Western Watersheds Project
PO Box 1770
Hailey, ID 83333
tel: (208) 788-2290
fax: (208) 475-4702
email: wwp@westernwatersheds.org
web site: www.westernwatersheds.org

Working to protect and restore Western Watersheds and Wildlife

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Angela Richman, Superintendent
US Department of the Interior
Theodore Roosevelt National Park
PO Box 7
Medora, ND 58645

Revision to Scoping Comments of Western Watersheds Project on the Theodore Roosevelt N.P Livestock Plan

Dear Supervisor Richman:

The following revision of the scoping comments of Western Watersheds Project (WWP) amends comments submitted by WWP for this process on January 11, 2023, and April 13, 2022. These comments are responsive to both newsletters issued by the National Park Service announcing the initiation of a Livestock Management Plan to determine the disposition of wild horses and longhorn cattle on Theodore Roosevelt National Park (TRNP). We are submitting this revision because our original scoping comments as submitted do not reflect Western Watersheds Project's thinking and policy stance on wild horses, generally and as applied to Theodore Roosevelt National Park. These comments amend, supplement, and supersede only those portions of our comments that are addressed specifically in this letter. Other portions of our previous comment letters (regarding ecological impacts of cattle and threats posed by *M. bovis*) stand as originally submitted.

Wild Horses Cannot Definitively be Characterized as Non-Native (or Native)

In our earlier letters, we characterized wild horses in TRNP as non-native species, which is an erroneous description. To the best of our information and belief (and based on the historical record), wild horses existed on the lands occupied by TRNP during the era when Teddy Roosevelt owned his ranch in Medora. In North America more broadly, approximately 2 to 7 million wild horses were present during the Lewis and Clark era (Beever and Aldridge 2011). It is also entirely likely that significant numbers of domestic horses were released onto the range, in many cases interbreeding with free-roaming horses extant at the time. Thus, the wild horse herd on TRNP is of mixed lineage.

Horses evolved in North America, all the way to the Yukon horse (*Equus lambei*). Barron-Ortiz et al. (2017) examined mtDNA samples and concluded that *E. lambei* and *Equus caballus ferus* (the modern horse) are one and the same species. Thus, the horses that roam TRNP evolved to that species here in North America. Fossil DNA evidence places wild horses in

North America as recently as 5,700 years before present (Murchie et al. 2021), well into the Holocene Epoch, meaning that they were not just a creature of the mammoth steppe, but that they were sympatric with (and co-evolved with) the full suite of modern vegetation communities found in North America today.

The consensus among paleontologists is that horses went extinct at some point thousands of years ago, based on gaps in the paleontological record (J. Lillegraven, pers. comm.). However, the Holocene Epoch is notorious for being difficult to interpret in terms of its fossil record, and the old scientific saw applies here: The absence of presence does not necessarily equate to the presence of absence. Collin (2017) pointed to the presence of horse fossil evidence from this period that had been dismissed as site contamination, as well as historical accounts from early explorers documenting the presence of free-roaming equids prior to the Pueblo Revolt to which North American wild horse origins are sometimes attributed. The main thrust of Collin's argument, however, are the oral histories of Indigenous tribal members, who recount that wild horses were present continuously and without interruption in North America throughout their collective memory. Thus, the question of whether wild horses were extirpated in North America (and at what date), or were continuously extant in North America from the Pleistocene to modern times, is a matter of live scientific controversy and debate.

Further clouding the question is the lack of a rigorous and universally accepted definition of what it means for a species to be "native" to a given locality. A definitive statement could certainly be made that horses once were native to North America, but if indeed they disappeared for a period of years (or millennia), then they would be considered a reintroduced species. Personally, as a published mammologist, I would tentatively argue for wild horses being classified as a "reintroduced native species," but others might simply apply the word "native" based on evolutionary history and make an equally valid point. Classifying wild horses as "non-native" is a difficult proposition and requires a determination of how long a species must be absent from a landscape before it loses "native" status (for example, Rocky Mountain elk were extirpated from Colorado and reintroduced from Yellowstone decades later – are they now a "native" or "non-native" species?). For these reasons, WWP takes no position on whether wild horses are native or non-native, and further asserts that there is no rigorous way to definitively classify them either way.

WWP Does Not Support Removal of Wild Horses Absent Evidence of Ecological Problems

WWP's position on wild horses is that, like any other large ungulate (wild or domestic), they can cause damage to lands and vegetation, and potentially harm other species, when they reach sufficient population densities. It has been our experience throughout the West that wild horses often are scapegoated for ecological damage caused by other species, most often domestic cattle and sheep which typically outnumber them by a factor of ten or more on lands they share in common with livestock. Wild horses range much more broadly than cattle, utilizing steeper slopes and lands distant from surface water to a much greater extent, and thereby spreading their impact more lightly across the landscape than cattle, which concentrate near water and commonly destroy vegetation communities and riparian areas. On TRNP, wild horses share the grassland with wild bison, a handful of cattle, and presumably deer. No analysis has yet been presented indicating that wild horses, either in concert with other large grazers on TRNP or in isolation, are causing ecological problems.

The mixed-grass prairies found in TRNP are highly resilient to grazing from large herbivores, having co-evolved with large numbers of wild bison. At the time when 2 to 7 million wild horses roamed North America (together with 55 million bison, 380,000 wolves, and a rich diversity of other wildlife (some, like Audubon's bighorn sheep, now extinct), ecological problems were not noted. To the contrary, this period is seen as the most ecologically healthy and intact the land has ever been, in recorded (by Euro/Americans, at least) history. The photographs posted on the NPS website show lush, healthy prairie ecosystems with no sign of degradation from overgrazing. Given the apparent compatibility of wild horses with native wildlife species over long timeframes, and the lack of evidence of ecological impacts attributable to horses on TRNP, WWP does not support the elimination of wild horses at this time.

Conclusions

The large-scale program of wild horse gathers and removals implemented by the Bureau of Land Management across the interior West demonstrates that periodic helicopter roundups disrupt social hierarchies and encourage increases in breeding among remaining wild horses, thereby defeating the purpose of the program. Temporary fertility control at levels that prevent permanent sterilization might offer a less invasive alternative to helicopter gathers, but chemical or physical interventions that risk (or cause by design) sterilization are inappropriate for a wild equid population. WWP supports a livestock plan alternative that is a mix of those proposed for consideration, that removes all cattle, but leaves bison and wild horses in a free-ranging and minimally-managed condition (within ecologically sustainable parameters), and encourages the recovery of large native carnivores to assist in population control. Thank you for considering our input.

Respectfully yours,

Erik Molvar
Executive Director

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