

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

LEAST TERN

Sternula antillarum

Family: LARIDAE
B234

Order: CHARADRIIFORMES

Class: AVES

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Sternula antillarum browni is the only representative subspecies of *Sternula antillarum* regularly occurring in California. Migratory in California, usually arriving at breeding territory in late April in southern California (Massey 1971) to mid-May in northern California (Anderson and Rigney 1980).

In 1994, 2,750 breeding pairs were counted in California (California Department of Fish and Game, as cited in Thompson et al. 1997). Breeding colonies are located in southern California along marine and estuarine shores, and in San Francisco Bay in abandoned salt ponds and along estuarine shores (Wilbur 1974a). Feeds in nearby shallow, estuarine waters. After breeding, family groups regularly occur at lacustrine waters near the coast of southern California (Garrett and Dunn 1981). Wintering areas are unknown, but suspected to include the Pacific Coast of South America (Massey 1977). The Endangered California Least Tern (*S. a. browni*) is the only subspecies that occurs in California.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Feeds primarily in shallow estuaries or lagoons where small fish are abundant. Hovers, and then plunges for fish near the surface, without submerging completely. Prey in California includes anchovy (*Engraulis* sp.), silversides (*Atherinops* sp.), and shiner surfperch (*Cymatogaster aggregata*). Considerable feeding also takes place near shore in the open ocean (Cogswell 1977), especially where lagoons are nearby, or at mouths of bays.

Cover: Adult roosts primarily on the ground. Young chicks, 3 days old and older, are brooded less often by parents, and require wind blocks and shade.

Reproduction: Nests in loose colonies in areas relatively free of human or predatory disturbance. Abandons nesting areas readily if disturbed (Davis 1974). Courtship may take place away from nest colony, typically on a beach or exposed tidal flat (Hardy 1957). Nests on barren to sparsely vegetated site near water, usually on sandy or gravelly substrate. On hard soil, may use artificially created depressions such as a dried boot impression (Swickard 1971, 1972, Rigney and Emery 1980). At 8 localities in Florida, this species nested on gravel roofs (Fisk 1975).

Water: Requires unpolluted feeding areas in lagoons and estuaries all year.

Pattern: Prefers undisturbed nest sites on open, sandy or gravelly shores near shallow-water feeding areas in estuaries.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: Winters south of California; absent from mid-October

through late April.

Home Range: No specific information found on home range, but breeding adult probably forages in waters close to nest site. Nesting density ranged from 3-7 per ha (1 -3 per ac) (Swickard 1971, 1972), but may be much greater; e.g., 145 nests on about 0.75 ha (1.9 ac) in San Diego Co.

Territory: During courtship, male selects and defends display site near nest site. During breeding season, birds are spaced 1-5 m apart when loafing on ground. Nest or chicks are defended within a 1 m radius by both parents. Smallest territories have a 40 cm radius (Wolk 1974, as cited in Thompson et al. 1997). Chicks

Reproduction: Present at colony from April through August. Nesting starts in mid-May, with most nests completed by mid-June (Bent 1921, Davis 1968, Massey 1974). Late-season nest may be re-nest or late-arriving 2nd-yr individual (Wilbur 1974a, Collins and Bailey 1980, Massey and Atwood 1981). A colonial nester, but does not form dense colonies. Clutch size usually 2-3; range 1-4, and a single brood is raised yearly. Incubation, by both parents, lasts 17-28 days, usually 20-25 days. The semiprecocial young are tended by both parents. Young become strong and mobile at 3 days, and can fly by 28 days (Terres 1980, U.S. Fish and Wildlife Service 1980). Young continue to be fed by parents for about 2 wk after leaving the colony. May begin breeding in 2nd yr, but this age arrives late at established colony (Massey and Atwood 1981).

Niche: Significant disturbance and/or predation reported by burrowing owls and American kestrels (Collins and Bailey 1980). In one large colony, disruption and abandonment suspected of being caused by house cats. In many areas in southern California, protective enclosures are necessary for colony success (Craig 1971, Massey 1972, Bender 1973, 1974, Atwood et al. 1977). Artificial nest structures aid in providing sand substrate and protection from wind (Loftin and Thompson 1979). Human disturbance at former coastal nesting areas has reduced the breeding population in California (Garrett and Dunn 1981), and was noted as early as the mid-1920s (Schneider 1926).

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