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

BLACK TERN Family: LARIDAE B235 Chlidonias niger
Order: CHARADRIIFORMES

Class: AVES

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#### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Formerly a very common spring and summer visitor to fresh emergent wetlands of California (Grinnell and Miller 1944). Numbers have declined throughout the range, especially in the Central Valley (Cogswell 1977). Currently fairly common migrant and breeder on wetlands of the northeastern plateau area, but absent from some historic nesting localities, such as Lake Tahoe (Cogswell 1977). Despite the presence of apparently suitable habitat in rice farming areas, breeding is questionable in the Central Valley (Gaines 1974). Although restricted to freshwater habitats while breeding, can be fairly common on bays, salt ponds, river mouths, and pelagic waters in spring and fall migration (Grinnell and Miller 1944, Cogswell 1977).

### SPECIFIC HABITAT REQUIREMENTS

Feeding: Forages by hovering above wet meadows and fresh emergent wetlands. Catches insects in air; also plucks them from water and vegetation surfaces. Eats grasshoppers, dragonflies, moths, flies, beetles, crickets, and other insects (Terres 1980). Also hovers above croplands, then drops to capture adult and larval insects from recently plowed soil. Another foraging technique is plunging to water surface for tadpoles, crayfish, small fish, and small mollusks. Young are fed insects (Cuthbert 1954).

Cover: Often nests in dense wetland vegetation.

Reproduction: Nest is a loose mass of dead plant stems, anchored to standing vegetation or floating on the water surface. On dry ground, a hollow scrape lined with fine plant matter is used, and also takes over abandoned muskrat houses and coot and grebe nests (Bent 1921, Harrison 1978). Dikes in rice fields also may be used where available (Cogswell 1977).

Water: Needs fresh water while breeding, but also frequents salt water in migration (Grinnell and Miller 1944).

Pattern: Uses fresh emergent wetlands, lakes, ponds, moist grasslands, and agricultural fields. In migration, some take coastal routes and forage offshore.

## SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity. Forages in daylight hours with erratic flight and frequent hovering (Bent 1921, Pough 1951).

Seasonal Movements/Migration: Long distance migrant that winters off the coast of northwestern South America. Spring migration takes place in April and May, and fall migration extends from late June through September, but stragglers have been reported in all

months in California (Cogswell 1977).

Home Range: No additional data found.

Territory: At Eagle Lake, Gould (1974) recorded nests averaging 8.5 m (28 ft) apart, and ranging 3.7-20 m (12-66 ft) apart, within colonies. In Michigan, Cuthbert (1954) recorded nests 9.1-805 m (30-2640 ft) apart; within colonies, most nests were less than 30.5 m (100 ft) apart. Cuthbert (1954) stated that most food was obtained within "a few hundred yards" of the nest. After the young fledged, "large" feeding territories, containing 3-4 perches for young, were established and defended by both parents and young.

Reproduction: The breeding season extends from May through late August with a peak in June and July. Loosely colonial; usually 3 eggs in clutch (range 2-4) (Harrison 1978). Single-brooded; incubation is by both sexes, lasting 20-22 days. Young are semiprecocial, and are tended by both parents. Young remain near the nest for about 2 wk, start to fly at 3 wk, and are fully fledged at 4 wk (Harrison 1978).

Niche: Loss of wetlands in the Central Valley has been mitigated in part by rice farming, which provides potential foraging and nesting sites (Grinnell and Miller 1944). Highly vulnerable to destruction of natural wetlands by drainage, or heavy grazing. Pesticide pollution of many agricultural areas also has been extremely detrimental. Campgrounds and marinas on the shorelines of large lakes and wetlands also may be partially responsible for population decline (Marcot 1979).

#### REFERENCES

- 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.
- Cuthbert, N. L. 1954. A nesting study of the black tern in Michigan. Auk 71:36-63.
- Gaines, D. 1974. The birds of Yolo. California Syllabus, Oakland. 55pp.
- Garrett, K., and J. Dunn. 1981. Birds of southern California. Los Angeles Audubon Soc. 408pp.
- Gould, G. I., Jr. 1974. Breeding success of piscivorous birds at Eagle Lake, California. M.S. Thesis, Humboldt State Univ., Arcata. 94pp.
- Grinnell, J., and A. H. Miller. 1944. The distribution of the birds of California. Pac. Coast Avifauna No. 27. 608pp.
- Harrison, C. 1978. A field guide to the nests, eggs and nestlings of north American birds. W. Collins Sons and Co., Cleveland, OH. 416pp.
- Marcot, B. G., ed. 1979. Calfornia wioldlife/habitat relationships program: North Coast/Cascades Zone. Vol. II. Bird narratives. U.S. Dep. Agric., For. Serv., Six Rivers Nat. For., Eureka. 573pp.
- Pough, R. H. 1951. Audubon waterbird guide. Doubleday, New York. 352pp.
- Terres, J. K. 1980. The Audubon Society encyclopedia of North American birds. A. Knopf, New York. 1100pp.

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