

Royal Tern *Sterna maxima*

The Royal Tern is found along San Diego County's coast year round, commonly in fall and winter, fairly commonly in spring and summer. It forages mainly on the ocean near shore, then loafs in flocks on beaches and in estuaries. A few pairs nest with other terns. Irregular from 1959 from 1998, nesting of the Royal Tern in the salt works of south San Diego Bay became annual at the beginning of the 21st century, with up to 35 pairs. In the first third of the 20th century, the Royal was the county's commonest large tern; today, it is vastly outnumbered by the Caspian and Elegant. In the middle of the 20th century, numbers of the Royal apparently decreased in tandem with those of the Pacific sardine.

Breeding distribution: Gallup and Bailey (1960) reported the first nesting of the Royal Tern in California in the salt works in 1959, the year the Elegant Tern first colonized there. Schaffner (1985) located the egg they collected in the Western Foundation of Vertebrate Zoology and

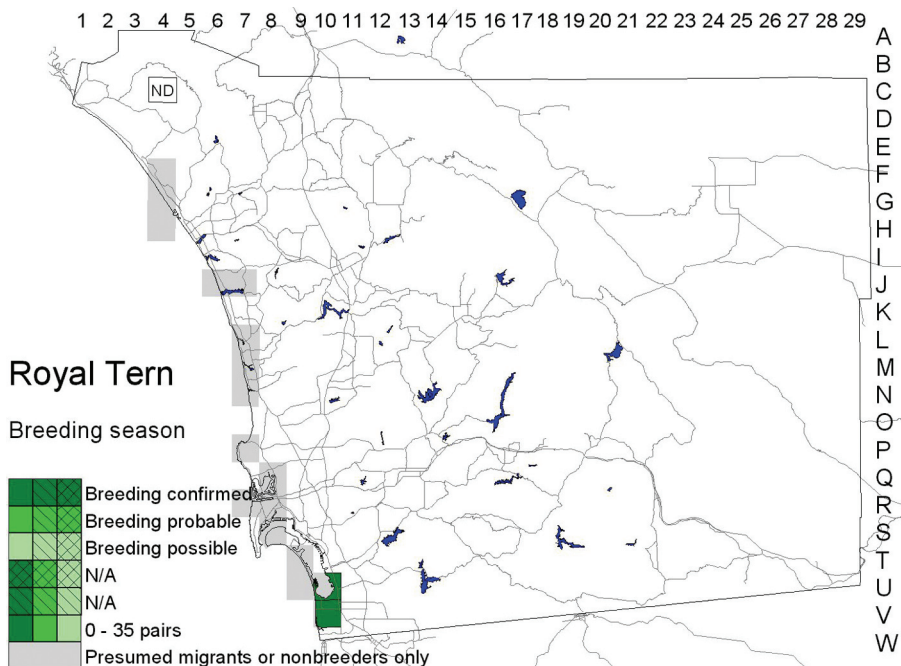


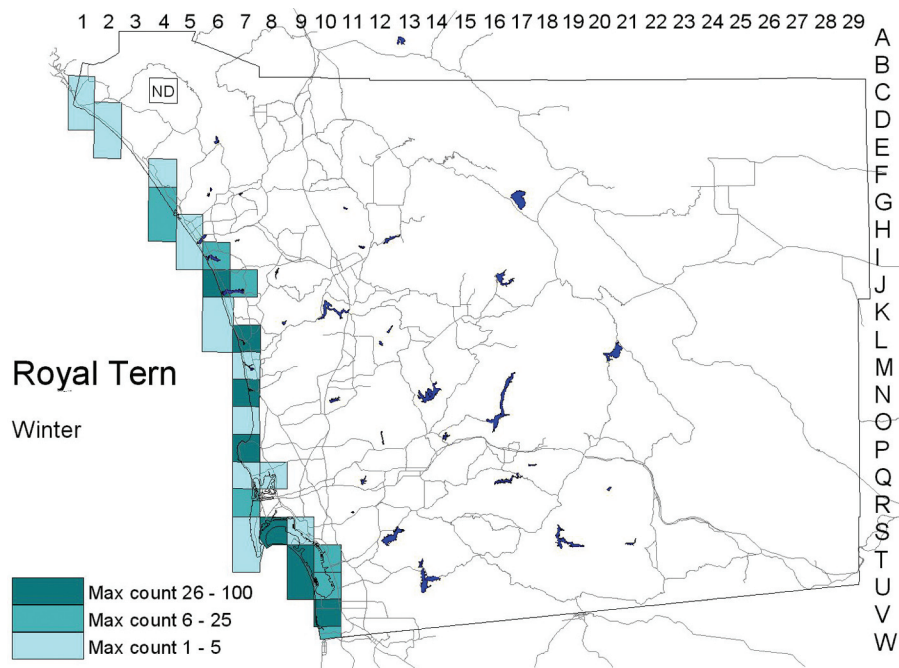
Photo by Jack C. Daynes

confirmed the identification. In 1960, over 30 nests were reported in late May (AFN 14:447, 1960); there is a possibility these were misidentified Elegant Terns. The next known nestings were in 1980, when a pair laid an egg subsequently broken by a Ruddy Turnstone, and 1982, when two pairs fledged one chick each (Schaffner 1985). In 1984, one or two pairs nested; in 1985, one pair had a large chick 12–15 June (R. E. Webster, AB 38:1062, 1984; 39:962, 1985). In 1997, at least one, possibly as many as four pairs nested (M. R. Smith, E. Copper, FN 51:1054, 1997). In 1999, R. T. Patton noted 35 nests on 27 May; in 2003, about 27 nests on 7 May.

Even during the breeding season the Royal Tern is widespread along San Diego County's coast. Spring flocks are usually rather small, of 15 or fewer birds, but range up to 34 at North Island (S8) 26 May 2000 (R. T. Patton).

Nesting: In the salt works, Royal Terns nest in close association with Caspian and Elegant Terns. The two smaller species rely on the aggressive Caspian for defense





