



U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Species Account
CALIFORNIA RED-LEGGED FROG
Rana aurora draytonii



CLASSIFICATION: Threatened
Federal Register 61:25813, May 23, 1996.
http://ecos.fws.gov/docs/federal_register/fr2960.pdf

CRITICAL HABITAT: Designated
Federal Register 71:19243, April 13, 2006.
http://ecos.fws.gov/docs/federal_register/fr5071.pdf

PROPOSED REVISION - September 16, 2008
We have proposed increasing critical habitat. See [News Release](#).

RECOVERY PLAN: Final
Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*). September 12, 2002.
http://ecos.fws.gov/docs/recovery_plans/2002/020528.pdf

DESCRIPTION



Photo by Peter Epanchin, FWS

The California red-legged frog (*Rana aurora draytonii*) is the largest native frog in the western United States, ranging from 4 to 13 centimeters long. (1.5 to 5 inches)

The abdomen and hind legs of adults are largely red. The back has small black flecks and larger irregular dark blotches.

These have indistinct outlines on a brown, gray, olive, or reddish background color. The spots on the frogs' backs usually have light centers. Lateral folds are prominent on the back.

Larvae (tadpoles) range from 0.6 to 3 inches in length, and the background color of the body is dark brown and yellow with darker spots.

DIET

The diet of California red-legged frogs is highly variable. Larvae probably eat algae. Invertebrates are the most common food items of adult frogs. Vertebrates, such as Pacific tree frogs and California mice, are frequently eaten by larger frogs. Juvenile frogs are active both during the day and at night, whereas adult frogs are largely nocturnal. Feeding activity likely occurs along the shoreline and on the surface of the water.



Photo by Carley Sweet



Photo by Peter Trenham

HABITAT

The California red-legged frog occupies a fairly distinct habitat, combining both specific aquatic and riparian components. Adults need dense, shrubby or emergent riparian vegetation closely associated with deep (greater than 2 1/3-foot deep) still or slow moving water.



Photo by Cathv Johnson, FWS

The largest densities of California red-legged frogs are associated with deep-water pools with dense stands of overhanging willows and an intermixed fringe of cattails. Well-vegetated terrestrial areas within the riparian corridor may provide important sheltering habitat during winter.

California red-legged frogs estivate (enter a dormant state during summer or dry weather) in small mammal burrows and moist leaf litter. They have been found up to 100 feet from water in adjacent dense riparian vegetation.

RANGE

The historic range of the California red-legged frog extended along the coast from the vicinity of Point Reyes National Seashore, Marin County, California, and inland from the vicinity of Redding, Shasta County, California, southward to northwestern Baja California, Mexico. California red-legged frogs have been documented in 46 counties in California, but now remain in only 238 streams or drainages in 31 counties.

California red-legged frogs are still locally abundant within portions of the San Francisco Bay area (including Marin County) and the central coast. Within the remaining distribution of the species, only isolated populations have been documented in the Sierra Nevada, northern Coast, and northern Transverse ranges. The species is believed to be extirpated from the southern Transverse and Peninsular ranges, but is still present in Baja California, Mexico.

REPRODUCTION

California red-legged frogs breed from November through March with earlier breeding records occurring in southern localities. Northern red-legged frogs breed in January to March soon after the ice melts.

SURVEYING:

Researchers have tracked radio-collared frogs into extremely small, vegetation-choked drainages, where they can be found only with radio-tracking devices, and are otherwise invisible to standard surveys. Frogs hide in heavy vegetation and under banks, in holes, in cracks and under objects. A researcher may be able to locate a collared frog by radio to within one square meter and still not be able to see it.

Frogs foraging, resting, or dispersing in upland areas also may not be detected by surveys. A great deal of experience, especially with nighttime surveys, is necessary for good sampling for frogs. Because of these difficulties associated with surveying for the frog, negative survey results do not necessarily indicate an absence of the species, even if conducted by highly qualified

biologists. Frogs actually seen during surveys probably represent a relatively small subsample of those actually present.

Therefore, in areas where frogs have been found in the vicinity and suitable habitat is present, we advise that suitable habitat accessible to frog populations occurring within five miles should be presumed to be occupied by the species. For guidance on field surveys, see <http://www.fws.gov/sacramento/es/protocol.htm>.

THREATS

California red-legged frogs are currently threatened by human activities: degradation and loss of its habitat through urbanization, mining, improper management of grazing, recreation, invasion of nonnative plants, impoundments, water diversions, degraded water quality and introduced predators.

These factors have resulted in the isolation and fragmentation of habitats within many watersheds. This often prevents dispersal between sub-populations. The fragmentation of existing habitat, and the continued colonization of existing habitat by nonnative species, may represent the most significant current threats to California red-legged frogs.

REFERENCES FOR ADDITIONAL INFORMATION

Cook, D. G. and M. R. Jennings. 2007. Microhabitat use of the California red-legged frog (*Rana draytonii*) and introduced bullfrog (*Rana catesbeiana*) in a seasonal marsh. *Herpetologica* 63:430-440.

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. Publication brief about this study: <http://www.werc.usgs.gov/pt-reyes/pdfs/fellerspbjul2007.pdf>

Stebbins, R.C. 1985. A field guide of western reptiles and amphibians. Second edition, revised. Houghton Mifflin Company, Boston, Massachusetts.

U.S. Fish and Wildlife Service. 1996. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the California Red-legged Frog (PDF). Portland, Oregon.

U.S. Fish and Wildlife Service. 2006. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the California Red-legged Frog, and Special Rule Exemption Associated with Final Listing for Existing Routine Ranching Activities.

U.S. Geological Survey. Amphibian declines and deformities web page <http://www.usgs.gov/amphibians.html>.

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825
Phone (916) 414-6600
FAX (916) 414-6713

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