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Comments: I am writing to ask you NOT to remove prairie dog protections on Thunder Basin National Grassland (Thunder Basin). The protections currently in place are essential to the health of the temperate grasslands which serve as a crucial habitat for an extensive number of species, several of which are considered threatened or endangered including perhaps one of the more well-known species - the black-footed ferret.

I am a full-time student at Metropolitan State University of Denver (MSU Denver) pursuing a degree in Biology and preparing to teach Biology on a high school level. My commitment to a career in science research and education is based upon two primary themes: interacting in a teaching capacity with young people, and a lifelong love of nature. My decision to leave a successful career as a certified public accountant and return to college to become a Biology teacher was motivated by a deep appreciation of nature and my desire to help others and make a meaningful difference in the world.

In keeping with that commitment, I have been a volunteer at the Denver Zoo for the past 4 years. As a zoo team member, I am part of an outdoor- and wildlife-focused environment in which education is a critical component. Caring for the animals as well as engaging in teachable moments with young visitors has not only met my highest expectations but also has provided me with much personal satisfaction. As time has progressed, this sense of fulfillment has not subsided. The clarity and purpose I have discovered there would not have been possible without the opportunities to experience the beauty our world has to offer.

During my time at MSU Denver, I have been fortunate to learn about the interconnectedness of organisms throughout various levels of ecological structure and how removing an apex or keystone species leads to a profound and detrimental impact on an ecosystem, most notably resulting in a significant decline of overall biodiversity. Prairie dogs are an example of a keystone species, and their impact on community structure is well documented. Through their burrowing and vegetation management activities, prairie dogs play a significantly critical role in habitat viability for many other vertebrate and invertebrate species who call the prairie home.

Prairie dogs have been shown to translocate between 200-225 kg. of nutrient-rich subsoil to the surface surrounding each burrow (Whicker and Detling 1988). According to the intermediate disturbance hypothesis, species diversity is highest in areas that have moderate amounts of disturbance. One of the most important and pervasive sources of disturbance to grasslands is burrowing by mammals. Varying levels of disturbance imposed by prairie dogs lead to different responses by the community. Total plant species diversity is greatest in areas that have received modest disturbance (Whicker and Detling 1988).

Prairie dogs clip low-hanging vegetation around their burrows, and plants respond according to the functional equilibrium model by allocating energy resources to producing new shoots which contain a higher amount of nitrogen (Coppock et al. 1983). The new shoots high in nitrogen provide significantly more nutrients for other grazers like bison or pronghorns (Coppock et al. 1983). Bison have been shown to prefer grazing within active prairie dog colonies as compared to uncolonized areas (Coppock et al. 1983). The bison who graze within the prairie dog colonies gain more weight than bison who graze outside of the prairie dog colonies (Coppock et al. 1983). This is an important strategy for the bison as they utilize the least amount of energy possible to obtain the greatest amount of resources prior to the winter.

Additionally, prairie dogs serve as a food source and/or provide a source of shelter for a wide array of predators, including the black-footed ferrets, who are highly dependent on prairie dogs, as well as swift foxes, mountain plovers, burrowing owls and ferruginous hawks.

Removing the vital wildlife safeguards that protect prairie dogs from poisoning and shooting in Thunder Basin's designated black-footed ferret recovery area, as proposed by the Forest Service's plan amendment, undermines this recovery effort. The proposed amendments would have terrible consequences for native grassland species that rely on prairie dogs to survive and would eliminate the ability to successfully reintroduce a viable population of the endangered black-footed ferret back to these grasslands. Thunder Basin is a central location for the overall recovery of the black-footed ferret. However, without the presence of a healthy prairie dog population, successful reintroduction of the black-footed ferret is not possible.

Worldwide, species face the increasing threat of extinction. Action is required to prevent our valuable flora and fauna from disappearing from the earth. As an administrator of our public lands, the U.S. Forest Service has a duty to protect species and habitats on these federal lands from this threat. Unfortunately, this proposal directly contradicts the bureau's mandate. Please ensure the protection of our native wildlife for future generations.

Thank you for making endangered and native species conservation a priority in land management decisions.