

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

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AMERICAN WHITE PELICAN

*Pelecanus erythrorhynchos*

Family: PELECANIDAE

Order: PELECANIFORMES

Class: AVES

B042

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#### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

In California, now nests only at large lakes in Klamath Basin, especially Clear Lake National Wildlife Refuge (Airola 1980, Sloan 1982). It is common to abundant on nesting grounds April to August (sometimes March to September). Bred at Honey Lake in 1976 (Tait et al. 1978), and formerly bred in large numbers in Central Valley and Salton Sea (Cogswell 1977). From August to December common on salt ponds of San Francisco Bay and on the coastal slope from Sonoma Co. south. Locally uncommon to common on large lakes and estuaries in Central Valley. Fairly common at Lake Tahoe and Salton Sea in late spring and summer. Common spring and fall migrant at Salton Sea and Colorado River. In fall and winter, rare at Salton Sea, Morro Bay, and San Diego Bay; sporadic elsewhere. Migrant flocks pass overhead almost any month, but mainly in spring and fall throughout the state, especially in southern California (Cogswell 1977, McCaskie et al. 1979, Garrett and Dunn 1981).

#### SPECIFIC HABITAT REQUIREMENTS

**Feeding:** Feeds in water of various depths, diving for prey items from the surface and scooping them up in pouch. In shallow water, small groups sometimes cooperate to drive fish closer to shore, where they are easily caught. Preys almost entirely on fish, but occasionally on amphibians and crustaceans (Palmer 1962); in a breeding colony in North Dakota over half of diet consisted of larval tiger salamanders (Lingle and Sloan 1980).

**Cover:** Rests in day and roosts at night along edge of water, on beaches, sandbars, or old driftwood, but never in trees.

**Reproduction:** Nests at large freshwater and salt water lakes, usually on small islands or remote dikes. Nest-site must be flat or gently sloping, lacking shrubs or other obstructions that would impede taking flight, free of human disturbance, and usually with loose earth suitable for nest-mounds. One report of nesting on floating tule islands (Palmer 1962).

**Water:** No additional data found.

**Pattern:** During breeding season, may commute as much as 306 km (184 mi) each way from breeding grounds to foraging area (Lingle and Sloan 1980); thus does not require nest site and food at same lake.

#### SPECIES LIFE HISTORY

**Activity Patterns:** Active yearlong. Circadian feeder during breeding season, though less active in middle of day. Diurnal feeder in winter. In tidal areas, usually feeds on rising tide (Palmer 1962).

**Seasonal Movements/Migration:** Most of breeding population leaves northeastern California from October to March. Migrant flocks are seen throughout much of California. Large numbers move into San Francisco Bay from July to December; fewer elsewhere in central and southern California. Small numbers winter locally, mainly in southern California.

**Home Range:** Breeders foraged as far as 81 -145 km (50-90 mi) from the nest in Utah (Low et al. 1950); 95 km (60 mi) at Pyramid Lake, Nevada (Marshall and Giles 1953); and 48-306 km (29-184 mi) in North Dakota (Lingle and Sloan 1980).

**Territory:** Territory defended only as far as adults can reach from the nest (Palmer 1962). Mean distance between nests was 107 cm (42 in) and the minimum was 74 cm (29 in) in Wyoming (Schaller 1964). The mean distance was 59 cm (23 in), and the minimum was 25 cm (10 in), in Utah (Knopf 1979).

**Reproduction:** A monogamous, colonial nester, in groups of a few to several hundred pairs. Courtship begins soon after arrival at breeding grounds (Knopf 1979), thus in March or April in California. Nest-building begins in March or April, egg-laying in April (Cogswell 1977). Clutch size is usually 2 eggs, sometimes 1, with up to 6 reported. Presumably, single-brooded. Incubation probably lasts about 36 days, as in other pelicans (Harrison 1978). Altricial young are fed by both parents, and leave the nest at 3-4 wk. Age at first flight about 2 mo, but young may be independent before that; by September in most cases.

**Niche:** Mortality results mostly from human disturbance, "colony interactions" and bad weather (Sloan 1982); frightening adults from nests can cause desertion or overheating of young. The major natural enemies are gulls, which steal eggs, but only in small numbers. Coyotes can eliminate colonies if islands become connected to shore. Susceptible to pollution of watershed by persistent pesticides. Degradation of breeding habitat has eliminated several major colonies in California.

## REFERENCES

- Airola, D. A., ed. 1980. California Wildlife Habitat Relationships Program: Northeast interior zone. Vol III. Birds. U.S. Dep. Agric., For. Serv., Lassen Natl. For., Susanville. 590pp.
- Cogswell, H. L. 1977. Water birds of California. Univ. California Press, Berkeley. 399pp.
- Garrett, K., and J. Dunn. 1981. Birds of southern California. Los Angeles Audubon Soc. 408pp.
- Harrison, C. 1978. A field guide to the nests, eggs and nestlings of North American birds. W. Collins Sons and Co., Cleveland OH. 416pp.
- Knopf, F. L. 1979. Spatial and temporal aspects of colonial nesting of white pelicans. *Condor* 81:353-363.
- Lingle, G. R., and N. F. Sloan. 1980. Food habits of white pelicans during 1976 and 1977 at Chase Lake National Wildlife Refuge, North Dakota. *Wilson Bull.* 92:123-125.
- Low, J. B., L. Kay, and D. I. Rasmussen. 1950. Recent observations on the white pelican on Gunnison Island, Great Salt Lake, Utah. *Auk* 67:345-356.
- Marshall, D. B., and L. W. Giles. 1953. Recent observations of birds of Anaho Island, Pyramid Lake, Nevada. *Condor* 55:105-116.
- McCaskie, G., P. De Benedictis, R. Erickson, and J. Morlan. 1979. Birds of northern California, an annotated field list. 2nd ed. Golden Gate Audubon Soc., Berkeley. 84pp.
- Palmer, R. S., ed. 1962. Handbook of North American birds. Vol. 1. Yale University Press, New Haven CT. 567pp.
- Remsen, J. V., Jr. 1978. Bird species of special concern in California. Calif. Dept. of Fish and Game, Sacramento. Wildl. Manage. Admin. Rep. No. 78-1. 54pp.
- Schaller, G. B. 1964. Breeding behavior of the white pelican at Yellowstone Lake, Wyoming. *Condor* 66:3-23.
- Sloan, N. F. 1982. Status of breeding colonies of white pelicans in the United States through 1979. *Am. Birds* 36:250-257.
- Tait, I. C., F. L. Knopf, and J. L. Kennedy. 1978. White pelicans nesting at Honey Lake,

California. West. Birds 9:38-40.

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