

Dunlin *Calidris alpina*

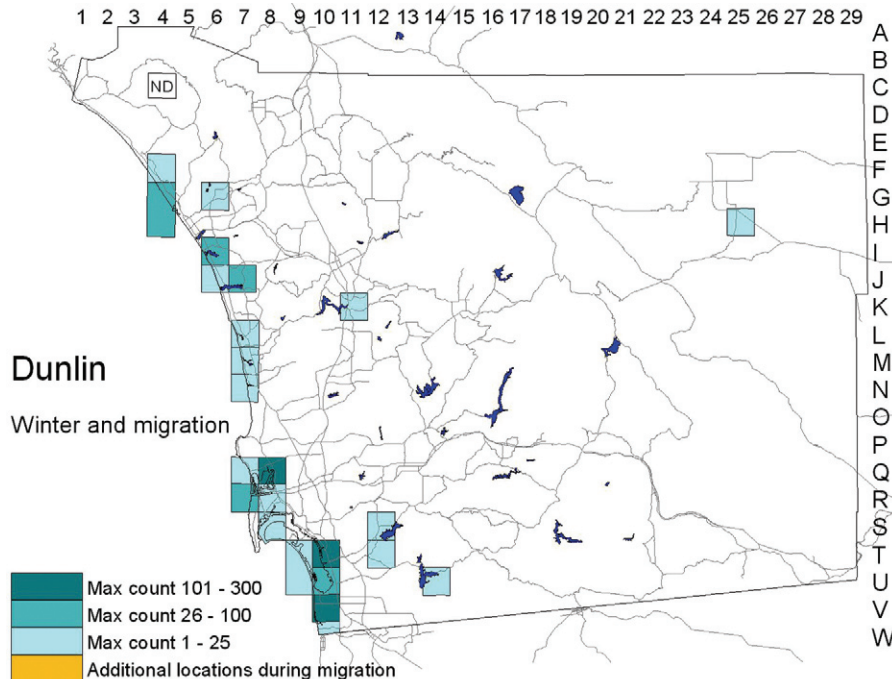
Though sometimes seen in large flocks on San Diego and Mission bays and in the Tijuana River estuary, the Dunlin is outnumbered there by the Western Sandpiper, Short-billed Dowitcher, Marbled Godwit, and Willet. The shifting of flocks and annual irregularity make the Dunlin's abundance difficult to assess, but the number wintering in San Diego County at the beginning of the 21st century was about 750 to 1000. The Dunlin's arrival in fall, beginning in September, is later than that of other shorebirds because, unlike the others, virtually the entire North American population remains in Alaska and northern Canada to molt before heading south.

Winter: The Dunlin's primary habitats in San Diego County are the tidal mudflats of San Diego and Mission bays, the San Diego River flood-control channel, and the Tijuana River estuary. From 1997 to 2002 our largest



Photo by Anthony Mercieca

concentration was of 300 on the mudflat at the west end of the D Street fill in the Sweetwater River estuary (T10) 18 December 1999 (P. Unitt). Macdonald et al. (1990) found this site and the northern margin of the south San Diego Bay salt works (U10; 160 on 10 December



1988) to be the foci for Dunlins on San Diego Bay. Stadtlander and Konecny (1994), on their weekly surveys in and near the salt works 1993–1994, found huge variation in the number of wintering Dunlins, from almost none on one survey in February 1993 to about 950 on 26 January 1994. The numbers on San Diego Christmas bird counts have also fluctuated wildly, from a high of 4146 on 26 December 1970 to a low of 7 on 19 December 1998. Whether these differences are due to actual variation or to flocks simply being missed because of incomplete coverage of the bayfront is unclear.

Away from San Diego Bay, our numbers of wintering Dunlins during the atlas period ranged up to 50 in the Tijuana

River estuary (V10) 16 December 2000 (A. DeBolt), 133 in northeast Mission Bay (Q8) 21 December 1998 (J. C. Worley), 100 at Agua Hedionda Lagoon (I6) 26 December 1998 (P. Unitt), and 50 at the Santa Margarita River mouth (G4) 27–29 January 1999 (P. A. Ginsburg). In the north county the Dunlin's numbers are at least as variable as in the San Diego area. Both the Oceanside and Rancho Santa Fe Christmas bird counts occasionally miss the species. On the basis of monthly surveys 1973–83, King et al. (1987) reported an October–April average at San Elijo Lagoon of 13.

On fresh water, wintering Dunlins are rare. From 1997 to 2002 our only sightings of more than single individuals were of ten and five at Sweetwater Reservoir (S12) on 20 December 1997 and 18 December 1999, respectively (P. Famolaro), and eight flying up the Sweetwater River near Bonita (T12) 16 December 2000 (G. C. Hazard). Eighteen years of Escondido Christmas bird counts have yielded only a single Dunlin, 29 December 1990. The species has turned up on 3 of 22 Lake Henshaw counts; the only record of more than a single individual was of eight on 3 January 1981. The only record for the Anza–Borrego Desert is of one at the Borrego sewage ponds (H25) 19 December 1999 (H. L. Young, M. B. Mosher).

Migration: Dunlins, already in winter plumage, begin arriving in numbers in late September. Previously I reported the species' span of dates in San Diego County as 13 September–22 May (Unitt 1984), and in their surveys of San Diego Bay Macdonald et al. (1990) did not extend this span. At San Elijo Lagoon, King et al. (1987) had an earliest date of 4 September 1977. A molting adult—not juvenile as originally published—at Batiquitos Lagoon

(J6/J7) 2 September 1993 (P. A. Ginsburg) was unusual enough to merit notice in *American Birds* (48:152, 1994). Stadtlander and Konecny (1994), however, reported arrival in August and plotted counts during that month ranging as high as about 50, suggesting misidentification. Fall migration peaks in October and November, and during these months the Dunlin is fairly common inland (Unitt 1984).

Spring migration takes place largely in March and April, with few birds left by 1 May. Stadtlander and Konecny (1994) reported none in May. During the atlas period our latest Dunlin was one at Batiquitos Lagoon 4 May 2001 (C. C. Gorman).

There are just four records of the Dunlin summering in San Diego County: one from the San Diego River mouth 9 July 1982 and three from San Diego Bay, 15 June 1976, 6–18 July 1982, and (up to five individuals) 9–22 June 1984 (AB 30:1003, 1976; 36:1016, 1982; 36:1016, 1982; 38:1062, 1984).

Conservation: Because of great annual variation, it is difficult to say whether the changes in Dunlin numbers on San Diego Christmas bird counts constitute a trend. But figures of over 1000 were frequent in the late 1960s and 1970s, whereas from 1981 to 2002 the count did not yield more than 500. Like other shorebirds, the Dunlin lost much habitat with the development of the bays.

Taxonomy: Dunlins migrating along the coast of California, including all specimens from San Diego County, are *C. a. pacifica* (Coues, 1861), distinguished by its relatively long bill and gray streaks on its flanks (Browning 1977, Unitt 1984).