



Rare Sierra Nevada Red Fox Makes Mt. Hood Home



Recent explorations to locate the Sierra Nevada Red Fox (*Vulpes vulpes necator*) have concluded that the population in the Cascades won't need to be listed under the Endangered Species list. That's great news for the Mt. Hood NF where some populations of

the rare Fox have been found through wildlife cameras and surveys. But despite this new discovery confirming the existence of a population here on Mt. Hood, the species' future is still tenuous at best.

The Red Fox is one of the most common fox families found in North America and Asia. With their striking reddish fur and white tipped tail, the Red Fox is an iconic part of America's folklore and history. However, the Sierra Nevada Red Fox is probably the most endangered sub-species of foxes in North America.

“The habitat for Sierra Nevada Red Foxes is very restricted,” said Alan Dyck, Mt. Hood Wildlife Biologist. “They are adapted for high elevation living and traditionally have had less competition with coyotes in the winter at these higher elevations.”

However, that relationship between higher elevations keeping coyotes from outcompeting with the Fox may be unraveling.

Climate change could make the Fox’s habitat even more restricted as the snow levels move higher in elevation due to warmer winters. This could lead to coyotes being able to move into the higher elevation habitat traditional held pretty exclusively by the fox and create more competition for food and other vital resources.

The fox primarily eats small mammals such as meadow voles, mice, and snow shoe hares. However, like many species of wildlife they will occasionally eat ground nesting birds, eggs, and berries when they are in season.

Coyotes were rare in Oregon until the 1930s, but they started growing in number and expanded their territory as the Gray Wolf populations diminished. The Fox’s restricted and vanishing habitat is a big problem for multiple reasons.

“The fox has a small population size due to the habitat restrictions and their populations are very isolated. These means there isn’t a great opportunity for them to get new genetic material into the gene pool,” said Dyck. “Because of this there are some examples of lowland foxes interbreeding with the Sierra Nevada Red Fox populations and reducing the purity of the gene pool.”

There is some evidence showing that reestablishing Grey Wolf populations may help the Fox as well. Wolves don’t compete for the same food sources as the Fox since wolves primarily go for larger prey while also keeping the coyote populations in check.

While reintroducing wolf populations to Oregon’s forestlands may be a long-range goal, there are some things we can all do to help protect the Fox and its habitat right now.

“Reducing our carbon emissions that create climate change will allow historic snow levels to return,” said Dyck. “Also, making sure that dogs that travel on trails at higher elevations are both inoculated against disease and kept under control could reduce impacts to the Fox from our pets.”

The Mt. Hood NF has some excellent habitat for the Fox. We are trying to better understand exactly where the Fox lives on the Forest, so we can consider the best way to manage its habitat. Protecting the habitat from extreme fires that wipe out all vegetation in the area for years is one of our goals.

Unlike lower elevation environments, fires can devastate habitat in our higher elevations because, due to their severe weather and typically nutrient-poor soils, it can take many years to rebuild lost habitat. When we do get naturally occurring fires at these elevations, we can help the

recovery by following a Burned Area Emergency Response (BAER) process that can expedite burned habitats.

“We are just now learning about the Fox and its needs since we just discovered this population in 2012,” said Dyck. “There will be many more management recommendations we’ll have to consider as our understanding of the life history of the Fox improves.”

