

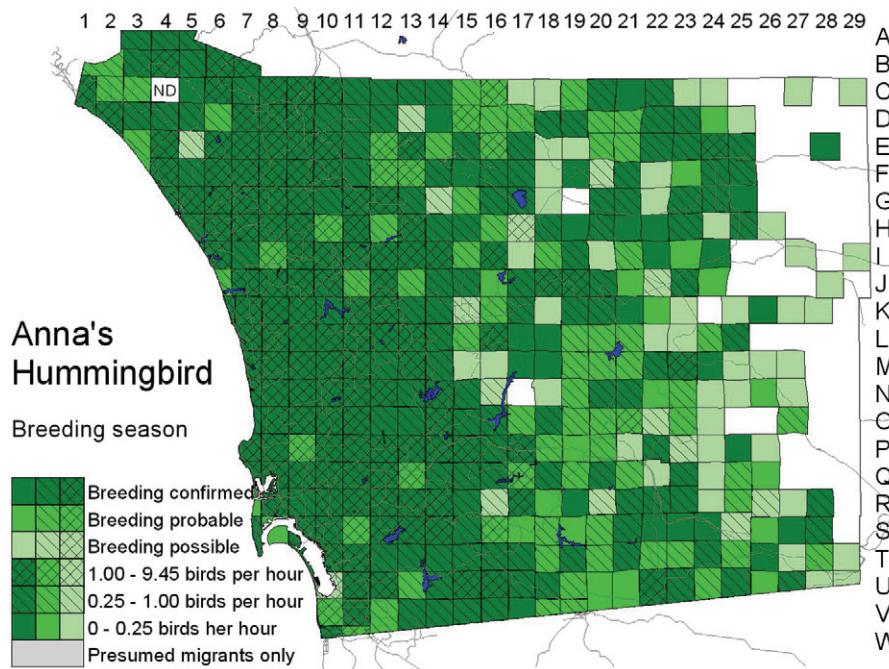
Anna's Hummingbird *Calypte anna*

Few birds have taken to man-made surroundings more thoroughly than Anna's Hummingbird. In its range, Anna's is by far the most abundant hummingbird in gardens and at feeders while still remaining common in native sage scrub, chaparral, and riparian and oak woodland. Where feeders and ornamental plants fuel it year round, Anna's Hummingbird is a permanent resident; in natural habitats, many birds depart for the fall. During winter they return, and some begin nesting as early as December, earlier than any other San Diego County bird.

Breeding distribution: Anna's Hummingbirds breed widely over San Diego County, lacking only in the more sparsely vegetated parts of the Anza-Borrego Desert. But they are most abundant in the coastal lowland and lower foothills. High counts come from both heavily urbanized areas (41 in Pacific Beach, Q7, 1 June 1997,



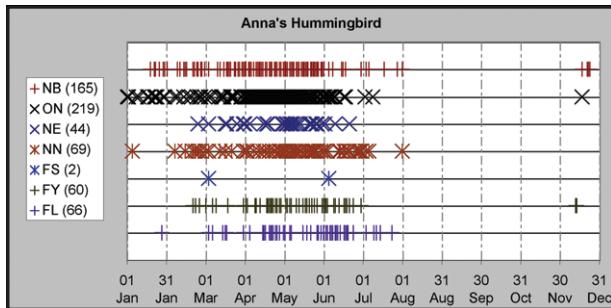
Photo by Anthony Mercieca



J. C. Worley) and native habitats (40 in Boden Canyon, I14, 24 April 2000, R. L. Barber). It is likely that many of the Anna's Hummingbirds seen in the mountains in summer are postbreeding dispersers from lower elevations. Nevertheless, some do nest in montane forest, as

illustrated by a female building a nest about 4200 feet elevation at Heise County Park (K20) 19 May 1998 (E. C. Hall) and by fledglings at about 4500 feet elevation in Lower Doane Valley (D14) 12 July 1998 (J. O. Zimmer) and about 4000 feet on Volcan Mountain (J20) 24 June 2001 (A. P. and T. E. Keenan).

In the Anza-Borrego Desert Anna's Hummingbird is locally common in developed areas, with up to 17 in the north Borrego Valley (E24) 12 March 2000 (P. D. Ache). We confirmed the species' nesting in all desert atlas squares with substantial agricultural or residential development, as well as in many canyons draining the desert slope of the mountains. In other parts



of the desert Anna's Hummingbird is rare and much outnumbered by Costa's. Nevertheless, occasional birds nest in the desert far from oases: we found nests with nestlings in Smoke Tree Wash (E28) 25 April 1997 (P. D. Jorgensen), in upper Pinyon Canyon (K26) 9 May 2000 (E. Jorgensen), and in Smuggler Canyon (L25) 15 February 1999 (R. Thériault).

