



SIERRA NEVADA YELLOW-LEGGED FROG

Anura
Family: Ranidae
Genus: *Rana*
Species: *sierrae*



Range: Sierra Nevada and Glass Mountains in high elevations

Habitat lakes, ponds, streams and pools

Niche: Aquatic, carnivorous, mainly diurnal

Wild diet: aquatic and terrestrial invertebrates and occasionally other amphibians.

Zoo diet:

Life Span: (Wild) up to 3 years
(Captivity)

Sexual dimorphism:

Location in SF Zoo:

APPEARANCE & PHYSICAL ADAPTATIONS:

Sierra Nevada yellow-legged frogs are a medium-sized frog with a slim waist. They are yellowish or reddish brown from above, with black or brown spots or lichen-like markings. Toe tips are usually dusky. Underside of hind legs and sometimes entire belly is yellow or slightly orange. Large sticky tongue used to bring prey into mouth. They may smell like garlic when handled.

Weight:

Length: 2 – 3 in

Unlike most frogs and toads that complete their metamorphosis in one season, mountain yellow-legged take multiple seasons. Because of the cold water and the high altitudes, this species develops slowly and spends at least one winter underneath the ice. They smell like garlic when handled.

STATUS & CONSERVATION:

The Sierra Nevada yellow-legged frog is listed as Endangered on the IUCN Red list. It is threatened by non-native trout, pollution, climate change, cattle grazing, ozone depletion and the chytrid fungus. Researchers discovered bacteria on the skin of healthy wild frogs that kills the chytrid fungus. Conservation programs such as the SF Zoo's inoculate frogs with these bacteria to protect them from the fungus. The San Francisco Zoo and its partners are working together to head-start the most critically threatened populations and trying different techniques to boost numbers throughout the frog's range.

COMMUNICATION & OTHER BEHAVIOR:

Mating calls are primarily are underwater during the day, but may also call at night. The call is a short and rasping call often accelerated and rising at the end, sometimes preceded by calls that don't rise at the end. This frog has no vocal sacs, so the call has very little volume.

Frogs tend to sit and wait until they see prey come within range, then they strike, or creep up a little then strike, using their large sticky tongue to catch the prey and bring it into the mouth. The may consume dead frogs and its own eggs.

COURTSHIP & YOUNG:

Courtship involves tail fanning, following and biting. Reproduction is aquatic and fertilization is external. Mating and egg-laying occurs after high creek waters have subsided. Eggs are laid singly on aquatic vegetation, several eggs per day, with a clutch consisting of 100 to 300 eggs. A cluster of eggs may be laid in shallow water and is left unattached in still waters, but may be attached to vegetation in streams.

Tadpoles in the may over-winter, possibly taking as many as 3 or 4 summers before they transform.

Incubation: 2 – 3 wks # of Eggs: 100 - 350	Sexual Maturity: up to 4 years Larval stage: up to 2 in
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MISCELLANEOUS

The mountain yellow-legged frog has two different populations that have been declared separate species; the species *Rana mucosa* (Southern Mountain Yellow-legged Frogs) is considered a separate species from *Rana sierra* (Sierra Nevada Yellow-legged Frog) and can be distinguished by its relatively longer legs and a significantly different mating call. The Southern Mountain yellow-legged frog is also an Endangered species due mostly to introduced species, pollution and chytrid fungus.

Sources:

<https://amphibiaweb.org/species/6901>
<http://www.californiaherps.com/frogs/pages/r.sierrae.html>
<https://www.iucnredlist.org/species/136114/4240654>

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