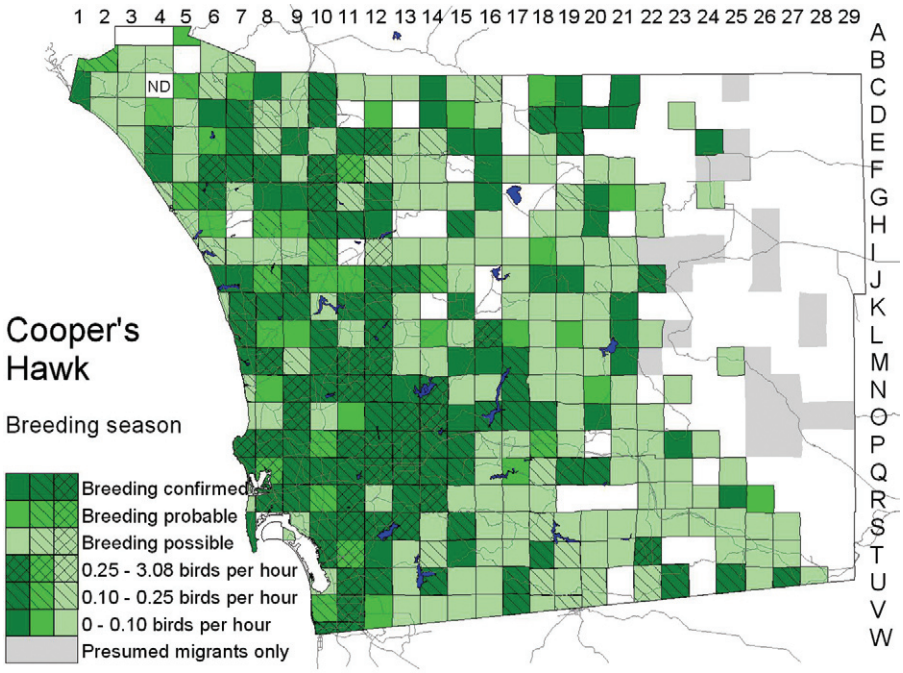
Cooper's Hawk *Accipiter cooperii*

Long a bird of oak groves and mature riparian woodland, Cooper's Hawk adapted abruptly to city living in the last two decades of the 20th century. The species is now at least as numerous in urban eucalyptus trees as in natural habitats. The breeding population increased to the point where the local birds probably outnumber winter visitors. Though Cooper's Hawk is still listed as a "covered species" under San Diego's multiple-species conservation plan, the idea that natural habitats and Cooper's Hawks are conserved together is now laughably obsolete.

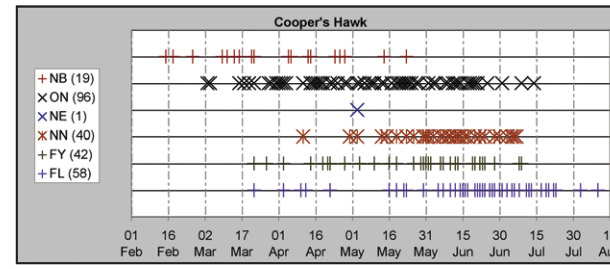
Breeding distribution: Breeding Cooper's Hawks are widespread over San Diego County's coastal slope wherever there are stands of trees. They are most numerous in lowland and foothill canyons and in the urban areas

Photo by Jack C. Daynes



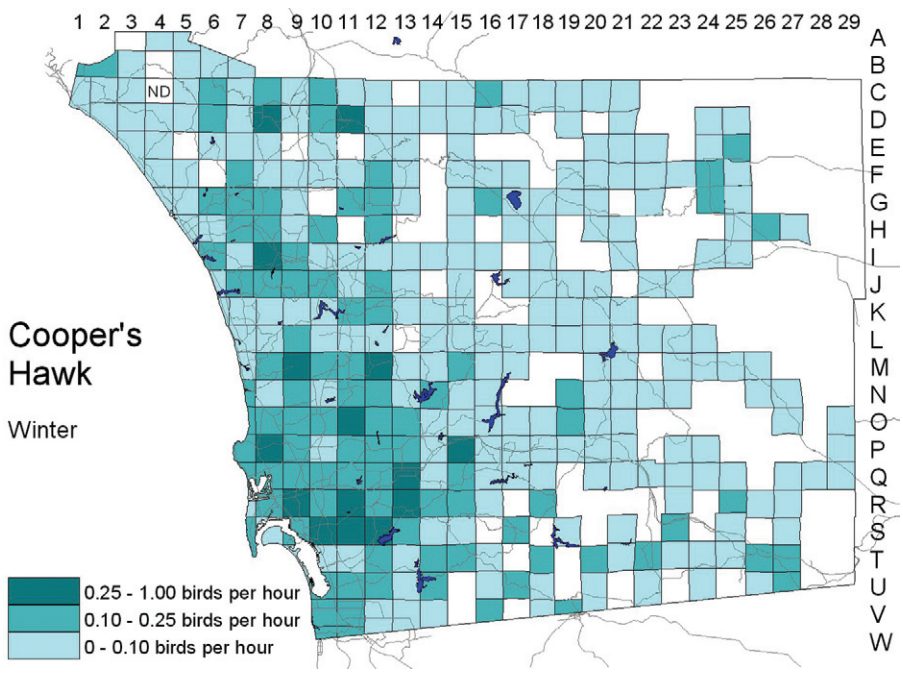
of the city of San Diego. We found up to four pairs per atlas square, and densities higher than this are likely. Asay (1987) reported distances between nests as low as 1.0 km in oak woodland in Riverside and San Diego counties. David Bittner, J. L. Lincer, and J. M. Wells found a similar density in riparian woodland of the Tijuana River valley in 2002 (Wildlife Research Institute 2004).

