## Red-tailed Hawk Buteo jamaicensis

The Red-tailed Hawk is not only San Diego County's most widespread bird of prey, it is one of the most widespread of all the county's birds. During the atlas study we found it in 472 of 478 covered atlas squares. It favors grassland with scattered trees that serve as lookout perches and nest sites but uses all of the county's terrestrial habitats to some extent. It tolerates considerable urbanization. From the hawk's point of view the additional nest sites afforded by eucalyptus trees and towers for electric lines have offset the reduction of foraging grounds.

**Breeding distribution:** Though the Red-tailed Hawk nests in all regions of San Diego County, the breeding population is concentrated in areas of extensive grassland like Camp Pendleton, Warner Valley, and the Santa Maria Valley around Ramona. Atlas observers noted up to three active nests per square, as along 1 mile of the San Diego River above El Capitan Reservoir (M17) in March and April 1999 (R. C. Sanger) and along 3 miles of Dulzura Creek northwest of Dulzura (T16) on 23 February 1998 (D. W. Povey). The Wildlife Research Institute (2004) reported 26 pairs in and around the roughly 5000 acres of grassland in Santa Maria Valley, a density of over three pairs per square mile. The total county population may be on the order of 1000 pairs.

In the Anza–Borrego Desert the Red-tailed Hawk is considerably sparser than on the coastal slope, but we found active nests in some of the most remote and dry desert wildernesses, as in Wonderstone Wash (D29) 29 March 2001 (R. Thériault) and in the north fork of Fish Creek Wash (L28) 13 April 1999 and 6 May 2001 (L. J. Hargrove, D. C. Seals). The Anza–Borrego Desert probably supports around 25 to 30 pairs after wet years, fewer after dry ones.



Photo by Anthony Mercieca

**Nesting:** The Red-tailed Hawk tends to build its nest in more exposed situations than other local hawks, though it participates with other hawks, the Common Raven, and the Great Horned Owl in the musical-chair reuse of each other's nests. Of 55 nests that atlas observers described, 10 were in sycamores, 4 were in coast live oaks, 19 were in eucalyptus, and 3 were in other species of trees. Seven, mainly in the Anza–Borrego Desert, were on bluffs or cliffs. Ten were on power-line towers, one was on a wooden telephone pole, and one was on a platform for floodlights for the ball field at Mount Carmel High School (M10).



Red-tailed Hawks may begin refurbishing their nests in December and lay eggs mainly from late February to mid April. The earliest date among 160 egg sets collected 1890-1964 is 22 February. From 1997 to 2001, and especially in 1998 and 1999, however, about 20 observations suggested laying from early January to mid February. The date of our latest nest with nestlings, 29 June 1998, suggests laying about 30 April. Sharp (1907) reported eggs at Escondido as late as 4 May, and J. B. Dixon collected a set there as late as 3 June in 1926, following a wet winter (WFVZ 10082). The Red-tailed Hawk's breeding season tends to begin earlier and last longer after wet winters, like 1997-98,



and the following year, when the abundance of prey is still high.

**Migration:** On the basis of monthly censuses 1973–83 at San Elijo Lagoon (L7), King et al. (1987) found numbers of Red-tailed Hawks to be at their low from May to September, at their high (about 3 times larger) from December to February.

Winter: The Red-tailed Hawk is only slightly more common as a winter visitor than as a breeding species; from December to February counts per day per atlas square ranged up to 23 (between Santee and Lakeside, P13, 8 January 2000, D. C. Seals) but from March to July the maximum was only to 13. In winter it spreads to areas

where it does not nest such as the Silver Strand (T9; up to six on 16 December 2000, P. R. Pryde). It is most numerous in the coastal lowland and scarcest in the Anza–Borrego Desert. We missed it in winter in only 15 atlas squares: one completely urbanized (Ocean Beach, R7), 14 in the desert.

**Conservation:** The Red-tailed Hawk uses any open area for foraging, however disturbed, giving the species great flexibility. Even though it has little use for heavily developed areas, it takes advantage of even small scraps of undeveloped habitat. It acclimatizes to human activity near nests, allowing it to breed in places like Switzer Canyon at the east edge of Balboa Park (R10). From at least 1997 to 2000 a pair nested in this canyon surrounded by urbanization on three sides for nearly a century (J. M. Wells, J. A. Dietrick). The majority of the hawk's nests are now in eucalyptus trees and on power towers and other man-made structures, suggesting that the supply of nest sites limited the population, at least in the coastal lowland, before people introduced these features into the environment. Even with explosive growth of the human population, the Red-tailed Hawk population is still remarkably stable.

**Taxonomy:** Red-tailed Hawks breeding in San Diego County, and nearly all winter visitors, are the widespread subspecies of western North America, *B. j. calurus* Cassin,



1856. In *calurus* the light-morph adult has rufous-barred thighs and a rather distinct band of streaking on the lower breast and upper belly. Two specimens match the whiter subspecies *B. c. fuertesi* Sutton and van Tyne, 1935, and so are apparently dispersers from northern mainland Mexico or the southern Great Plains. One of these was at Ocean Beach (R7) 24 January 1921 (SDNHM 2235),

the other in Pringle Canyon (T16) 10 February 1935 (SDNHM 17074). There is one sight record of Harlan's Hawk, *B. c. harlani* (Audubon, 1830), the melanistic subspecies with a mottled grayish tail that breeds mainly in Alaska and winters mainly in the southern Great Plains: near Lower Otay Lake (U13/U14) 14 January 1992 (J. C. Lovio, AB 46:315, 1992).