**Sora Porzana carolina**

The Sora is the most migratory member of the rail family in southern California, now occurring as a winter visitor almost exclusively. Soras usually remain hidden in marshes, noticed only by sound. Though generally uncommon, they are widespread, visiting even small isolated marshes scattered in the mountains and desert. Formerly, San Diego County represented the southern tip of the Sora’s breeding range, and rare stragglers still occur in summer, but there has been no confirmation of nesting here for 50 years.

*Photo by Anthony Mercieca*
Winter: The Sora's distribution in San Diego County is concentrated in the northwest, where the coastal lagoons and ponds in the low-lying valleys offer more habitat than in the rest of the county. Most of the larger numbers were reported from this area, such as five in the Santa Margarita River valley, Camp Pendleton (F5) 1 December 2001 (P. A. Ginsburg), five at the mouth of Agua Hedionda Creek (I6) 19 December 1999 (P. A. Ginsburg), seven in San Dieguito Valley (M8) 27 December 1998 (P. Unitt), and five at Los Peñasquitos Lagoon (N7) 1 March 1998 (D. K. Adams). The Sora is less frequent in salt marshes than in brackish or freshwater ones but uses them in small numbers (four at Kendall–Frost Marsh, Mission Bay, Q8, 2 January 1987, P. Unitt).

The Sora occurs at least sporadically at marshes throughout the county, at elevations as high as 4100 feet at Twin Lakes, Cooper Canyon (C18; up to three on 6 February 2000, M. and B. McIntosh), 4500 feet in Thing Valley (Q24; one on 25 December 2001, J. R. Barth), and 5000 feet in Crouch Valley, Laguna Mountains (P22; one on 31 December 1998, P. Unitt). Our largest count from 1997 to 2002 was from such an isolated location, 12 at a pond in La Posta Creek just north of Interstate 8 (S23) 9 December 1998 (L. J. Hargrove).

In the Anza–Borrego Desert the Sora is more frequent as a migrant but still occurs as a rare winter visitor at both sewage ponds (e.g., two at Ram's Hill, H25, 16 January 1999, P. D. Jorgensen) and natural oases (e.g., two at Sentenac Ciénaga, J23, 12 February 1999, R. Thériault).

Migration: Late August to early May is the Sora's usual season in San Diego County. From 1997 to 2001 our dates for the species ranged from 27 August (1997, one at O'Neill Lake, E6, P. A. Ginsburg) to 11 May (1999, two in McCain Valley, R26, L. J. Hargrove). Extreme dates are difficult to ascertain because of occasional summering birds, but one at Hillsdale near El Cajon (Q14) 7 August 1951 (SDNHM 31214) and one found dead in the driveway of a house near the Borrego Sink (G25) 15 August 1994 (ABDSP database) were away from possible breeding habitat.

Possibly because of increased calling in spring, King et al. (1987) noted numbers of Soras at San Elijo Lagoon more than twice as large in March and April than from September to January. Concentrations of spring migrants have been noted occasionally at oases in the Anza–Borrego Desert, up to at least eight at Sentenac Ciénaga 3 May 1978 and at least six at Carrizo Marsh (O29) the following day (P. D. Jorgensen).

Migrants occasionally strike power lines or other obstacles while flying through urban areas. These casualties occur during the winter as well as during spring and fall migration, suggesting the birds cross unsuitable habitat at night regardless of season (e.g., one at Coronado, S9, 17 January 1982, SDNHM 42219).

Breeding distribution: The only specific published account of Sora breeding in San Diego County is Sharp's (1907) statement that "for several years a pair has nested in nearly the same locality on the river below Escondido. Each year the nest was discovered before the clutch of eggs was complete and on going back a few days later the nest was always empty." The San Bernardino County Museum has an egg set collected at National City (T10) 20 April 1935 and another from "San Diego County" without a more precise locality collected 4 May 1954. A. M. Ingersoll (in Willett 1912) believed Soras bred occasionally "in the vicinity of San Diego," and Stephens (1919a) wrote that the species was "occasional throughout the year."

More recent summer records are few, with no suggestion of breeding. For example, King et al. (1987) noted single individuals only three times in June or July on monthly censuses of San Elijo Lagoon, 1973–83. The only June or July record during the atlas period was of one in the San Luis Rey River just north of Indian Flats (D19) 2 June 2001 (L. J. Hargrove).

Conservation: Early in the 20th century, the Sora was common year round in coastal southern California (e.g., Willett 1912), though probably more so in the Los Angeles basin and Orange County's former Gospel Swamp than in San Diego County. Unfortunately, the breeding population was nearly eliminated by draining of marshes before it was well documented. Nevertheless, a few birds continue to breed at a few sites in Orange County (Hamilton and Willick 1996), so breeding in San Diego County remains possible.

The trend in the winter population is less clear but it too may be downward. For example, from 1976 to 1986, the Oceanside Christmas bird count, whose circle con-
stitutes the core of the Sora's range in San Diego County, averaged 17, but from 1997 to 2001 it averaged only six. The reduction of natural marshes in floodplains has likely been compensated partly, from the Sora’s point of view, by the installation of many ponds that are quickly colonized by aquatic plants.