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Phyllis Ashmead

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RE: Notice of intent to prepare an environmental impact statement on the Stanislaus National Forest Over-Snow Vehicle (OSV) Use Designation (Federal Register Vol. 80, No. 123, Friday June 26, 2015, pp. 36760-36763)

Dear Ms. Ashmead:

I write to you in my capacity as a carnivore biologist with particular expertise on the Sierra Nevada red fox to express several concerns about the above-mentioned OSV use designation proposal. I am concerned that aspects of the proposal may fail to "minimize impacts to natural ...resources" (p. 36761, first paragraph in "Purpose and Need for Action"). Although I will restrict my comments hereafter specifically to effects on Sierra Nevada red fox, the same concerns in many cases can be extended more broadly to other subalpine carnivores (e.g., American marten) and, indeed, the subalpine and alpine biotic communities as a whole.

For the record, the Sierra Nevada red fox is a Forest Service Region 5 Sensitive Species in the Stanislaus National Forest and a Region 4 Sensitive Species in adjacent portions of the Humboldt-Toiyabe NF, as well as a California State Threatened species, and is currently under review for possible listing as an endangered species under the federal Endangered Species Act of 1973. I have been involved in research on red foxes for 20 years and specifically on the Sierra Nevada red fox in the project area since 2010, when Forest Service surveys detected this rare fox in the Stanislaus NF and surrounding lands. On the basis of existing information, the population (one of two known in California) in the project area is dangerously small, warranting substantial precaution before embarking on use-policy changes that are likely to affect it.

My general concern is that the proposed opening up of additional (currently non- motorized) high-elevation areas for snowmobile use and working with counties to groom snow- covered roads could potentially harm Sierra Nevada red foxes. The available data also are inadequate to anticipate and protect against all such potential impacts. First, we do not know the spatial extent of the population (or its abundance); it is therefore difficult to project how impacts to foxes in the immediate project area are likely to affect the persistence of the population as a whole. The project area overlaps a large portion of the known range. Second, we have little data on the potential direct and indirect effects of snowmobile activity on behavior, reproductive functioning, or survival of Sierra Nevada red foxes. Some potential factors include noise disturbance, habituation, compaction (e.g., affecting access to subnivean prey), and increasing access to competing species, such as coyotes, which are known generally to competitively exclude and kill red foxes.

The proposed changes in existing OSV management directions would clearly increase both compliance and non-compliance snowmobile activity in Sierra Nevada red fox habitats. OSV use in the vicinity of den sites could be especially problematic. Based on our findings to this point, poor reproduction appears to be the primary factor inhibiting population growth in the Sierra Nevada red fox population. Selection of den sites begins as early as December, with pups born sometime during March through May, after which pups are dependent on mothers for

warmth for another few weeks, remain in dens for another week or so after that, and are dependent on milk for a few weeks longer still. Throughout this sensitive period, which coincides with peak snow, disturbance can cause den abandonment and stress to pregnant or nursing females, potentially jeopardizing pregnancies or litters. Therefore, it seems crucial to locate den sites and to establish non-motorized zones or appropriate limited operating periods around them.

Additionally, the grooming of many additional miles of snow-covered road could, in and of itself, increase access by coyotes (regardless of OSV use of those groomed roads). Our preliminary data from the most recent winter with significant snowfall (2010/2011) suggests that coyotes actively used groomed or well-used OSV trails to access higher-elevation locations they might otherwise have been unable to access under those high snow conditions. Studies in the Rocky Mountains also suggest that snowmobile trails increase coyote access.

The particular concerns I have relate to

(1) opening up semi-primitive non-motorized roadless areas to snowmobiles (Proposed Action No. 8, p. 36762, column 2, last paragraph), in particular

a. the Pacific Valley Near Natural Area (p. 36762, column 3, paragraph 1)

b. Eagle/Night Near Natural Area (p. 36762, column 3, paragraph 2)

c. portion of Eagle/Night Near Natural area near Sonora Pass (shown on high-resolution map passed only; not specified in Fed Reg)

(2) working with Tuolumne and Alpine County to groom 9 miles of Clark's Fork/Fence Creek Road (Proposed Action No. 3, p. 36762, column 1, paragraph 3)

(3) working with Alpine County to groom 5 miles of Highland Lakes Road (Proposed Action No. 3, p. 36762, column 1, paragraph 3)

I am directly aware of photographic detections (which I have verified) of red foxes as far north as Highland Lake (<1 km east of the 5-mile road proposed for grooming in Alpine County) and as far south as Yosemite National Park. Surveys to the east and west of the crest have been very limited. However, on the basis of vegetation, elevation, historical distribution, and landscape, we have identified suitable habitat that could contain Sierra Nevada red foxes on the Dardanelle ridgeline, running along the northern side of Clark's Fork/Fence Creek Rd, and on the ridgeline connecting Bald and Red Peaks, along the southern side of Clark's Fork/Fence Creek Rd. We therefore consider that Clark's Fork/Fence Creek Road extends into the potential range of the Sierra Nevada red fox. Additionally, the 50-60 acre sliver of Near Natural Area directly west of Sonora Pass above 9,000 feet elevation proposed for opening to OSV use (visible on high-resolution project map) sits squarely in the center of the known Sierra Nevada red fox range and at the boundary of two distinct home ranges. Lastly, while this appears to be a mapping error (based on verbal information I have to the contrary), I would note that the "Proposed Action" map available to the public on the project web page indicates that Highway 108 will be groomed all the way to the Sonora Pass, rather than stopping downslope at the gate (which is my understanding of the intent). In the event that the map is correct, I should like to suggest that grooming all the way to the pass, rather than stopping at the gate below, could significantly impact the foxes we already know to center their activity around the Sonora Pass.

The Sierra Nevada red fox population at Sonora Pass stands at a critical juncture.

Nevertheless, its persistence for thousands of years to this point, and at very low numbers for the last several decades, indicate a degree of resilience which could sustain it if appropriate measures are taken. Thus, continued monitoring combined with proactive conservation measures can potentially make a decisive difference in the fate of this population. I believe that the Forest Service is obliged to obtain the necessary information on the Sierra Nevada red fox range and abundance, as well as potential impacts of the proposed actions on the fox, before deciding whether the proposed actions (or some modification of them) are to be put in place.