of the colony (Schaffner 1985). The Royal's nesting is thus synchronized with that of the other species. In 1982, the birds laid on or just before 8 May and the chicks hatched between 8 and 15 June (Schaffner 1985). In 1999, adults were incubating from 12 May to 30 June; in 2003, from 29 April to 4 June (R. T. Patton).

Migration: The Royal Tern is generally regarded as primarily a postbreeding and winter visitor to southern California. During the atlas periods our highest counts were in December. During their monthly counts at San Elijo Lagoon (L7) 1973–83, however, King et al. (1987) found numbers highest in spring (April–May) and fall (September–October), lowest in December and January. During their weekly counts in and near the salt works

February 1993–February 1994, Stadtlander and Konecny (1994) found no more than seven in winter but up to 36 in September. Evidently local movement can obscure larger-scale migration. There are no records inland.

Winter: In winter the Royal Tern is widespread along San Diego County's coast, but resting flocks aggregate at a few regular sites, especially beaches at estuary mouths (up to 35 at San Elijo Lagoon, L7, 22 December 2000, G. C. Hazard; 100 at Los Peñasquitos Lagoon, N7, 2 December 2000, K. Estey) and around San Diego Bay (up to 60 on the Silver Strand, T9, 19 December 1998, N. Osborn). Foraging birds are often common on the ocean at La Jolla (P7;

up to 40 on 28 January 2000, L. Polinsky).

Conservation: In spite of the Royal Tern's decrease earlier in the 20th century, the species' colonization of San Diego Bay represents a northward extension of the breeding range. This extension continued beyond San Diego as the Royal began nesting with the tern colonies at Bolsa Chica, Orange County, in 1988 and the Los Angeles harbor in 1998 (K. C. Molina unpubl. data). The Royal Tern's nesting biology is harnessed behind that of the other large terns; all the species depend on the same man-made colony sites and have the same need for security from disturbance and predators.

Taxonomy: Royal Terns on both coasts of North America are nominate *S. m. maxima* Boddaert, 1783.