2001, one at Buena Vista Lagoon, H6, J. Smith et. al.). Wintering birds, however, do not seem to occupy their habitat before October.

Winter: Wintering Townsend's Warblers concentrate in a narrow strip along the coast, using both native riparian woodland and ornamental trees in parks, cemeteries, and residential areas. High counts are of 14 in Balboa Park (R9) 15 December 2001 (V. P. Johnson) and 14 in Imperial Beach (V10) 18 December 1999 (C. G. Edwards). In the inland valleys wintering Townsend's Warblers are sparser but can be found in small numbers especially where the white alder is a major component of riparian woodland or used in landscaping. Numbers in this area range up to five along the Santa Margarita River north of Fallbrook (C8) 10 January 1999 (L. Ale), five in Kit Carson Park, Escondido (J11), 29 December 2001 (P. Hernandez), exceptionally 11 in Valley Center (G11) 28 February 2002 (S. L. and S. J. Farrow).

One unexpected revelation of the winter phase of the study was the regularity of Townsend's Warblers in the pine-oak woodland of San Diego County's mountains. The Palomar, Hot Springs, Volcan, and Cuyamaca mountains all stand out as isolated regions of Townsend's Warbler wintering. We recorded the spe-

cies on 27 occasions above 3000 feet elevation, usually single birds, but up to three at Palomar Mountain (E15) 30 December 1999 (E. C. Hall) and three on West Mesa, Cuyamaca Mountains (N20), 3 January 1999 (B. Siegel). In the Anza–Borrego Desert and on the Campo Plateau wintering Townsend's Warblers are rare; during the atlas period there were only two records in each area.

Conservation: In spite of being a species of mature coniferous forest breeding in an area subject to massive logging, Townsend's Warbler appears to be expanding its breeding range in the Pacific Northwest southward, possibly at the expense of the Hermit Warbler (Rohwer and Wood 1998, Rohwer et al. 2001). Numbers on San Diego Christmas bird counts are greater now than in the 1960s, possibly because of increased area landscaped with the conifers and white alder trees preferred by wintering Townsend's Warblers. The change may be part of a trend going back decades, as Willett (1933) said that Townsend's Warbler wintered in southern California only "occasionally," and Stephens (1919a) did not mention its wintering in San Diego County at all. The species' wintering in San Diego County's mountains appears to be a recent development, possibly the result of climatic warming. Such warming is most evident in this area by an increase in winter low temperatures at higher elevations.