## FINCHES — FAMILY FRINGILLIDAE

## Purple Finch Carpodacus purpureus

The Purple Finch has long been known as a fairly common resident of the coniferous woodlands of San Diego County's mountains. It still plays that role, but atlas observers also discovered an unexpected new one, as an uncommon and newly established resident of oak and riparian woodland at low elevations in northwestern San Diego County. Yet another role, this one traditional, is as an irregular winter visitor all over the county's coastal slope to woodland and dense chaparral with fruiting shrubs like toyon and California coffeeberry. In this role, however, the Purple Finch seems to be on the decrease. How changes in habitats and climate may



Photo by Anthony Mercieca



be contributing to these seemingly contradictory changes in status is unclear.

Breeding distribution: The Purple Finch occurs in all of the larger stands of coniferous forest in San Diego County's mountains, being more common in denser stands of bigcone Douglas fir, incense cedar, and canyon live oak than in open groves of Jeffrey or Coulter pine. Seldom does one find more than a dozen birds in a morning even in prime habitat, but counts occasionally run as high as 25 from 0.25 to 1.5 miles south of Burnt Rancheria Campground, Laguna Mountains (P23), 23 June 2000 (E. C. Hall, J. O. Zimmer), 30 on Palomar Mountain (E15) 3 July 2000 (C. R. Mahrdt, E. C. Hall), and 40 on Middle Peak, Cuyamaca Mountains (M20), 11 June 2000 (R. E. Webster). Between Palomar and Volcan mountains, Purple Finches inhabit a narrow band of oak woodland with few or no conifers around Mesa Grande and in the gorge of the San Luis Rey River below Lake Henshaw. In this band the species is generally uncommon, but W. E. Haas noted 11, including a mist-netted female with a brood patch, near the San Luis Rey Day Use Area (G16) 3 July 1999.

One of the biggest surprises generated by the field work for this atlas was the discovery that the Purple



Finch has colonized woodland of sycamores and coast live oaks at low elevations in northwestern San Diego County. We noted the species during the breeding season on 76 occasions in 19 atlas squares where no elevation covered exceeds 2000 feet. The area colonized extends from the Santa Margarita Mountains east through Fallbrook to Valley Center and Palomar Mountain. In this zone, the birds were most concentrated along De Luz Creek (B6/C6), with ten, all singing males, in B6 on 10 July 2000 and seven, including six singing males, in C6 on 26 June 1999 (K. L. Weaver). The record nearest the coast was of one singing male near O'Neill Lake (E6), elevation barely over 100 feet, 18 May 1999 (P. A. Ginsburg). Breeding

confirmations at low elevations were observations of nest building and feeding young at 840 feet in Fallbrook (C8) May 1998 (L. Ale), an occupied nest (female apparently incubating) at 1900 feet between Magee Creek and Castro Canyon (C12) 30 April 2000 (J. Determan), and nest building at 1600 feet in Marion Canyon (D12) 18 June 2001 (K. L. Weaver). Two singing males along Temecula Creek about 2600 feet elevation (C16) 10 April 1999 (K. L. Weaver) suggest spread north as well as west from Palomar Mountain.

**Nesting:** Before field work for this atlas began in 1997, no specific data on Purple Finch nesting in San Diego County had been published, and no eggs of the species had been collected. Of the seven nests reported since 1997, one was in a Jeffrey pine, one in a Coulter pine, one in a sycamore, and four in coast live oaks. Most were rather high in the trees, at heights of 28 to 45 feet, but one along the San Luis Rey River at Prisoner Creek (G16) 4 June 2001 (W. E. Haas) was barely over 3 feet above the ground in a coast live oak.

Our observations suggest the birds begin nesting in late April (occupied nest in Lost Valley, D20, 28 April 2000, W. E. Haas; adult feeding young along Nate Harrison Grade, E13, 18 May 1997, C. Sankpill). Most nesting activity concludes in mid July, but Maxine Dougan noted nest building as late as 18 July 2000 west of Dyche Valley (F15) and V. S. Moran noted fledglings as late as 2 August 2000 on North Peak, Cuyamaca Mountains (L20).

**Migration:** The Purple Finch's colonizing low elevations as a breeding species complicates tracking the species' dispersal. For example, four in Couser Canyon (E10) 4 April 1998 (K. Aldern, M. Bache) could well have been pioneers rather than late winter visitors. During the atlas period the latest observation far from a likely breeding location was of two in Oak Hill Cemetery, Escondido (I12), 13 April 1999 (C. Rideout), and that was the only one after 4 April. Extreme dates in previous years range from 5 November (1972, five at Point Loma, S7, G. McCaskie) to 18 April (1975, two at Live Oak Park, D8, J. L. Dunn).

Winter: The Purple Finch is well known as an irruptive species in winter, but this irregularity was not well featured during the fiveyear atlas period. Numbers were low in 1997-98 and 2001-02 in comparison to the three intervening winters, but there was no broad-scale invasion as in 1974-75 or 1987-88. Coinciding with an invasion of Cassin's Finch, the highest winter counts of the Purple were in 2000-01: 52 in Palomar Mountain State Park (E14) 28 December 2000 (J. D. Barr), 79 around the Palomar

Observatory (D15) the same day (K. L. Weaver), and 55 at Oak Grove (C16) 24 February 2001 (K. L. Weaver). Few observations during the atlas period were far from the breeding range, though past winter records were from as far from it as Point Loma. There was only one winter report from the Anza–Borrego Desert 1997–2002, of two at Agua Caliente Springs (M26) 26 February 1999 (J. L. Coatsworth). There are only about four earlier records from the desert floor, somewhat more from desert-edge locations like Culp Valley (H23) and Chariot Canyon (K21) (Massey 1998, ABDSP database).

**Conservation:** The Purple Finch's invasion of northwestern San Diego County just happened to coincide with the initiation of field work for this atlas. In spite of 20 years of field experience in the Fallbrook area, in areas covered well for the atlas, Kenneth L. Weaver had not found Purple Finches summering there before 1998. At low elevations in northwestern San Diego County, both the total number and the number reported per hour increased every breeding season of the five-year term. The reason for this spread is still a mystery. The avocado orchards widespread in this area give it a more forested aspect than it would have naturally, but the Purple Finches are using native woodland almost entirely.

In contrast to this trend during the breeding season, the Purple Finch seems to be on the decline as a winter visitor. It has not invaded San Diego County on any large scale since 1987–1988. It was noted on all 11 of the San Diego Christmas bird counts from 1965 to 1975, but on the 11 counts from 1991 to 2002 it was noted on only two, in 1992 and 2002. Trends on the Rancho Santa Fe, Oceanside, and Escondido counts are similar, if not quite so stark. Could climatic warming be obviating the need for this facultative migrant to move south?

**Taxonomy:** Only the western subspecies of the Purple Finch, *C. p. californicus* Baird, 1858, is known from San Diego County, though there are a few sight records and one specimen of the more eastern *C. p. purpureus* (Gmelin, 1789) from elsewhere in southern California (Patten et al. 2003).

