Marsh Wren Cistothorus palustris

The Marsh Wren is well named, for it is rarely seen outside a marsh. It occurs in San Diego County in two roles. As a year-round resident it inhabits freshwater and brackish marshes mainly along and near the coast—home of subspecies *C. p. clarkae*, narrowly restricted to coastal southern California. As a winter visitor from farther north it is more widespread, invading salt marshes, wet grassy areas, and marshes too small to support a resident population. As a conservation issue the Marsh Wren is complex too: much of its primitive habitat has been destroyed, yet in San Diego County, over the second half of the 20th century, its breeding range spread considerably.

Breeding distribution: The core of the Marsh Wren's distribution in San Diego County is the "Mesopotamia" between the Santa Margarita and San Luis Rey rivers. The birds inhabit many lakes and ponds in these river valleys as well as marshes in the river channels themselves, upstream along the Santa Margarita to north of Fallbrook

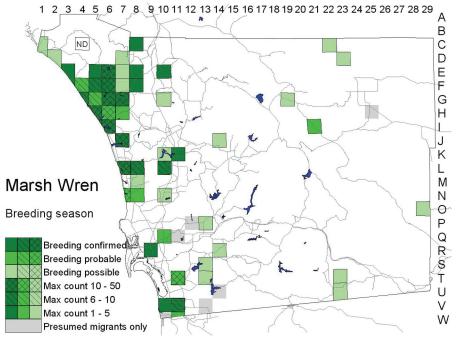


Photo by Anthony Mercieca

(C8; pair with nestlings 24 July 2001, K. L. Weaver) and along the San Luis Rey to Couser Canyon (E10; two on 6 and 13 June 1998, K. Aldern, M. Bache). Numbers in this area are as high as 30 at Guajome Lake (G7) 31 May 1999 (D. and C. Wysong), 20 at Whelan Lake (G6) 19 April 2001 (J. Smith), and 15 at O'Neill Lake (E6) 5 June 1998 (P. A. Ginsburg). Marsh Wrens are also resident in the coastal wetlands, even small ones, from San Onofre (C1)

to Los Peñasquitos Lagoon (N7). At the larger lagoons, numbers are as high as 50 at San Elijo (L7) 6 June 1999 (B. C. Moore) and 27 at Los Peñasquitos 2 May 1999 (D. K. Adams).

Elsewhere in the county breeding Marsh Wrens are quite localized. The largest colonies outside the core range are in La Jolla Valley (L10; up to 10 on 7 May 2000, K. J. Winter), along the Sweetwater River near Interstate 805 (T11; 28 on 18 April 1999, W. E. Haas), and at the Dairy Mart pond in the Tijuana River valley (V11; eight on 9 May 1999, P. Unitt). At other places numbers are small—no more than five reported in one atlas square per day. Outside the coastal lowland there are only a few breeding-season records,



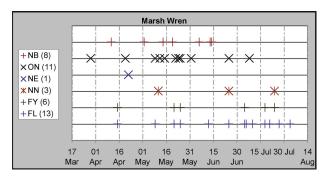
and the species is apparently inconsistent at any site. On the coastal slope such reports are from near Warner's Ranch (G19; one on 17 June 2000, J. D. Barr) and a pond straddling the line between squares T23 and U23 1.25 miles northeast of Cameron Corners (one singing male 16 June 2001, L. J. Hargrove). On the county's desert slope, the Marsh Wren has never been confirmed breeding but has occurred during the breeding season along Coyote Creek at both Middle Willows (C22; two, including a singing male, 6 May 2001, P. D. Jorgensen) and Lower Willows (D23; one on 19 May 1999, B. L. Peterson; one on 21 May 2001, M. L. Gabel; three on 12 June 1994, Massey 1998), in San

9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 В C ND D Ε F G Н J K L M Marsh Wren Ν 0 Winter Ρ Q RS T U Max count 11 - 24 ٧ Max count 3 - 10 W Max count 1 - 2

Felipe Valley near Paroli Spring (I21; two singing males 13 June 1999, J. O. Zimmer), and at Carrizo Marsh (O29; one on 4 May 1978, P. D. Jorgensen; one on 17 April 1998, M. C. Jorgensen).

Nesting: Using strips of marsh plants, Marsh Wrens build a characteristic globular nest with a side entrance, lashing it to several erect leaves, typically of cattail or tule, emerging from water. Placement over water rather than concealment helps protect the nest from predators. Males build several nests; for the eggs, females select one of the male's nests or build yet another of their own. The sedentary Marsh Wrens of western Washington use their nests for roosting through the winter (Verner 1965), and a report of an "occupied nest" at the Santa Margarita River mouth (G4) 12 February 1998 (B. L. Peterson) suggests that San Diego County's breeding Marsh Wrens, also sedentary, may do so as well.

Marsh Wrens enjoy a long breeding season in San Diego County. Two families of newly fledged young at Buena Vista Lagoon (H5) 15 April 2000 (J. Determan) must have hatched from eggs laid as early as 20 March; nestlings in the Santa Margarita River north of Fallbrook 24 July 2001 (K. L. Weaver) must have hatched from eggs laid as late as the first week of July. Thus the breeding



season we observed extends the 29 April–20 June range of 22 San Diego County egg sets preserved at WFVZ and even the 24 March–22 July range of 113 sets from throughout California reported by Bent (1948).

