

## MONTANE RED FOX

Montane red fox are a genetically distinct group from the red foxes found at lower elevations. They are descended from populations that existed in North America before the last ice age, having retreated to the high mountains as the ice retreated. Later in history, a different group of red fox migrated out of Asia and spread to the rest of the continent. Red fox live in open, non-forested areas, so the dense forests found on the lower slopes of the mountains prevented interbreeding between the two populations.

The red foxes found in the Cascade/Sierra Nevada mountain range are divided into two subspecies: the Sierra Nevada red fox, found in the Sierras and in southern Oregon, and the Cascade red fox, found in the Washington Cascades. It is likely the the ones on Mt Hood are of the Sierra Nevada subspecies, since the Columbia River presents a large barrier that would be difficult for a fox to cross, but this still has not been confirmed.

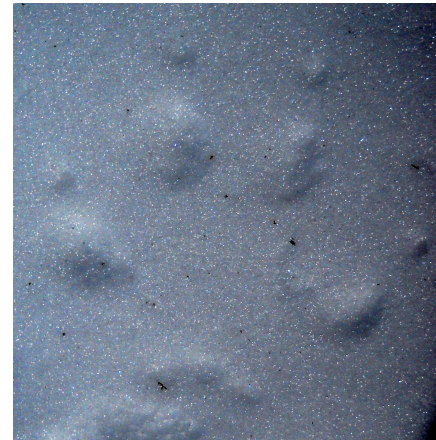
Being limited to small alpine areas on the tops of scattered mountain peaks, these foxes are rare and unique. Scientists are trying to gather data to determine their distribution and habitat use, evaluate their genetic diversity, and demonstrate whether they are still genetically distinct from lower elevation foxes.

Populations are thought to be declining due to habitat alteration from human development and climate change, and to the creation of roads into the high country, which has allowed other, less snow-adapted predators, such as coyote and lowland red fox, to increase and compete with the montane foxes. Increased travel barriers between mountain tops may also be isolating the different populations and creating additional problems from inbreeding. Although the US Fish and Wildlife Service recently (Oct 2015) declined to give protection to these subspecies, further research may provide reasons to change this decision.

## IDENTIFYING RED FOX TRACKS

### Track:

- Heel pad on front foot is very narrow, almost linear. This pad is diagnostic when you see it, but does not always show.



- Feet are heavily furred. If the track is clear, only the callous pads will register, showing a lot of negative space. If the track is indistinct and the fur is also registering, the “pads” look large, with little negative space. In indistinct tracks, the heel pad on the front foot may look triangular, similar to a coyote track.
- Track is usually proportionally wider than a coyote track, and the negative space between the toes and heel pad is more of an H-shape than an X-shape (similar to a domestic dog).
- Toes 3 and 4 (the front two toes) are usually closer together than in a coyote track, and the claws on toes 2 and 5 (the back two toes) show more often than on a coyote.
- Much overlap in size with coyote.

Red fox front foot:  $1\frac{7}{8} - 2\frac{7}{8}$ " long x  $1\frac{3}{8} - 2\frac{3}{8}$ " wide

Coyote front foot:  $2\frac{1}{8} - 3\frac{1}{4}$ " long x  $1\frac{1}{2} - 2\frac{1}{2}$ " wide

### Gait:

- Usually direct register walk, side trot, and direct register trot.
- Much overlap in stride with coyote.

Direct register walk/trot: red fox 16-40", coyote 22-46"

Side trot: red fox 28-45", coyote 38-54"