

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

CLAPPER RAIL

Rallus longirostris

Family: RALLIDAE
B144

Order: GRUIFORMES

Class: AVES

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Locally common yearlong in coastal wetlands and brackish areas around San Francisco, Monterey, and Morro bays (California clapper rail, *R. I. obsoletus*); in coastal saline emergent wetlands along southern California from Santa Barbara Co. to San Diego Co. (light-footed clapper rail, *R. I. levipes*); and April through September in freshwater and brackish emergent wetlands along the Colorado River from Needles southward, and around Salton Sea (Yuma clapper rail, *R. I. yumanensis*).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Forages in higher marsh vegetation, along vegetation and mudflat interface, and along tidal creeks. Gleans, pecks, probes, and scavenges from surface. Along coast, preys on crabs, mussels, clams, snails, insects, spiders, and worms. Also takes mice during high tides, and may scavenge dead fish (Zembal and Massey 1983). On Colorado River and Salton Sea, takes mostly crayfish, some clams, and insects (Ohmart and Smith 1973).

Cover: Prefers emergent wetland dominated by pickleweed and cordgrass, and brackish emergent wetland with these 2 species and bulrush. Along brackish emergent wetland of Colorado River and Salton Sea, frequents mature stands of cattail and bulrush. Requires shallow water and mudflats for foraging, with adjacent higher vegetation for cover during high water.

Reproduction: In saline emergent wetlands, nests mostly in lower zones, where cordgrass is abundant and tidal sloughs are nearby (Harvey 1980, Zembal and Massey 1983). Builds a platform concealed by a canopy of woven cordgrass stems or pickleweed and gumweed. Also uses dead drift vegetation as platform. In fresh or brackish water, builds nest in dense cattail or bulrush.

Water: Salt glands allow this species to drink either fresh water or seawater (Conway et al. 1988, Hammons et al. 1988). May ingest ice during extended periods of cold weather (Meanley 1969).

Pattern: Requires emergent wetlands and tidal sloughs. Occasionally uses ecotone between wetland and adjacent upland vegetation.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, circadian activity. Most vocal nocturnally and crepuscularly.

Seasonal Movements/Migration: Not migratory in coastal wetlands. However, dispersing juveniles recorded in freshwater wetlands in late summer and autumn. Along Colorado River,

mostly migrates to western Baja California for winter (Tomlinson and Todd 1973).

Home Range: Little information found. In San Francisco Bay area, breeding season density was 0.3 to 1.6 /ha (0.1 to 0.6 /ac) (Gill 1979). Density in nonbreeding seasons varied from 0.1 to 1.1 /ha (0.04 to 0.4 /ac) (Gill 1979). In coastal southern California and along the Colorado River, breeding season densities of 0.1 to 2.0 /ha (0.04 to 0.8 /ac) and 13.9 /ha (5.6 /ac), respectively, were recorded (Tomlinson and Todd 1973, Jorgensen 1975). Home range boundaries of adjacent individuals overlap considerably (Eddleman and Conway 1998).

Territory: Nesting territory estimated at 0.12-3.59 ha in Arizona (Bennett and Ohmart 1978). Defend territory during nesting season, but become more tolerant to intrusion when juveniles become independent (Zembal et al. 1989). Little documentation on interspecific territoriality. Known to defend nest area against Laughing gulls on the East Coast (Serge et al. 1968). Appears to use same territory in subsequent breeding season in Arizona (Eddleman and Conway 1998).

Reproduction: In San Francisco Bay area, breeds mid-March through July, with peaks observed early May and late June (Gill 1973, Harvey 1980). Clutch size averaged 5.3 (range 4-14) in southern California (Jorgensen 1975), and 7.6 in northern California (Harvey 1980). Incubates 18-29 days. Hatching success 38% in San Francisco Bay area (Harvey 1980), and 55-86% in southern California (Zembal and Massey 1983).

Niche: Loss of emergent wetland habitat to filling and diking has contributed to decline in numbers in recent decades. Predation by rats on eggs and young, and by raptors and mammals on adults, has been reported. Very high tides have caused nesting failure (Zucca 1954). Fluctuations in population in northern California may result from low rainfall and decline in abundance of cordgrass for nesting (Gill 1979).

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