

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

WILSON'S PHALAROPE

Phalaropus tricolor

Family: SCOLOPACIDAE
B200

Order: CHARADRIIFORMES

Class: AVES

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

A locally uncommon to fairly common breeding species in wet meadows east of the Sierra Nevada-Cascade axis, from Oregon to Owens Valley (Cogswell 1977). A very local breeder in the Sierra Nevada from Lake Tahoe north, and westward to Lower Klamath Lake along the Oregon border. Formerly nested in the Central Valley, e.g., Los Banos (Grinnell and Miller 1944), and still may do so (McCaskie et al. 1979). There is one nesting record for coastal California in Del Norte Co. Common in spring migration (mid-April through May), and common to very abundant in fall migration (mid-June to mid-September) at the Salton Sea, Central Valley lakes, and coastal salt ponds (Cogswell 1977). Large numbers occur at Mono Lake during fall migration, with smaller numbers in spring. Rare as a migrant on the coast north of Sonoma Co. (Small 1974).

SPECIFIC HABITAT REQUIREMENTS

Feeding: The main prey are insects and small crustaceans. During the nesting season, adult and larval dytiscid and hydrophilid beetles, midge and mosquito larvae, and hemipterans are important prey (Bent 1927, Johnsgard 1981). At migratory stopovers in California, Ephydra brine flies (Diptera: Ephydriidae) and brine shrimp are major foods. Forages mostly by wading in shallow ponds and marshes, mudflats, and occasionally on dry shorelines. In deep water, it swims, reaches under, tips up, and occasionally whirls. Gleans, probes, and sweeps bill sideways in shallow water and over mud for flying insects (Airola 1980).

Cover: During fall migration hypersaline aquatic habitats are used extensively (Cogswell 1977). Some areas (e.g., Mono Lake) are used at this time for undergoing extensive feather replacement (Jehl 1981, 1988).

Reproduction: Nest located on the ground in wet meadows or in short, emergent wetland along shallow sloughs or lakeshores. Aquatic habitats with tall, dense shoreline vegetation, but without open margins are not used for nesting (Hohn 1967). Nest may be up to 100 m (330 ft) from water. In agricultural areas, nest found in hay fields, often close to farms and highways (Hohn 1967). At a wildlife refuge in North Dakota, the typical nesting habitats were cultivated fields, seeded pastures, mixed-grass prairies, and grass-covered islets (Kagarise 1979). Semi-permanent, fresh to subsaline ponds also are important breeding habitats (Stewart 1975).

Water: Fresh drinking water may be needed during migratory stop-overs at inland saline lakes (Winkler et al. 1977, Jehl 1988).

Pattern: Aquatic habitats of either shallow or deep water are needed during the breeding and migratory periods. Shortgrass and sedge meadows and similar low vegetation are used for nest concealment, and nearby areas with sufficient invertebrate prey are required.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: Mostly breeds to the north and northeast of California. The prairie provinces of central Canada appear to be a major nesting area (Terres 1980). In California, the largest numbers occur during fall migration between early July and late August (Cogswell 1977). Over 90,000 occur on Mono Lake in July (Gaines 1977b). At the same time, up to 17,000 have been noted on a single 160 ha (400 ac) salt pond near south San Francisco Bay, with large numbers also on other ponds. Very rare and irregular after late October, and mostly spends the winter in South America, chiefly in Argentina (Cogswell 1977). Spring migration occurs from mid-April through May, and breeders are present from late April to July.

Home Range: Feeds in areas away from nest site (Hohn 1967, Kagarise 1979). In suitable habitat, nest density varies from 1.7/ha (0.7 per ac) (Howe 1975) to 14.6/ha (5.9/ac) (Kagarise 1979). Hohn (1967) found nests as close as 2-6 m (6-19 ft) apart, and Kagarise (1979) reported 24 m (79 ft) as the mean distance between 20 neighboring nests.

Territory: Hohn (1967) found no evidence of a nest territory maintained by either sex. Female defends area of about 3-9 m (10-30 ft) radius around male during the pre-nesting period (Johns 1969, Howe 1975). During the copulation and egg-laying period, both members of a pair will chase other individuals from the vicinity of the nest (Kagarise 1979). Incubating male repulses courting female (Kagarise 1979).

Reproduction: Breeds from April through August, with a peak May through June (Airola 1980). The sex roles are reversed; polyandry is suspected, but not proven (Johnsgard 1981). Semi-colonial nester. The female digs a shallow scrape in which a well-concealed, grass-lined nest is built. Clutch size averages 4 eggs and the incubation period lasts about 20 days (Hohn 1967). There is no strong evidence of renesting after loss of a clutch (Kagarise 1979). After laying eggs, the female takes no further part in the breeding cycle. Male does all incubating and he alone cares for the precocial young. No information found on fledging period (Johnsgard 1981). Age at first breeding probably 1 yr.

Niche: The main nest predators are small mammals (e.g., raccoons and skunks) and other birds. In some areas nest predation is very high (Kagarise 1979).

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B200

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