## White-winged Dove Zenaida asiatica

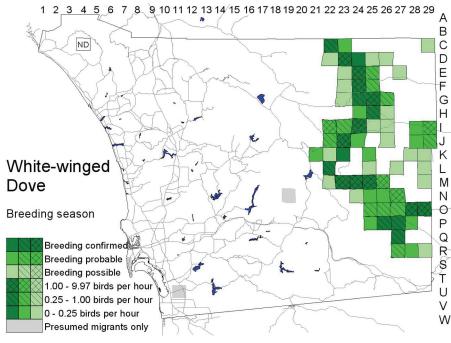
The White-winged Dove is a characteristic bird of the desert Southwest, at the edge of its range in eastern San Diego County. In the Anza–Borrego Desert it is common at oases and human settlements. Its numbers are on the increase, as part of a pattern that reaches from California to Florida. Formerly a summer visitor only to California, the dove is losing its habit of migration, establishing itself year round first in San Diego County and increasingly elsewhere in the Colorado Desert.

Breeding distribution: The White-winged Dove is found in all the developed areas of the Anza–Borrego Desert and at almost all of the oases, extending up canyons on the mountains' east slope occasionally as far west as Banner (K21; six on 17 May 1999, P. K. Nelson). The largest numbers are at the oases of the southern half of the desert, with up to 150 at Vallecito County Park (M25) 16



Photo by Anthony Mercieca

May 2001 and 120 at Carrizo Marsh (O29) 11 May 2001 (M. C. Jorgensen). The grapefruit orchards at the north end of the Borrego Valley (E24) are the area of the next largest concentrations, with up to 50 on 11 June 2001 (P. D. Jorgensen).



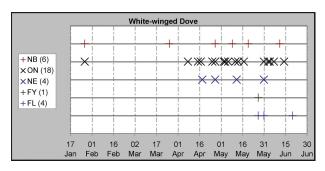
In Arizona, White-winged Doves feed heavily on the nectar and fruit of the saguaro and may be able to meet their need for water from these sources. In the Anza–Borrego Desert, where there are no native saguaros, the doves probably must drink free water daily. The distance to which they will commute to water is not known precisely but may be at least 2 miles, about the distance to water from a nest along Carrizo Wash (O28) 31 May 2001 (P. D. Jorgensen). On rare occasions it may be farther, as suggested by one singing in Fish Creek Wash (M29) 1

**Nesting:** The White-winged builds a typical dove nest, a flimsy platform of sticks, usually on a large branch or in the fork of a trunk. Nest sites atlas observers described

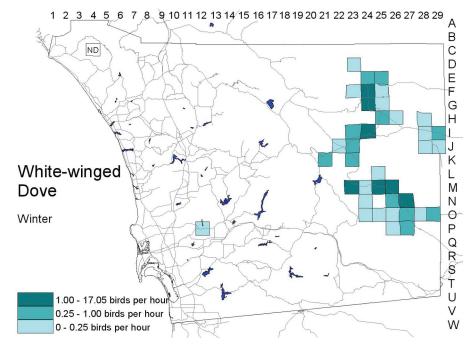
May 2001 (J. R. Barth).

were willow (twice), mesquite, palo verde, and California fan palm. The birds may nest colonially or as scattered pairs.

The White-winged Dove is noted for its midsummer nesting even in the hottest climate, as along the lower Colorado River (Rosenberg et al. 1991). In the Anza-Borrego Desert, where many White-winged Doves stay through the winter, the birds can start earlier, as they do in urban settings in Texas (Hayslette and Hayslette 1999). Our observations from 1997 to 2001 indicate that in San Diego County the doves lay from the beginning of April to early June. A notable exception was in the wet winter of 1998, when one was building a nest at Tamarisk Grove (I24) 27 January (P. K. Nelson)



**Migration:** In the Salton Sink, where at the beginning of the new millennium it was just starting to winter regularly, the White-winged Dove arrives mainly in April and



departs mainly in August (Patten et al. 2003). Evidently some in the Anza-Borrego Desert still follow this schedule because the species is more widespread there in summer than in winter. Small numbers of stray migrants reach the coastal slope regularly in fall, less frequently in spring. At least 40 such migrants have been reported in spring, most frequently from Point Loma (S7), on dates ranging from 30 April (Point Loma, R. E. Webster, AB 36: 894, 1982) to 6 June (1966, Tijuana River valley, AFN 20:600, 1966). During the atlas period, at least one was at Point Loma 12-23 May 2001 (D. K. Adams) and one was at Chula Vista (U11) 4 May 2001 (A. Mercieca). Coastal migrants are considerably more frequent in fall than in spring, occurring annually with as many as 22 in 1982 (AB 37:224, 1983). A few are seen as they cross the mountains, such as one in Sherilton Valley (N19) 23 August–4 September 1999 (G. and R. Wynn) and one flying west over the Laguna Summit along Interstate 8 (Q22) 16 August 1986 (P. Unitt). Late August to mid September is the peak period for coastal White-winged Doves, but the species has been noted in the Tijuana River valley 3 July 1995 (B. Foster, NASFN 49:982, 1995) and at Point Loma 12 July 1985 (R. E. Webster), and occasional stragglers occur through the fall.

Winter: The White-winged Dove is more concentrated in the major oases and developed areas in winter than in summer. At some places the doves are as abundant in winter as in summer. But at others they are absent in winter. At Angelina Spring (I22), for example, where P. K. Nelson found the birds regularly in the breeding season, with up to 20 per day, he found none in winter. White-winged Doves are especially numerous at Agua Caliente Springs (M26), with up to 150 on 26 February 2000 (E. C. Hall); many winter also in Borrego Springs (up to 141 throughout the valley 19 December 1999, Christmas bird count)

Winter visitors to the coastal lowland are rare, now averaging fewer than one per year. From 1997 to 2002 there was only one, at Santee (P12) 7 January 2001 (S. D. Cameron).

Conservation: The White-winged Dove spread north

and west into southeastern California as the Colorado River and Imperial valleys were converted to agriculture in the early 20th century (Rosenberg et al. 1991, Patten et al. 2003). It was first reported from the Anza-Borrego Desert at Yaqui Well (I24) in July 1946 (Krutzsch and Dixon 1947), and it was first reported wintering in 1956, with one at Agua Caliente Springs 4 January (AFN 10:282, 1956). By 1984 the largest number reported at any season was only 20 and the species was still uncommon (Unitt 1984). Numbers on the Anza-Borrego Christmas bird count increased abruptly beginning in 1991. During its first seven years, 1984-90, the count averaged 2.6; from 1997 to 2001 it averaged 87. Although the creation of new habitat in the form of farms and cities is probably responsible for the White-winged Dove's northward spread, the colonists use natural habitat as well as artificial, as can be seen at the Anza-Borrego Desert's oases.

Curiously, the number wintering in the San Diego area has peaked and declined. From 1965 to 1971 the White-winged Dove was found almost annually on the San Diego Christmas bird count with an average of 1.7. Yet none has been found on any Christmas count on the coastal slope since 1992. Perhaps the change is the result of the population in the Anza–Borrego Desert becoming more sedentary.

**Taxonomy:** Only the large, pale subspecies *Z. a mearnsi* Ridgway, 1915, occurs in California.