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

NORTHERN RED-LEGGED FROG *Rana aurora*
Family: RANIDAE Order: ANURA Class: AMPHIBIA
A040

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The northern red-legged frog inhabits quiet pools of streams, marshes, and occasionally ponds. Occurs along the Coast Ranges from Del Norte County to Mendocino County, usually below 1200 m (3936 ft). This species was once known as the red-legged frog with a range extending the length of the state in the Coast Ranges and including portions of the Sierra Nevada and Cascades ranges. Sierra Nevada and Cascades populations and populations in the Coast Ranges south of a narrow zone of overlap in southern Mendocino County are now considered to be a new species -- Rana draytonii, the California red-legged frog (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 Kremples 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.

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 probably 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.

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Life history accounts for species in the California Wildlife Habitat Relationships (CWHR) System were originally published in: Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Updates are noted in accounts that have been added or edited since original publication.