## Lawrence's Goldfinch Carduelis lawrencei

Though found in San Diego County year round, Lawrence's Goldfinch is notoriously nomadic, exploiting food sources that are abundant but ephemeral. In summer, these are seeds of wildflowers of the family Boraginaceae, especially the fiddleneck, which grows in scattered meadows, often in disturbed soil. In winter, the goldfinches shift to gleaning seeds from the dried flowers of chamise, the shrub dominating San Diego County's chaparral. Nevertheless, the bird's irregularity in winter is even greater than in summer. Lawrence's Goldfinch responded to El Niño rains of 1997-1998, capitalizing on the bloom of desert wildflowers. Lawrence's, like the other goldfinches, must drink regularly, making long flights to water sources scattered through its arid habitat.

Breeding distribution: In San Diego County, Lawrence's Goldfinches are concentrated in the mountains. For suitable habitat, a meadow, a creek, and a grove of oaks is the ideal combination. In such areas, one may occasionally encounter concentrations as high as 50 in Chariot Canyon (L21) 16 June 1999 (J. K. Wilson), 56 on East Mesa, Cuyamaca Mountains (N21), 8 July 1999 (D. C. Seals), and 60 along upper Pine Valley Creek (O21) 4 July 1997 (P. Unitt). Even in this core range, however, the species is patchy and irregular, often lacking. At lower elevations, toward the coast, it becomes ever more so, though numbers as high as 40 in Pauma Valley (E12) 13 May 2000 (P. Unitt) and 20 along the San Diego River in Santee (P13) 24 June 1997 (D. C. Seals) may still occur in the middle of the breeding season in the inland valleys. Along the coast, Lawrence's Goldfinch is rare, especially as a breeding bird. Susan E. Smith noted two coastal nest-





Photo by Anthony Mercieca

ings, one barely more than 1 mile from the beach near the intersection of Interstate 5 and Del Mar Heights Road (N7), where apparently three pairs nested in Canary Island pines planted around an apartment complex; nestlings were visible in one nest 8 May 1999. The other was 0.3 mile from the beach near the University of California (O7), where a male fed a female on a nest in a eucalyptus 9 May 2000.

In the Anza–Borrego Desert Lawrence's Goldfinch's irregularity is accentuated further. Of the atlas period's five years, the wet 1998 saw by far the greatest numbers; in other years there were few to none. Butterfield Ranch in Mason Valley (M23) is the only desert location where Lawrence's Goldfinch is even moderately regular. All our desert confirmations of Lawrence's Goldfinch nesting were in 1998, except at the desert-edge locations of Earthquake Valley (K23), Mason Valley, and In-Ko-Pah (T29), where the birds nested in 2001 as well. Lawrence's Goldfinch nesting in the Anza–Borrego Desert was unknown before 1998 (Massey 1998).



Nesting: Lawrence's Goldfinch's strategy of opportunism results in its being the most colonial of San Diego County's finches. Several pairs may nest simultaneously in a small grove of trees. In addition to coast live and Engelmann oaks, sycamores, and pines, reported nest sites included deodar cedar and Italian cypress. Evidently the dense screening foliage of these exotic trees makes them especially attractive. An atypical apparent nest site was in a rotted out cavity in a horizontal willow branch, from which I flushed a pair near Moretti's Junction (H18) 12 May 2001.

The timing of Lawrence's Goldfinch nesting varies with the rains and food supply as well.



Most nesting takes place from April to July, as shown by the 7 April–9 July spread of 12 collected egg sets. After the wet winter of 1997–1998, however, Lawrence's Goldfinches began nesting exceptionally early, as attested by an occupied nest in Culp Valley (H23) 23 March 1998 (M. L. Gabel), a nest with nestlings at Stelzer County Park (O14) 4 April 1998 (M. B. Mulrooney), and a fledgling at the Roadrunner Club, Borrego Springs (F24), 25 March 1998 (M. L. Gabel). The last implies eggs laid at the end of February, apparently the earliest the species' nesting has ever been reported. On the late side, Lawrence's Goldfinches were still building nests in Pine Valley (P21) 5 July 1997 (J. K. Wilson) and at Lake Morena (T21) the same day (R. and S. L. Breisch).

**Migration:** Lawrence's Goldfinch is an irregular, partial migrant, a variable fraction of the population moving east of the Colorado River for the winter. In San Diego County, migrants are most notable in March and April, when flocks are seen occasionally and the birds show up

more frequently in the Anza–Borrego Desert and along the coast. Such flocks may be as large as 60 at Lower Otay Lake (U14) 2 April 2000 (S. Buchanan), 350 in the Borrego Valley's mesquite bosque (G25) 10 April 1995 (Massey 1998), and "hundreds" in Santee (P12) 24 March 2001 (W. McCausland). In a nomadic, opportunistically nesting species like Lawrence's Goldfinch the notion of a migration schedule is fuzzy. Especially in 1998 we noted occasional pairs or flocks in habitat atypical for breeding in late spring and summer: pair near Sunset Mountain (J26) 19 April 1998 (F. L. Unmack, R. Orr); pair at Azalea Park, East San Diego (R10) 28 May 1998 (J. A. Dietrick); 10 on the east side of Chula Vista (U12) 24 June 1998 (T. W. Dorman).

Winter: In winter opportunism rules Lawrence's Goldfinch's behavior and distribution even more strongly. The birds descend on a source of seeds, exhaust it, and move on. They are concentrated at this season between 1500 and 4500 feet elevation and most widespread in south-central San Diego County, where the chamise on which they feed covers vast areas. During the atlas period the largest winter flocks noted were 236 east of Corte Madera Valley (R21) 20 February 1999 (W. E. Haas), 200 near Corral Canyon (S20) 30 January 1999 (D. C. Seals), and 150 near Swan Lake (F18) 29 December 1997 (G. L. Rogers). We found the species rare along the coast in winter, with a maximum of six in Torrey Pines State Reserve (N7) 23 December 2001 (S. Walens). The irregularity of Lawrence's Goldfinch is exemplified by the results of the Escondido Christmas bird count: species recorded on 10 of 17 counts, mean 22, standard deviation 71, maximum 224.



Lawrence's **Conservation:** Goldfinch's irregularity means that much more information is needed for trends to be identified in this species than in most others. No trends are evident yet, though the flocks of hundreds noted occasionally in the Tijuana River valley in the 1960s did not recur during the atlas period. The planting of exotic conifers and the irrigation of rural ranches enhance Lawrence's Goldfinch habitat, but intensive development, obliterating meadows and weedy fields, eliminates it. Another likely negative factor is the proliferation of foreign weeds that have so largely displaced the native wildflowers that provide the staples of the goldfinch's summer diet.