## Long-billed Curlew Numenius americanus

North America's largest shorebird, the Long-billed Curlew, has two main habitats in San Diego County: tidal mudflats and open grassland. It is primarily a migrant and winter visitor, but small numbers remain along the coast through June, the brief interval between spring and fall migration. The curlew's population has been reduced greatly, first by uncontrolled hunting, then by loss of habitat in both the breeding and winter ranges, until its total numbers at the beginning of the 21st century were estimated at about 20,000.

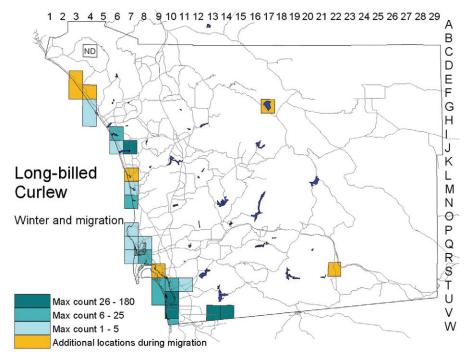
Winter: The most consistent sites for wintering Longbilled Curlews in San Diego County are south San Diego Bay and the Tijuana River estuary. From 1997 to 2002 our counts in these areas ranged up to 54 along the Chula Vista bayfront (U10) 15 December 2001 (C. H. Reiser) and 26 in the Tijuana estuary (V10) 18 December 1999 (A. DeBolt). A count of 127 along the north edge of the salt works 10 December 1988 (Macdonald et al. 1990) was exceptional; weekly surveys of the salt works 1993-94 yielded no more than 21 December-February and no more than 23 at any season. Kjelmyr et al. (1991) rated the winter abundance of the curlew at Mission Bay and the San Diego River flood-control channel (R8) at 10-100, but during the atlas period our maximum counts in this area ranged up to only 10, as in the flood-control channel 28 December 1999 (S. D. Cameron).



Photo by Anthony Mercieca

In northern San Diego County the Long-billed Curlew is generally scarce; in most years a dozen individuals or fewer are scattered among the various lagoons. The opening of Batiquitos Lagoon (J7) to the tide led to a spike in curlew numbers there, with up to 40 on 26 December 1998 (R. Stone). At other north county sites our counts during the atlas period ranged up to 12 at Agua Hedionda Lagoon (I6) 28 December 1999 (R. Gransbury) and seven at Los Peñasquitos Lagoon (N7) 26 December 1999 (B. C. Moore). A total of 93 on the Rancho Santa Fe Christmas bird count 20 December 1992 was exceptional.

San Diego County's only remaining upland habitat the curlew uses with any regularity is on Otay Mesa (V13/



V14). We found the species here in three of the five winters of the atlas period, in both natural grassland and fallow agricultural fields. Numbers ranged up to 180 one mile east of the Otay Mesa border crossing (V14) 22 December 1998 (M. Fugagli) and 86 one mile west of the crossing (V13) 25 December 2001 (P. Unitt). Two of 18 Escondido Christmas bird counts 1986–2002 yielded three near Fenton Ranch, San Pasqual Valley (K13), 2 January 1987 (C. G. Edwards) and one there 29 December 1990 (M. B. Stowe).

**Migration:** Fall migrant Long-billed Curlews begin arriving in July, if not late June, and their numbers peak in August and September. Seven fall migrants were inland at Lake Henshaw (G17) 5 September 1978 (B. Cord); one was at Lake Hodges (K11) 15 August 1982 (K. L. Weaver).

There is no clear peak of migration in spring. Three records inland are of spring migrants, of one at Lake Henshaw 12 May 2001, three at the upper end of Lake Morena (S22) 16 May 1998 (R. and S. L. Breisch), and one at De Anza Country Club, Borrego Springs (F24), 22 May 1967 (ABDSP database).

The number of Long-billed Curlews failing to migrate and remaining to summer is small. During the atlas period we noted up to three at Los Peñasquitos Lagoon 5 June 1999 (K. Estey), four at the Sweetwater River mouth (U10) 10–14 June 1998 (B. C. Moore), and seven in the Tijuana estuary 27 June 1998 (C. G. Edwards). The largest number of summering curlews recorded is 24 around south San

Diego Bay 24 June 1988 (Macdonald et al. 1990).

Conservation: Hunting for the market took its toll on the Long-billed Curlew in the late 19th and early 20th centuries; Stephens (1919a) called the species "formerly abundant." Development of San Diego and Mission bays and urbanization of grasslands near the coast has eliminated most of the curlew's habitat in San Diego County. San Diego Christmas bird counts, however, suggest that the number wintering in the remaining habitat on San Diego Bay has remained fairly static since the 1950s.

**Taxonomy:** The Long-billed Curlew has been divided into two subspecies on the basis of bill length. The difference is apparently insufficient for a taxonomic distinction, though a definitive analysis remains to be published.