

March 19, 2008

Corbin Newman, Regional Forester USDA Forest Service Region 3 333 Broadway SE Albuquerque, NM 87102

RE: Considering Impacts to Candidate Species New Mexico Meadow Jumping Mouse

Dear Mr. Newman,

On December 6, 2007, the U.S. Fish and Wildlife Service ("FWS") issued its determination that the New Mexico Meadow Jumping Mouse (*Zapus hudsonius luteus*) is now a candidate species for listing under the Endangered Species Act ("ESA"), 16 U.S.C. § 1531 *et seq.* 72 Fed. Reg. 69034. In its determination, FWS states that threats to the mouse include habitat curtailment and/or destruction due to grazing pressure, water use and management, highway reconstruction, development, and recreation. FWS has classified these threats as both "imminent" and of "high magnitude."¹

Indeed, poor land management in recent years has caused a dramatic decline in the number of occupied localities and areas of suitable habitat across this subspecies' range in New Mexico. In Forest Service land in New Mexico, the mouse is known to persist only within several livestock exclosures and in a beaver wetland (Frey 2005, 2007).²

Loss of habitat has caused the distribution of mouse populations to become highly fragmented, which in turn not only makes this subspecies incredibly vulnerable, but also increases the likelihood of small, isolated populations being extirpated. Thus, ensuring the integrity of all historic, potential, and suitable habitat of the New Mexico Meadow Jumping Mouse has become a critical component to safeguarding this subspecies' very survival.

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¹See Attachment 1: U.S. Fish and Wildlife Service candidate assessment form for New Mexico Meadow Jumping mouse. (All Attachments can be found on the enclosed CD.)

²See Attachment 2: Frey, J. K. (2005). Status assessment of montane populations of the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) in New Mexico. Santa Fe, Final report submitted to New Mexico Department of Game and Fish. See also Attachment 3: Frey, J. K. (2007). Final report: Survey for the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) at selected locations in the Jemez Ranger District, Santa Fe National Forest, Santa Fe National Forest: Jemez Ranger District.

Historic, potential, and suitable New Mexico Meadow Jumping Mouse habitat – both occupied and unoccupied – exists on the Santa Fe, Lincoln, and Carson National Forests in New Mexico. The way in which the USDA Forest Service manages this public land is of great import to the fate of this subspecies. While the mouse's new candidate species status affords it no formal protection under the ESA, its status constitutes significant new circumstances for the purposes of the National Environmental Policy Act ("NEPA"), 42 U.S.C. 4321 *et seq.* Thus, the Forest Service must take a "hard look" at the potential consequences to the mouse each time it undertakes a "major federal action" on any one of these Forests. Your agency should promptly adopt conservation measures designed to prevent this mouse's extinction and to promote its recovery.

Such actions include, but are not limited to, issuing grazing permits and/or annual grazing operating instructions, constructing water developments and diversions, erecting or maintaining riparian livestock exclosures, authorizing off-road vehicle use, and drafting travel management and Forest plans. If the Forest Service is currently involved in NEPA processes for any of these activities on any one of these three Forests, it must now supplement such analysis by examining how the proposed action may significantly impact the New Mexico Meadow Jumping Mouse and/or its habitat. *See* 40 C.F.R. § 1502.9. To ensure adequate NEPA compliance for actions taken on these Forests in the future, the Forest Service must begin to include an impacts analysis for the mouse whenever the area in question falls within historic, potential, and/or suitable mouse habitat.

One example of how current Forest management is likely significantly impacting the mouse is the Forest Service's general policy of maintaining just a 4-inch stubble height in riparian areas impacted by livestock grazing. Contrast this stubble height with an average stubble height of 33 inches at sites where the mouse has been captured (Table 1).

| Table 1: Vegetative characteristics measured at New Mexico meadow jumping |
|---|
| mouse capture sites in the Jemez, Sacramento and Sangre de Cristo Mountains |
| during 2005 and 2006. Data from Frey (2006). ³ |

| Vegetative Variable | Average |
|---------------------------|------------|
| Canopy Cover | 20% |
| Vertical Cover | 38 inches |
| Vertical Stubble Height | 33 inches |
| Laid-over Stubble Height | 25 inches |
| Vegetative Litter Depth | 1.7 inches |
| Tree numbers | 0 |
| Shrub numbers | 15 |
| Ground Cover (Class 1-6)* | |
| Sedge | 2.6 |
| Forb (broad leaved herbs) | 2.6 |
| Equisetum (horsetails) | 1.0 |
| Grass | 1.4 |
| Alder/willow | 1.1 |

*Class 1 = 0-5%, Class 2 = 5-25%, Class 3 = 25-50%, Class 4 = 50-75%, Class 5 = 75-95% and Class 6 = 95-100%.

Significant adjustments in Forest management like maintaining better vegetative cover and health are necessary to prevent the further extirpation of mouse populations from Forest Service land and to ensure this subspecies does not go extinct.⁴ After completing surveys in the Sacramento Mountains Dr. J. Frey wrote that this subspecies "is nearing extinction and immediate action is needed to recover these populations" in the Sacramentos (Frey 2005: 64). We implore your agency to adopt the recommendations Frey made in 2005 to protect and protect the mouse in the Sacramento Mountains. These included:

- 1) maintain existing livestock exclosures and prevent habitat disturbance;
- 2) expand the size of each population as rapidly as possible by establishing additional livestock exclosures within each drainage;
- 3) create additional refugial habitat areas; and
- 4) restore riparian habitat throughout the Rio Penasco watershed.

Frey has noted similar livestock management conflicts with the mouse and made similar management recommendations on the Carson and Santa Fe National Forests (Frey 2005, 2006, 2007).

³See Attachment 4: Frey, J. K. (2006). Status of the New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) in the Sangre de Cristo Mountains, New Mexico, Final Report submitted to New Mexico Department of Game and Fish.

⁴See Attachment 5: Frey, J.K., and J.L. Malaney (in litt). Decline of a riparian indicator species, the meadow jumping mouse (Zapus hudsonius luteus), in relict montane habitats in the American southwest.

Additional threats to the mouse which the U.S. Forest Service must integrate into its environmental analyses include climate change and drought, both of which are having and will have adverse impacts on this riparian mammal. Finally, vehicle use and recreation must be curtailed in occupied or potential mouse habitat.

Thank you for your swift attention to this manner. It is our sincere hope that through sound, ecologically-based management of our National Forests, we can provide all of New Mexico's wildlife, including the New Mexico Meadow Jumping Mouse, with the quality of habitat it needs to survive and thrive. Please respond to this letter in writing at your earliest convenience. We would appreciate the Forest Service's commitment to thorough consideration of this newly designated candidate species by March 31, 2008, and prompt adoption of measures to protect this mouse from extinction.

Respectfully submitted,

Melinie Cailey

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CC: Dr. Benjamin Tuggle, U.S. Fish and Wildlife Service, Region 2 Director

As of January 28, 2008 Forest Guardians, Sinapu, and the Sagebrush Sea Campaign have joined forces to become WildEarth Guardians. With offices in Boulder, Denver, Phoenix, and Santa Fe, WildEarth Guardians protects and restores wildlife, wild places, and wild rivers in the American West.