

**California Wildlife Habitat Relationships System**  
**California Department of Fish and Wildlife**  
**California Interagency Wildlife Task Group**

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CASPIAN TERN

*Hydroprogne caspia*

Family: LARIDAE  
B227

Order: CHARADRIIFORMES

Class: AVES

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#### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Common to very common along the California coast and at scattered locations inland, from April through early August. Nests in dense colonies on sandy estuarine shores, on levees in salt ponds, and on islands in alkali and freshwater lakes (Small 1974, Cogswell 1977). Breeding adult often flies substantial distances to forage in lacustrine, riverine, and fresh and saline emergent wetland habitats (Gill 1976). Nesting colonies are located at south San Francisco Bay, San Diego Bay, and several lakes in Modoc and Lassen cos. (Cogswell 1977, Garrett and Dunn 1981). Small colonies recently reported on Humboldt Bay, San Pablo Bay, and Elkhorn Slough, Monterey Co. (Gill and Mewaldt 1983). An analysis of banding recoveries indicates a shifting from nesting in numerous small colonies associated with freshwater marshes in interior California, to nesting in large colonies on human-created habitats along the coast (Gill and Mewaldt 1983). Large numbers are present at the Salton Sea in the breeding season, but nesting no longer occurs there. This species winters from southern California, where it is locally fairly common, south to Central and South America. Scattered individuals have been noted in winter along the central and northern California coast.

#### SPECIFIC HABITAT REQUIREMENTS

**Feeding:** Feeds primarily on small fish in freshwater lakes, estuaries, and salt ponds. Sometimes feeds over the open ocean, near shore (Cogswell 1977). Searches aerially, hovers, and dives just below water surface for prey. Fish as long as 15 cm (6 in) are taken (Cogswell 1977).

**Cover:** Groups rest on mudflats, boardwalks, lake shores, pilings, small islands, or occasionally on open sand beaches.

**Reproduction:** Nests in dense colonies on undisturbed islands, levees, or shores. Nests are scraped, unlined depressions in soil near water. Barren, or nearly barren, sites are preferred.

**Water:** No requirement for fresh water has been reported .

**Pattern:** For nesting, requires relatively barren, undisturbed islands, levees, or shores, and nearby foraging areas in lakes, estuaries, salt ponds, or emergent wetlands.

#### SPECIES LIFE HISTORY

**Activity Patterns:** Yearlong, primarily diurnal activity. Nesting colonies are active at night.

**Seasonal Movements/Migration:** Breeding population disperses widely before migrating south. Arrives at wintering grounds in late September to early October (Bent 1921), returns in

late March or April.

**Home Range:** Although most adults probably forage near the colony, Gill (1976) reported finding tagged trout in nests, which only could have been obtained 29-60 km (18-37 mi) from the colony. The largest colony on San Francisco Bay saltpond dikes held 499 nests in 1954. It declined thereafter, and was abandoned by 1970, by which time 3 other colonies were established.

**Territory:** Small territories are established around densely grouped nests; territory varied from 1.0 to 1.4 m<sup>2</sup> (10.8 to 15.3 ft<sup>2</sup>) in the Great Lakes region (Ludwig 1965).

**Reproduction:** The breeding season begins in April, peaks May through July, and extends well into August. Average clutch size ranged from 2.8 in the Great Lakes region (Ludwig 1965) to 2.0 in San Francisco Bay (Gill 1973). Incubation period is 20 days (Bent 1921). Both sexes incubate eggs and care for young. Adults continue to feed young for weeks, or months (Cogswell 1977). The semiprecocial young wander widely after 2 wk. First breeding probably occurs in the 3d yr.

**Niche:** Although Gill (1973) noted the presence of ring-billed gulls, California gulls, and black-crowned night-herons near a large colony of nesting Caspian terns, any attempt at predation by these species was thwarted by colony-wide mobbing of intruders. At one colony, Caspian terns nesting in close proximity to least terns were credited with protecting the least terns by interspecific cooperation in mobbing predators (Anderson and Rigney 1980).

#### REFERENCES

- Anderson, C., and M. Rigney. 1980. California least tern breeding survey, South San Francisco Bay - 1981. U.S. Dep. Inter., Fish and Wildl. Serv., San Francisco Bay Natl. Wildl. Refuge Special Rep. 16pp.
- Bent, A. C. 1921. Life histories of North American gulls and terns. U.S. Natl. Mus. Bull. 113. 345pp.
- Cogswell, H. L. 1977. Water birds of California. Univ. California Press, Berkeley. 399pp.
- Gill, R. E., Jr. 1973. The breeding birds of the South San Francisco Bay estuary., M.A. Thesis, San Jose State Univ., San Jose, CA. 145pp.
- Gill, R. E., Jr. 1976. Notes on the foraging of nesting Caspian terns, *Hydroprogne caspia* (Pallas). Calif. Fish and Game 62:155.
- Gill, R. E., Jr. 1977. Breeding avifauna of the South San Francisco Bay Estuary. West. Birds 8:1-12.
- Gill, R. E., Jr., and L. R. Mewaldt. 1979. Dispersal and migratory patterns of San Francisco Bay produced herons, egrets, and terns. North Am. Bird Bander 4:4-13.
- Gill, R. E., Jr., and L. R. Mewaldt. 1983. Pacific Coast Caspian terns: dynamics of an expanding population. Auk 100:369-381.
- Ludwig, J. P. 1965. Biology and structure of the Caspian tern population of the Great Lakes from 1896-1964. Bird-Banding 36:217-233.
- Small, A. 1974. The birds of California. Winchester Press, New York. 310pp.