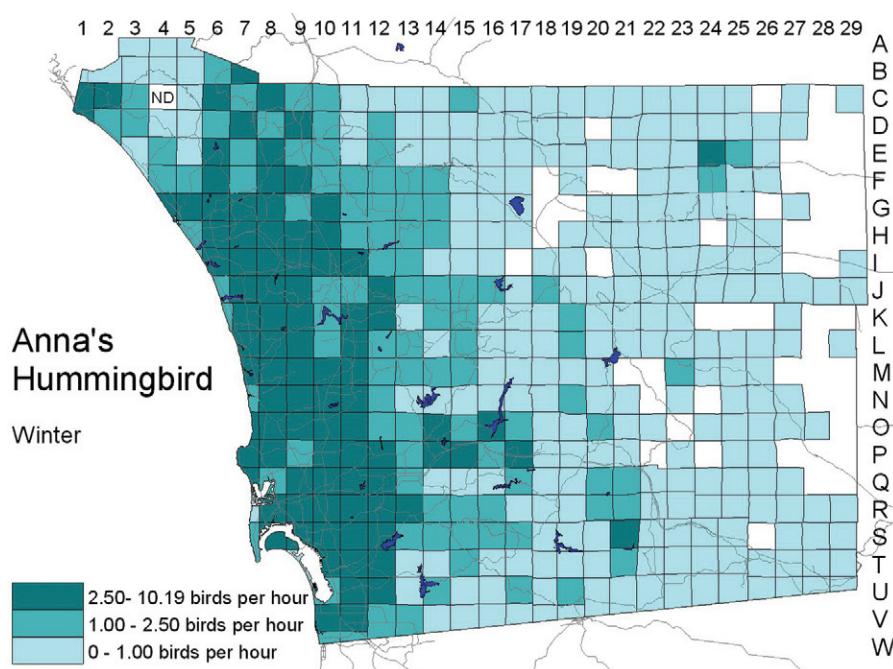
Nesting: Anna's Hummingbirds build their nests mainly of plant fluff bound together with spider web. The action of the female in collecting spider webs, grabbing a strand, backing up by about a foot, moving in to grab another strand, and repeating the cycle several times, is so characteristic that it proved an easy way to find nests. The nest is typically decorated or camouflaged with flakes of lichen and dead leaves, sometimes of paint (Maender et al. 1996). The sites in which the birds build are so diverse that a pattern is difficult to discern. They make little effort to conceal the nest, usually protecting it only by placing it on slender twigs that terrestrial predators cannot negotiate.

If trees are in a female's territory, she appears to prefer them over shrubs as nest sites, but in treeless habitats the birds nest in many other plants, including small shrubs. Eleven of 12 nests found by M. A. Patten and colleagues in sage scrub around San Diego in 2001 and 2002 were in

laurel sumac. In urban areas man-made artifacts are common nest sites. Perhaps the most extreme site described by atlas observers was a nest with nestlings in full sun atop a chain-link fence (M. and B. McIntosh).

Our observations from 1997 to 2001 show that mid February to early June is the season when most Anna's Hummingbirds nest in San Diego County. Nevertheless, a minority of the birds in the coastal lowland start earlier, some as early as the third week of December. Our earliest observation of nest building was at Guajome Lake (G7) 18 December 1998 (P. A. Ginsburg), and a nest with nestlings at Del Mar (M7) 5 January 1998 (L. Ellis) implies egg laying no later than 20 December. A nest with one egg and one recently hatched chick at Old Mission Dam (P11) 31 December 1974 (J. L. Dunn) must have been started about 15 December, and a recent fledgling being fed by its mother in the Tijuana River valley (V11) 13 December 1998 (G. McCaskie) must have come from an egg laid about 7 November. Our observations of eggs, nestlings, and fledglings suggest that egg laying ends rather abruptly in late June, yet on six occasions we noted nest building from 30 June to 1 August; perhaps these late attempts are aborted.

Migration: Our field schedule for this atlas, with an off season from August to November, was not well situated to detect seasonal changes in Anna's Hummingbird's distribution or abundance. The species is scarce in natural habitats during the fall dry season, and migration between California and Arizona is confirmed on the basis of one band recovery (Russell 1996). Yet there are records from late summer through fall from oases and irrigated areas in the Anza-Borrego Desert, up to 10 at the Roadrunner Club, Borrego Springs (F24), 10 October 1992 (A. G. Morley). In San Diego County's mountains Anna's Hummingbird increases noticeably from December to January (see under Winter). In urban areas the species is common year round, though individuals may move.



Winter: From December through February Anna's Hummingbird is about as widespread in San Diego County as in spring and summer but even more concentrated in the coastal lowland. We found it somewhat more widespread in the Anza-Borrego Desert in winter but sparse or lacking at the higher elevations. In 28 squares encompassing the county's higher mountain ranges, we noted Anna's Hummingbird only seven times in December (maximum two individuals per day) versus 27 times in January (maximum 12 per day on 31 January) and 32 times in February (maximum

25 per day). Three Anna's Hummingbirds had returned to the summit of the county's highest peak, Hot Springs Mountain (E20), by 13 February 1999, when there was still much snow and no plants in bloom (K. L. Weaver).

Conservation: The proliferation of exotic nectar-bearing plants like eucalyptus, tree tobacco, and Cape honeysuckle, not to mention thousands of hummingbird feeders, has allowed the population of Anna's Hummingbird to increase enormously and extend its range (Zimmerman 1973). Sharp (1907) and Dixon (1912) considered the Black-chinned and Costa's Hummingbirds more numerous than Anna's at Escondido; now Anna's surpasses them

not only in man-made habitats but in many natural ones as well. The increase continued into the 21st century. The San Diego Christmas bird count, for example, averaged 324 Anna's Hummingbirds from 1966 through 1975 but 875 from 1997 through 2001, though the number of party-hours per count was 222–223 for both intervals. All other counts in the county also show increases, except for Lake Henshaw, where there is great annual variability. Bolger et al. (1997) found Anna's Hummingbird to be more common along the interface between urban development and native scrub in metropolitan San Diego than in native habitat away from development.