

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

CALIFORNIA RED-LEGGED FROG

Rana draytonii

Family: RANIDAE
A071

Order: ANURA

Class: AMPHIBIA

Prepared by: CWHR Staff, August 2008, based on account for *Rana aurora* as written by S. Morey, and H. Basey, reviewed by T. Papenfuss, and edited by R. Duke

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The California red-legged frog inhabits quiet pools of streams, marshes, and occasionally ponds. Occurs along the Coast Ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges, usually below 1200 m (3936 ft). This species was once a subspecies of *Rana aurora*, then known as the red-legged frog, and has been elevated to species-level status (Shaffer et al. 2004).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Highly variable. Adults take aquatic and terrestrial insects and crustaceans and snails (Stebbins 1951), as well as worms, fish, tadpoles, smaller frogs, and small mammals. (Dickerson 1906, Baldwin and Stanford 1987). Aquatic larvae are mostly herbivorous.

Cover: Highly aquatic. Prefers shorelines with extensive vegetation. Usually escapes to water 1 m (3 ft) deep or more, at the bottom of pools.

Reproduction: Eggs are deposited in permanent pools attached to emergent vegetation (Stebbins 1954). Northern red-legged frog (*R. aurora*) eggs are typically submerged whereas California red-legged frog (*R. draytonii*) eggs are in contact with waters surface (Hayes and Kremple 1986).

Water: Requires permanent or nearly permanent pools for larval development, which takes 11 to 20 weeks (Storer 1925, Calef 1973). Intermittent streams must retain surface water in pools year-round for frog survival (Jennings et al. 1993). May require rains for dispersal. Individuals have been found considerable distances from breeding sites on rainy nights. Water salinity may have an important influence on embryo survival (Jennings and Hayes 1989).

Pattern: Occurs in the vicinity of quiet, permanent pools of streams, marshes, and occasionally ponds.

SPECIES LIFE HISTORY

Activity Patterns: Active all year coastally, but with periods of inactivity (late summer to early winter) elsewhere.

Seasonal Movements/Migration: A highly aquatic species with little movement away from streamside habitats. Individuals are occasionally found on roads at night during winter and spring rains. The nature of these movements is unknown.

Home Range: Unknown; possibly large for dispersing juveniles but smaller for adults.

Territory: Males probably defend a space for sexual display during the breeding season, as in other ranids (Martof 1953, Emlen 1968).

Reproduction: Breeds January to July (peak in February) in the south, and March to July in the north. Females lay 750 to 4000 eggs in clusters up to 10 in across, attached to vegetation 7 to 15 cm (2 to 6 in) below the surface (Stebbins 1954). Tadpoles require 11 to 20 weeks to reach metamorphosis (Stebbins 1951, Calef 1973).

Niche: Probably subject to predation by aquatic invertebrates and vertebrates such as fishes, other amphibians, snakes, and occasionally birds and mammals, during all life history stages.

General Comments: Sierra populations are highly restricted and consist of small numbers of individuals. Human activities that result in habitat destruction and/or the introduction of exotic competitors such as bullfrogs and green sunfish may have a negative effect on these few existing Sierra populations (Moyle 1973).

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