Cooper's Hawk is sparser in the mountains than at lower elevations. On Hot Springs Mountain (E20/E21) it has been seen only as a postbreeding visitor (juvenile 17 August 1996, K. L. Weaver, J. Dillane), but it has been found nesting as high as 5900 feet elevation in the Laguna Mountains (P23; occupied nest on 1 July 1999, E. C. Hall, J. O. Zimmer). The eastern margin of the species' breeding range corresponds closely to the eastern limit of the oaks but goes down the east slope of the mountains in Alder Canyon (C21; used nest on 20 June 2001, P. D. Jorgensen) and San Felipe Valley (nests with nestlings near Scissors Crossing, J22, 28 June 2000 and 28 June 2001, M. C. and P. D. Jorgensen). Cooper's Hawks are seen rarely through the breeding season in the Anza–Borrego Desert, mainly but not exclusively in the Borrego Valley. Most of these are nonbreeding; our only nest of Cooper's Hawk in the Anza–Borrego Desert had nestlings in the north Borrego Valley (E24) 31 May 2001 (J. Fitch). In 1997 a pair may have nested at Vallecito (M25); two birds were both carrying prey 29 April (M. C. Jorgensen).



Nesting: Cooper's Hawks nest high in trees but beneath the canopy. Sometimes they nest in riparian willows, but oaks are the species' traditional nest site in California (Asay 1987). In San Diego County the hawks still use oaks commonly, but atlas observers described more than twice as many nests in eucalyptus trees as in oaks. Other reported nest sites were also in planted trees: pine, redwood, and avocado.

Most of our nesting confirmations of the Cooper's Hawk 1997–2001 corresponded to egg laying from late March to mid June, much like the 31 March–21 June interval of 32 egg sets collected 1897–1953. However, atlas observers also noted about 15 instances of earlier nesting, enough to suggest that a broader breeding season is part of the species' recent adaptations. An adult feeding a full-grown juvenile already out of the nest at Kimball Park, National City



(T10), 3 April 1999 (P. Unitt) suggests laying as early as the end of January.

Migration: Winter visitors occur in San Diego County mainly from September to March, but with the increase of Cooper's Hawk as a breeding bird the arrival and departure of migrants is seldom obvious. Occasionally, in late September and October, small numbers can be seen migrating south over Point Loma and through the Cuyamaca Mountains (D. Bittner).

Winter: Cooper's Hawk is just as widespread over the coastal slope in winter as in the breeding season but more strongly concentrated at low elevations and in developed areas. One of the atlas squares where we found the species most frequently in winter, for example, was Q13 in El Cajon, which has no significant natural habitat. Our maximum per square per day was nine in Imperial Beach and the Tijuana River valley (V10) 19 December 1998 and 18 December 1999 (P. K. Nelson, W. E. Haas, et al.).

In the Anza–Borrego Desert Cooper's Hawk is rare except at oases and in developed areas. But in Borrego Springs the birds are just as numerous as on the coastal slope. The Anza–Borrego Christmas bird count 19 December 1999 yielded the maximum of seven in one single atlas square (F24; P. K. Nelson et al.) and 16 in the count circle as a whole.

Conservation: In 1978 the California Department of Fish and Game listed Cooper's Hawk as a species of special concern (Remsen 1978), on the basis of population declines probably due to shooting, destruction of riparian woodland, and pesticide contamination. As the principal "chicken hawk," Cooper's Hawk attracted the wrath of man; even Stephens (1919a) wrote "it deserves no mercy." One specimen from San Diego tested in 1968 was highly contaminated with DDT (Risebrough et al. 1968), although such contamination was not widespread (Snyder et al. 1973).

In the 1980s, however, Cooper's Hawks began adapting to the urban environment, nesting in eucalyptus trees in Balboa Park (R9) and later elsewhere throughout the city. In the 1990s this adaptation accelerated and the birds' numbers increased conspicuously. By the time the atlas period began in 1997, Cooper's Hawks had colonized many small parks and schoolyards in inner-city San Diego: Roosevelt Junior High School (R9), the Educational Cultural Center (S10), Emerald Hills Park (S11), Kimball Park in National City, and Eucalyptus Park in Chula Vista (T10). At the same time reports of nests in suburban and rural areas proliferated. Numbers on San Diego Christmas bird counts increased from an average of 11 from 1961 to 1985 to 30 from 1997 to 2002.

Why did Cooper's Hawk adapt so suddenly? A shift in society's attitudes toward birds of prey coincided with the maturation of urban trees over many square miles of formerly treeless scrub. Collisions with windows are now the most serious source of mortality the hawk faces at the hand of man. Once enough Cooper's Hawks learned that people rarely pose a threat any longer, the barrier to their occupying a habitat to which they were preadapted fell. Though hawks in secluded areas defend their nests against people aggressively, in settled areas they usually ignore people even directly below the nest. The open "woodland" of a eucalyptus-planted park, school campus, or neighborhood may be even more attractive habitat for the hawks than a natural oak grove if the numbers of prey like Domestic Pigeons, Mourning Doves, Western Scrub-Jays, and California Ground Squirrels are inflated by a steady supply of lunch scraps or bird feeders.