## Caspian Tern Sterna caspia

The salt works of South San Diego Bay have been the site of a major colony of the Caspian Tern since at least the 1940s. For foraging the birds range widely along San Diego County's coast and on its inland lakes. The species is primarily a summer visitor, being common from April to September, generally uncommon from October to March. Over much of North America the Caspian Tern population is on the increase—the lack of suitable sites elsewhere is probably the reason why the salt works remain the site of the county's only viable colony.

Breeding distribution: Caspian Terns had begun nesting in the salt works by 1941, when E. E. Sechrist collected a set of eggs on 23 April and recorded a "colony of 78 pair" (WFVZ 28472). Over the next 40 years, the colony increased, reaching an estimated 412 pairs in 1981 (F. C. Schaffner). Subsequently, the population has hovered around 200 to 300 pairs, with up to 320 in 1994, at least 198 in 1998 (Terp and Pavelka 1999), at least 261 in 1999, and at least 249 in 2003 (R. T. Patton). In 1998, most of the nests were in a single cluster in the north half of the salt works (U10); in other years, they have been more dispersed.

The only nesting known in San Diego County outside the salt works took place in 1998, when six pairs attempted nesting at Zuñiga Point at the mouth of San Diego Bay (S8). All the nests suffered predation, however; only one chick hatched (R. T. Patton, B. Foster).

Even during the breeding season the Caspian Tern occurs fairly commonly outside the salt works all along



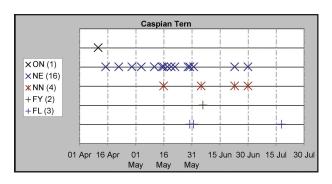
Photo by Anthony Mercieca

San Diego County's coast (up to 30 at the Santa Margarita River mouth, G4, 21 May 2001, P. A. Ginsburg; 45 at Los Peñasquitos Lagoon, N7, 3 May 1998, K. Estey; 46 around North Island, S8, 26 May 2000, R. T. Patton). Inland, summering Caspian Terns are generally uncommon. Twenty at Barrett Lake (S19) 29 April 2001 (R. and S. L. Breisch) were exceptional; otherwise our highest inland count before postbreeding dispersal was of eight at Lake Hodges (K10) 26 April 1999 (R. L. Barber). Nonbreeding Caspian Terns visit lakes as high as Cuyamaca (M20), where our counts ranged up to four on 5 June 1998 and 5 June 1999 (A. P. and T. E. Keenan).

**Nesting:** In the salt works, Caspian Terns nest in scrapes in the dirt on top of the dikes. The Elegant and Royal Terns cluster around the Caspians, taking advantage

of the larger species' aggressive defense of the colony. Cuthbert and Wires (1999) reported that egg laying at San Diego Bay begins in the first week of April, but in 1997, the first eggs were found 15 April (M. R. Smith), in 1998 on 28 April (Terp and Pavelka 1999), in 1999 on 12 May, and in 2003 on 23 April (R. T. Patton). In 1998, most females laid in the first three weeks of May, but some laid as late as 24 July and hatched as late as about 15 August. Late clutches are presumably replacements for ones lost to predators or accidents; the Caspian Tern raises only one brood per year.

**Migration:** In their 10 years of monthly censuses at San Elijo Lagoon (L7), King et al. (1987) observed peaks in Caspian Tern numbers in April and July–August.

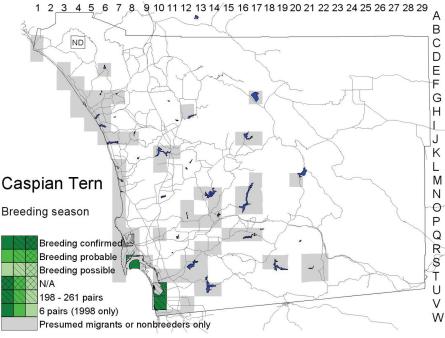


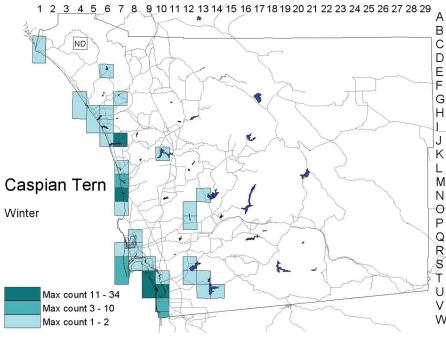
The latter months correspond to postbreeding dispersal from the salt works; the shrill call of young still begging from their parents can be heard widely both along the

coast and at inland lakes at this season. During the atlas period counts away from the colony ranged up to 200 in northeastern Mission Bay (Q8) 27 June 1998 (E. Wallace). Inland, they ranged up to 14 at San Vicente Reservoir (N13) 27 July 1997 (C. G. Edwards) and at Sweetwater Reservoir (S12) 7 August 1998 (P. Famolaro), though counts before the atlas period were of up to 100 at Lake Hodges 24 April 1982 and 47 there 23 July 1982 (K. L. Weaver). Throughout the county, numbers drop sharply in October, then begin increasing again in March. There is still only one record for the Anza-Borrego Desert, of six flying over Borrego Springs (G24) 2 April 1977 (G. McCaskie).

Caspian Terns banded at San Diego Bay have been recovered as far south as Chiapas in southernmost Mexico and as far north as Montana and Gray's Harbor, Washington (Gill and Mewaldt 1983). These authors noted that the San Diego Bay colony enjoyed good success but remained stable at around 400 pairs, so they concluded that it has been a source population for the species' colonization elsewhere along the Pacific coast.

Winter: From December through February atlas observers reported only four sightings of more than 12 Caspian Terns, and the highest winter count, of 34 along the Silver Strand (T9) 27 February 2000 (Y. Ikegaya), may have been of early spring





migrants. Other high recent winter counts are of 28 at Batiquitos Lagoon (J7) 26 December 1998 (R. Stone) and 21 on the Silver Strand 24 January 2000 (J. L. Coatsworth). Inland, our Caspian Tern sightings were of one or two individuals only, and confined to the coastal lowland, east to Lake Hodges (one on 27 December 1998, R. L. Barber), San Vicente Reservoir (one on 4 January 2002, N. Osborn), and Lower Otay Lake (U14; one on 4 December 1999, S. Buchanan).

**Conservation:** The Caspian Tern's colonization of San Diego Bay was part of a range expansion covering the entire Pacific coast of North America (Gill and Mewaldt 1983). Until 1932, there was only one record for San

Diego County, in December (Saunders 1896). Not only at the salt works but elsewhere along the Pacific coast the expansion has been facilitated by the birds' nesting in man-made habitats, especially salt works. In spite of the positive trend regionally, the trend locally is flat. In spite of the Caspian Tern's defending its nest so aggressively, the colony is vulnerable to disturbance.

The Caspian Tern's abundance in winter appears to have declined somewhat since the early 1970s. Since 1972, San Diego County's Christmas bird counts have not returned more than 30; before that year, the San Diego count yielded up to 77 (in 1967).