



## Mountain yellow-legged frog (northern district population segment) *Rana muscosa*



### CLASSIFICATION

Endangered—April 2014

### DESCRIPTION

The mountain yellow-legged frog is medium size, measuring about 1.5 to 3.25 inches on average. Females also tend to be slightly larger than males. Adult frogs have a mix of brown and yellow coloring on their upper body, but can also be grey, red, or greenish-brown, usually with dark spots or splotches. These spots can look like lichen or moss, as to give the frog a camouflaged look. Their belly and underside of their back legs, and sometimes all the way up to their front legs, are yellow or light-orange. This gives the frog its name of “yellow-legged.”

If disturbed or threatened, these frogs can produce a distinctive mink- or garlic-like odor to ward off predators and other animals.

Although these frogs do not have vocal sacks, they can vocalize in or out of water, making what has been described as a flat “clicking” sound.

Mountain yellow-legged frogs deposit their eggs in globular clumps, which are often somewhat flattened and roughly 1 to 2 inches in diameter.

Spawn size varies from 15 to 350 eggs per mass and eggs hatch in 18

to 21 days with water temperatures from 41 to 56 degrees Fahrenheit. The tadpoles reach about 2.8 inches in length and generally are mottled brown on the dorsal side with a faintly yellow underside. Tadpoles often require 2 to 4 years to reach metamorphosis, depending on local climate conditions and site-specific variables.

The time required to reach reproductive maturity in mountain yellow-legged frogs is thought to vary between 3 and 4 years after metamorphosis.

### DISTRIBUTION

The northern district population segment (DPS) of the mountain yellow-legged frog occurs only in the western Sierra Nevada and extends from south of the Monarch Divide in Fresno County through portions of the Kern River drainage.

Throughout their range, these species historically inhabited lakes, ponds, marshes, meadows, and streams at elevations typically ranging from 4,500 to 12,000 feet, but can occur as low as 3,500 ft in the northern portions of their range.

Mountain yellow-legged frogs are highly aquatic and adults can be found sitting on rocks along the shoreline, where there was little or no vegetation.

Most of these frogs are now found on National Forest and National Park lands.

### THREATS

Studies show that populations of the northern DPS of mountain yellow-legged frog have declined by over 80 percent.

Threats include habitat degradation and fragmentation, predation and disease, climate change, and the interaction of these various stressors impacting small remnant populations.

There has been a range-wide reduction in abundance and geographic extent of surviving populations of frogs following decades of fish stocking, habitat fragmentation, and most recently a disease epidemic. Surviving populations are smaller and more isolated, and recruitment in disease-infested populations is much reduced relative to historic norms.

### CRITICAL HABITAT:

Designated—2016

### RECOVERY PLAN:

None