

UC SANTA CRUZ CAMPUS NATURAL RESERVE

CALIFORNIA RED- LEGGED FROG



Brandon Sanchez

Scientific Name: *Rana draytonii*

Common Name: California Red-legged Frog

Global Rarity: Vulnerable/Threatened

U.S. or State listing: Federally Threatened

UCSC Rarity: Very rare



General Description

The California Red-legged Frog is the largest native frog in the western United States. This frog is only found along the central and southern Coast Ranges and the foothills of the Sierra Nevada. In non-breeding and dispersal periods, they occupy terrestrial upland environments, taking refuge in densely vegetated areas or burrows, hiding from predators such as raccoons, snakes, and birds. During the breeding season, you can find them near ponds, slow moving streams, and pools of water as they breed and hunt for insects. With colors ranging from bright red, to light brown and gray, their black spots along its body and dorsolateral folds are great identifiers. Although, be cautious if you find one. The California Red-legged Frog is a threatened species due to habitat loss from development and invasive species predation by species such as the American Bullfrog.



Identification

General Color: Red, brown, gray

Legs: Red with small black spots

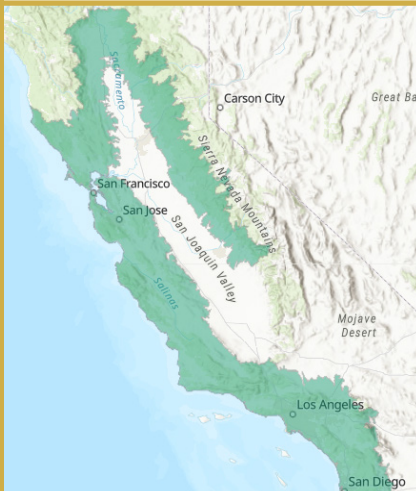
Underbelly: Red

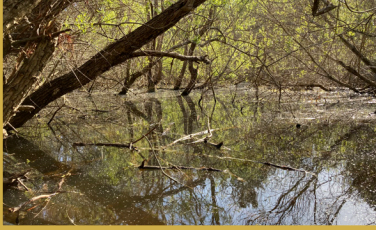
Face: Dark mask and light stripe above jaw extending to shoulder

Skin: Folds down the side of back, rough skin, partially webbed toes

Geographic Range

The California Red-legged Frog exists along the coast from Mendocino County to and one drainage in Los Angeles County, and a few drainages in the Sierra Nevada foothills to 5000' elevation. In the Santa Cruz area, they are found in a few areas along the coast and in Elkhorn Slough. They have lost 70% of their historical habitat, with major reductions in populations in southern California and the Sierra Nevada foothills.





UCSC Distribution

The California Red-legged Frog breeds in the old Cowell Reservoir and uses Lower Moore Creek and adjacent upland habitats for overwintering and dispersal.

Life history

Habitat: Slow-moving or standing pools, ponds, and streams that dry up in the fall so predatory fish and bullfrogs will not prey on them. Preferred habitats also include tall, damp vegetation, and burrows of other animals are used as refuge during the non-breeding season.

Reproduction: Mating period starts in November (or when the rains begin) and continues through April where males arrive first and sit in groups calling females. Females lay clutches of eggs ranging from 300-4,000 and males come and fertilize them.

Behavior: Juveniles can be active day or night, but adults are mainly nocturnal.

Diet: Mainly invertebrates (insects) but will occasionally eat smaller amphibians, mice, and fish. Tadpoles likely eat algae.

Predators: Birds, Raccoons, Snakes, invasive American Bullfrog

Research Highlights and Fun Facts

- Males will communicate to females with short soft grunts and then end the call with a growl.
- Largest native frog in the western U.S. (2-5 inches long).
- California's official state amphibian (2014).
- UCSC Environmental Studies alumnus Anna Ringelman's research into California Red-legged Frogs thermal tolerance and habitat preferences has important management implications for efforts to create more suitable habitat for the species.



Note that federal permits are required to handle the California Red-Legged Frog

Conservation Status

Federally Threatened

In 1996 the California Red-legged Frog was listed by the United States Fish and Wildlife Service as a **threatened** species under the Endangered Species Act.



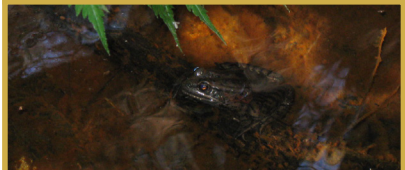
Threats

Statewide

1. Habitat loss and degradation from development and agriculture
2. Predation by the invasive American Bullfrog
3. Prolonged droughts removing key breeding habitats
4. Pollution from pesticides

UCSC campus

1. Development
2. Lack of habitat management to create more suitable habitat



Ways you can help

1. Be careful when walking or riding bikes in tall grass near streams or small ponds since they are key habitats.
2. Dispose of hazardous substances properly rather than dumping it in ponds or streams.
3. Conserve water whenever possible.
4. Reduce pesticide use and do not use pesticides that can harm aquatic animals.



References and Photo Credits

Fellers, G.M. and P.M. Kleeman. 2007. California red-legged frog (*Rana draytonii*) movement and habitat use: implications for conservation. *Journal of Herpetology* 41: 276-286.

Veronica Davison, V. (n.d.). California Red-Legged Frog - Amphibians and Reptiles, Endangered Species Accounts: Sacramento Fish & Wildlife Office.

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