Migration: Occasional Marsh Wrens show up away from breeding localities as early as August (one in the Tijuana River valley—before the species colonized this area—14 August 1978, P. Unitt; one at the Borrego sewage ponds, H25, 23 August 1998, P. D. Jorgensen). Most likely these early birds are short-distance dispersers of the local population—possibly from the Salton Sea in the latter case. The main influx of long-distance migrants from east of the Sierra Nevada does not begin until the third week of September (Unitt et al. 1996). In spring, our latest record during the atlas period of a Marsh Wren away from any suspected breeding site was of two at the Borrego sewage ponds 4 April 1997 (H. L. Young, M. B. Mosher). But in previous years the Marsh Wren had been noted at San Diego as late as 25 April (1965, G. McCaskie), and this date agrees with migrants' schedule elsewhere in southern California and Baja California (Unitt et al. 1996). A climatic shift toward warmer winters could result in the migratory subspecies of the Marsh Wren departing earlier—and, because their migration is facultative, reaching southern California in smaller numbers.

Winter: San Diego County's local population of Marsh Wrens is greatly augmented in winter by migrants from the north and northeast. The migrants mix with the local subspecies *clarkae* but show up at many additional places. In the coastal lowland numbers in such places range up to 20 in Vista (G8) 23 December 2001 (M. Lesinsky), 10 at San Dieguito Reservoir (K8) 28 December 1997 (J. Determan), and 10 at the upper end of El Capitan Reservoir (N17) 6 February 2001 (D. C. Seals). Marsh Wrens occur uncommonly and locally at higher elevations

as well, where 10 at Swan Lake (F18) 18 December 2000 (G. L. Rogers) was a high count. No more than four were reported from any other foothill or mountain location, but these locations ranged in elevation as high as 4600 feet at Lake Cuyamaca (M20; up to three on 18 February 1999, A. P. and T. E. Keenan), 4650 feet at Doane Pond (E14; one on 24 December 2000, G. C. Hazard), and 5100 feet in Crouch Valley, Laguna Mountains (P22; two on 31 December 1998, P. Unitt). In the Anza–Borrego Desert the Marsh Wren is uncommon, very local, and irregular except possibly at Middle and Lower Willows in Coyote Creek Canyon. The highest desert counts 1997–2002 were of four at ponds in the northern Borrego Valley (E24) 19 December 1999 (P. R. Pryde) and 18 February 2001 (P. D. Ache).

Conservation: With the elimination of almost all coastal wetlands from Los Angeles and Orange counties, southern California's endemic subspecies of the Marsh Wren undoubtedly experienced a huge population decline. Presumably Orange County's vast "Gospel Swamp," whose birds were never adequately documented before the swamp was destroyed (Hamilton and Willick 1996), was once the center of this subspecies' population. Cistothorus p. clarkae is now recognized as a species of special concern by the California Department of Fish and Game. In San Diego County, however, until 1953 the only sites where Marsh Wrens were known to breed were Guajome Lake, the county's largest natural freshwater marsh (20 egg sets in WFVZ), and nearby San Luis Rey (G6; Sharp 1907). Even Sharp's "San Luis Rey" may have actually been Guajome Lake. Willett (1912) wrote that A.M. Ingersoll had noted the (presumed) local subspecies in "early spring" at Lindo Lake (O14/P14), but without a specimen or precise date we cannot be sure the birds were not migrants. Marsh Wrens apparently first colonized the San Pasqual Valley and Mission Valley in 1978, the Tijuana River valley in 1980 (Unitt 1984). Other likely nesting sites such as the Sweetwater River emerged only during the field work for this atlas.

Because of near total human control of water in coastal San Diego County, the Marsh Wren is at the mercy of wetland management. But it has apparently benefited more from the installation of ponds and reservoirs than it has suffered from elimination of wetlands. In Mission Valley, where vegetation was removed along the San Diego River in 1988 and 1989, then allowed to regrow, Marsh Wrens recolonized in 1993. Increased siltation of the coastal lagoons, combined with reduced tidal flushing, converts saltwater habitat into freshwater habitat suitable for nesting Marsh Wrens, and this is probably the most important factor contributing to the birds' spread (Unitt et al. 1996).

A trend toward a dryer climate is a concern for a bird as dependent on wetlands as the Marsh Wren. The drying up in 2001 of the Dairy Mart ponds in the Tijuana River valley (V11) rendered unsuitable what had become one of the species' more important local sites.

Taxonomy: The subspecies of the Marsh Wren breeding in coastal San Diego County is C. p. clarkae Unitt, Messer, and Théry, 1996, distinguished from other subspecies by its small size, dark rufous rump and scapulars, and extensively black crown (brown usually reduced to a small patch on the forehead). Its known range is confined to the coastal strip from Los Angeles to San Diego, except for two singing males, presumably clarkae, at Lagunita El Ciprés near Ensenada, Baja California, 6 July 1999 (Erickson et al. 2001). The east end of Batiquitos Lagoon (J7) is the type locality. For many years, California's coastal Marsh Wrens were called C. p. paludicola Baird, 1864, but that subspecies, with an extensively brown back and crown, apparently ranges no farther south than Lincoln County, Oregon (Unitt et al. 1996). Summering birds in the Anza-Borrego Desert are most likely C. p. aestuarinus (Swarth, 1917), as this is the subspecies resident in the Imperial Valley (Unitt et al. 1996). It is somewhat larger and paler than *clarkae*, with more brown than black on the crown and more white streaking on the back. No specimens of aestuarinus have yet been collected in the county, however. Winter visitors are C. p. pulverius (Aldrich, 1946), from the western Great Basin and Columbia Basin, and C. p. plesius Oberholser, 1897, from the intermountain region east of pulverius. These partially migratory subspecies are longer-winged than the sedentary ones and, pulverius especially, have whiter underparts and paler tawny scapulars and rump.