

One of California's Rarest Mammals



A black and yellow-red Sierra Nevada red fox in the Sonora Pass area, near Yosemite National Park. NPS Photo, Jay Powers

Although once found throughout the Sierra Nevada and Southern Cascade mountain ranges, the Sierra Nevada red fox is now one of the rarest mammals in California.

The subspecies' abundance and distribution has declined dramatically in the last century. Today, the only known populations reside in Lassen Volcanic National Park and the surrounding Lassen National Forest (known as the Lassen area) and in the Sonora Pass area, near Yosemite National Park.

Sierra Nevada red fox is a genetically and geographically distinct subspecies of red fox that prefers to live at high elevations, usually above 5,000 feet.

Three of North America's ten red fox subspecies reside in high elevation areas: Sierra Nevada (*V. v. necator*), Cascade (*V. v. cascadensis*), and Rocky Mountains (*V. v. macroura*). In California, the native Sacramento Valley red fox occupies portions of the Sacramento Valley and other non-native red foxes are widespread in low-elevation habitats.



The Reach Higher Trail Challenge program is funded by the Lassen Association, which is supported by visitors like you. Join or learn more at lassenassociation.org.

On the Trail of the Elusive Sierra Nevada Red Fox

In 2018, California Department of Fish and Wildlife biologists began an intensive camera survey effort in and around Lassen Volcanic National Park. So far they have captured and collared one male and two female Sierra Nevada red foxes. These three foxes are the first of their kind captured in over a decade.



Sierra Nevada red fox in a box trap

Success in current survey efforts may provide our best opportunity for understanding and fostering Lassen's native red fox. Researchers estimate the Lassen area population consists of only about 20 individuals, based on survey findings from 2009 to 2011.

To help manage the species into the future, Lassen Volcanic National Park has joined the Sierra Nevada Red Fox Working Group. This multi-agency organization strives to give the native Sierra Nevada red fox its best chance for recovery through scientific research.



The Reach Higher Trail Challenge program encourages visitor and park health and well-being through active exploration. go.nps.gov/reachhigher



Lassen Volcanic National Park

**REACH HIGHER
TRAIL CHALLENGE**

Healthy People  Healthy Parks



Share the Trail with One of
California's Rarest Mammals



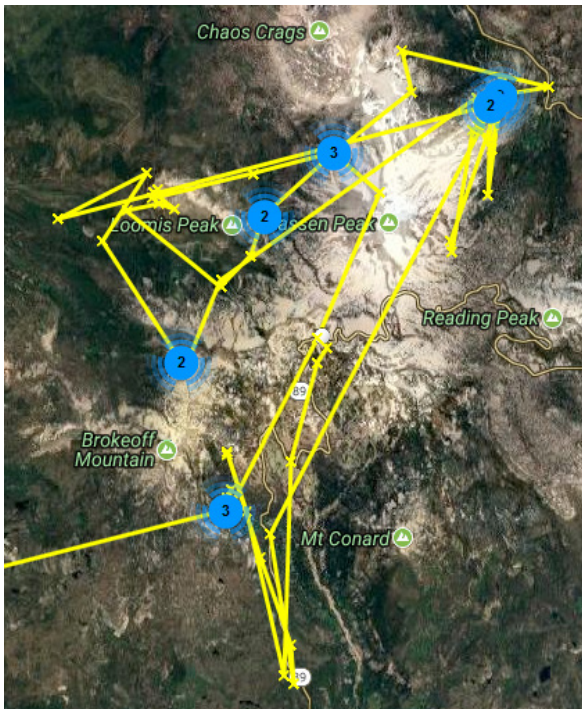
Take the Challenge

1. Hike a total of at least seven miles in Lassen Volcanic National Park or the surrounding Lassen National Forest; log your hike(s) in the challenge log.
2. Complete at least one activity to support Sierra Nevada red fox recovery.
3. Present your challenge log to a park ranger to receive your free bandana.

Can You Hike Seven Miles a Day?

Data collected from a GPS tracking collar on the first Sierra Nevada red fox captured in a decade showed it traveled an average of seven straight-line miles per day in very rugged terrain.

The map below shows the approximately 10-pound male's movements in the Lassen area during snowy February 2018.



Challenge Log

Hike/Trail Name	Date	Distance Round-trip
Total Miles Hiked		

Smaller in size than low-elevation red foxes, Sierra Nevada red foxes generally weigh 4.5 to 9 pounds, have a narrow pointed muzzle, large pointy ears, and a slender body and legs. They are typically yellowish to reddish brown, but can also be black or silver. Dark-brown markings adorn the back of their ears and shins and white covers their chest and stomach. Their bushy tail always has a white tip and is carried close to the ground.

How Can You Support Sierra Nevada Red Fox Recovery?

- Report a red fox observation** in the Sierra Nevada, Southern Cascade, or Klamath Mountain ranges above 2,500 feet elevation. Try to capture: date and time observed, location, terrain, photos and GPS (if possible). go.nps.gov/lavo/SNRF
- Keep your dog off park trails and on a leash** in permitted areas or encourage fellow visitors to do so. A female Sierra Nevada red fox was killed by an off-leash dog in the Southwest Area in 2002. Dogs have a predatory scent that can disturb both the foxes and their prey and diseases like mange and rabies can be passed between wild and domestic animals.
- Pick up trash and dispose of garbage properly.** Although Sierra Nevada red foxes primarily scavenge on mule deer carcasses and eat pocket gophers, human garbage has also been found in scat analysis.
- Share what you have learned** with others who can join in efforts to support Lassen's own Sierra Nevada red fox population.

Red Fox *Vulpes vulpes necator*



Tail tip: White
Tail length: Long
Back of ear: Black
Body color: Varies

Gray Fox *Urocyon cinereoargenteus*



Tail tip: Black
Tail length: Long
Back of ear: Orange
Back and tail: Silvery Gray

Coyote *Canis latrans*



Tail tip: Black
Tail length: Short
Back of ear: Orange