## PLOVERS — FAMILY CHARADRIIDAE

## Black-bellied Plover Pluvialis squatarola

The Black-bellied Plover is one of San Diego County's more numerous wintering shorebirds with about 1500 to 3000 annually. The species prefers tidal mudflats but uses a variety of habitats including brackish lagoons, sandy beaches, and rocky shorelines. Away from the coast the Black-bellied Plover is now rare, as the agricultural fields it formerly frequented inland are almost gone.

Winter: Because it uses sandy beaches, the Black-bellied Plover is found all along San Diego County's coast. Its numbers are by far the greatest, however, on the mudflats around south San Diego Bay. On their weekly counts in and near the salt works (U10/V10), 1993-94, Stadtlander and Konecny (1994) found an average of about 500-600 in December and January and a maximum of 1155 on 1 December 1993. In the same area, the San Diego Christmas bird count 15 December 2001 yielded 1418 (D. C. Seals et al.). Numbers can be large elsewhere on San Diego Bay (312 at the D St. fill, T10, 18 February 2000, R. T. Patton), in northeastern Mission Bay (Q8; up to 526 on 18 December 1998, J. C. Worley), and in the Tijuana River estuary (V10; 150 on 19 December 1998, A. DeBolt). Because the Blackbellied Plover forages individually rather than in flocks, such large numbers are seen generally when the birds congregate on dry ground to loaf and wait out the high tide.

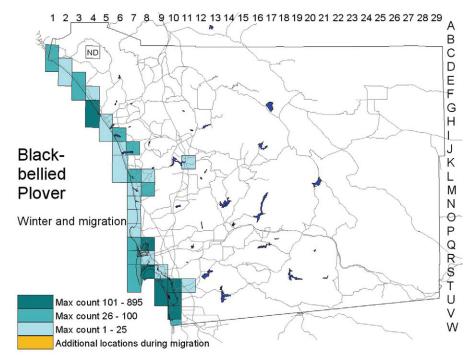
In northern San Diego County wintering Black-bellied Plovers are less common. The Oceanside Christmas bird count averages 100, the Rancho Santa Fe count 43. Counts of 85 at San Onofre State Beach (C1) 28 January 2001 (R. Breisch), 200 at the Santa Margarita River mouth



Photo by Anthony Mercieca

(G4) 25 January 1998 (B. C. Moore), and 80 in the east basin of Batiquitos Lagoon (J7) 26 December 1998 (R. and A. Campbell) were exceptionally high for this area. Away from coastal wetlands the Black-bellied Plover is generally uncommon. A high count for a bluff-backed beach is 37 at San Elijo State Beach (L7) 8 February 2004 (E. Garnica); for rocky shoreline, 27 at Point Loma 16 December 2000 (M. W. Klein).

From 1997 to 2002 we found wintering Black-bellied Plovers inland only at the east end of Lake Hodges (K11; two on 13 December 1999, B. C. Moore; one still present 26 December, E. C. Hall) and along the San Dieguito River in San Dieguito Valley (M8; up to 40 on 10 January 1998, R. T. Patton) and Osuna Valley (L8; up to 15 on 27 December 1998, A. Mauro). One at Lake Henshaw (G17) 16 December 2002 (P. Unitt) is the only one recorded on a Lake Henshaw Christmas bird count.



**Migration:** As for all shorebirds, understanding Black-bellied Plover migration requires that the plumage types be recorded separately, as nonbreeding birds summer commonly around south San Diego Bay (55 on 24 June 1988, Macdonald et al. 1990) and in the Tijuana River estuary (30 on 6 June 1998, B. C. Moore). Two hundred around south San Diego Bay 1 June 1987 (R. E. Webster, AB 41:1487, 1987) were an unusually large number for summering birds. A few summer elsewhere along the

coast (up to eight at Batiquitos Lagoon 4 June 1999, B. C. Moore). Migrants begin returning in July and finish leaving in May. There is no clear peak of migration in spring but there is in fall, with the arrival of juveniles in August and September.

Well inland, migrating Black-bellied Plovers are rare. Besides a few scattered individuals at lakes Hodges and Henshaw, 184 fall migrants were at Lake Henshaw 31 July 1981, and 30 spring migrants flew over Palomar Mountain (D15) 16 April 1982 (R. Higson, AB 36: 894, 1982).

**Conservation:** Development of Mission and San Diego bays eliminated a large fraction of the tidal mudflats where Blackbellied Plovers feed, but there are no adequate data suggesting

any change in the species' status along the coast. Inland, however, urban development supplanting agriculture has eliminated most of the fields the plovers formerly used; far fewer occur inland now than in the 1960s and 1970s.

**Taxonomy:** The subspecies maintained by Engelmoer and Roselaar (1998) are differentiated insufficiently for taxonomic recognition (Patten et al. 2003).