## Marbled Godwit Limosa fedoa

The Marbled Godwit is one of the dominant shorebirds along San Diego County's coast, especially around San Diego and Mission bays and in the Tijuana River estuary. In terms of biomass, in winter the Marbled Godwit is probably the dominant shorebird. Though the species is principally a winter visitor, with usually around 2500 to 3000 annually, several hundred remain through the summer.

Winter: As a winter visitor to San Diego County, the Marbled Godwit is almost exclusively coastal. Tidal mudflats and salt marshes are its primary habitats, though smaller numbers are regular on sandy beaches, in brackish lagoons, and on rocky ocean shores. Weekly surveys of the salt works 1993-1994 found an average of about 800 to 1000 in fall and winter and a maximum of 1300 on 26 January 1994 (Stadtlander and Konecny 1994). Quarterly surveys of other parts of south San Diego Bay 1988-89 found a maximum of 526 on 29 November 1988 (Macdonald et al. 1990). An estimate of 5000 along the Chula Vista bayfront (U10) 16 December 2000 (B. C. Moore) is exceptional; a tenth of this is more typical for the area. Other areas important to the species are the Tijuana River estuary (V10; up to 500 on 3 December 1999 and 24 January 1998, B. C. Moore), North Island (S8; up to 471 on 19 December 1998, R. T. Patton), and northeastern Mission Bay (Q8; up to 340 on 29 December 1998, J. C. Worley).

In northern San Diego County's lagoons the godwit is less numerous and less consistent. Winter counts as high as 124 at Batiquitos Lagoon (J7) 27 December 1997 (F. Hall) and 70 at Los Peñasquitos Lagoon (N7) 5 December 1999 (D. K. Adams) are unusual. The Oceanside Christmas bird count averaged 79 from 1976

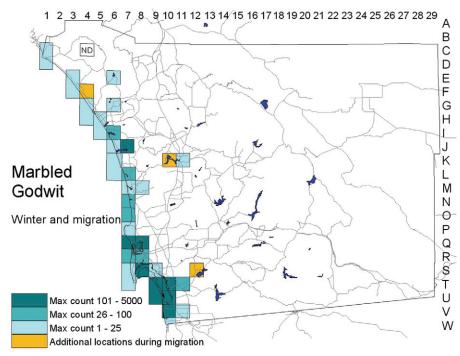


Photo by Anthony Mercieca

to 2002; the Rancho Santa Fe count averaged 43 from 1980 to 2003.

On inland ponds and lakes wintering godwits are now rare. From 1997 to 2002 we recorded them only nine times, and the only counts of over 10 were of 20 at O'Neill Lake (E6) 14 December 1997 (B. C. Moore) and 15 in Otay Valley (V11) 19 December 1998 (P. Unitt). Two at the east end of Lake Hodges (K11) 9 December 1997 (E. C. Hall) were unusually far inland.

**Migration:** The Marbled Godwit's migration in San Diego County is partially masked by the abundance of nonbreeding summering birds, probably immature. Monthly averages of weekly counts in the salt works 1993–94 show a fairly smooth change from a maximum of about 900 in November to a minimum of about 300 in June. At San Elijo Lagoon, in contrast, on the basis of monthly counts 1973–83, King et al. (1987) found godwit numbers to reach their annual low from November to January. The subtlety of difference between the species' plumages means that dif-



ferences in the migration of adults and immatures are poorly known. Nevertheless, adults whose attempt to breed failed probably begin arriving in late June, while immatures are still arriving in December (Gratto-Trevor 2000).

Inland, fall migrants are more frequent than winter visitors, though still uncommon. In the early 1980s at Lake Hodges, K. L. Weaver recorded the species 15 August-5 October with a maximum of 15 on 29 September 1985. A unique spring record there is of two on 7 June 1987 (K. L. Weaver). The surveys of San Elijo Lagoon and the salt works suggest a minor peak of spring migrants in March or April. Most godwits probably commute between California and the Great Plains with only one stop along the way, at Great Salt Lake, Utah (Shuford et al. 2002).

**Conservation:** In spite of market hunting in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, loss of much breeding habitat on the Great Plains, and loss of much winter habitat in California, evidence for change in the Marbled Godwit's numbers in San Diego County is slight. Torrey (1913) wrote that on San Diego Bay "I have seen godwits and willets together lining the grassy edge of the flats for a long distance, and so densely massed that I mistook them at first for a border of some kind of herbage. Thousands there must have been; and when they rose at my approach, they made something like a cloud." San Diego Christmas bird counts since 1954, however, show

**Taxonomy:** All specimens of the Marbled Godwit from San Diego County in the San Diego Natural History Museum are nominate *L. f. fedoa* (Linnaeus, 1758), breeding on the northern Great Plains. The shorterwinged *L. f. beringiae* Kessel and Gibson, 1989, breeds on the Alaska Peninsula and has been reported in winter no farther south than San Francisco Bay.