

Data Submitted (UTC 11): 7/1/2016 10:22:02 PM

First name: annie

Last name: griffin

Organization:

Title:

Comments: comments #32

Comments on Environmental Assessment

Forest Plan Amendment #32: Adjustment of Management Area 8 in the North Fork Sanpoil Creek Drainage  
submitted by Lorna Moffat

33569 Darrin Rd, Valley, Wa. 99181

VM 831-278-5602 <tel:831-278-5602> . 509-935-0654 <tel:509-935-0654>

to

Republic Ranger District, Colville National Forest

Ferry County, WA

Township 37 North, Range 34 East, Sections 19, 20, 21, 29, 30

Township 37 North, Range 33 East, Section 25

I agree with Proposed Action Alternative Two.

Protection to mule deer and other foraging animals is imperative considering the amount of illegal poaching that goes on and the lack of forest personnel to enforce hunting season laws.

This action might save some of our wildlife inhabitants from over kill.

It would also lessen the costly rescue missions that so often occur due to broken down snow mobiles.

I would also the plan include the allowance of wild horses into our Colville National Forests.

Wild horses greatly reduce fire danger. They provided much needed watering holes for other species because they have a unique ability to smell springs which they dig up with their hooves. (

Ginger Kathrens, founder and volunteer Executive Director of TCF, is an Emmy ... and Cloud: Challenge of the Stallions for WNET's Nature series on PBS.

Wild horses have been excluded from national forests for the most part due to the lobbying of cattle ranchers who have greatly undermined and misinformed forest service managers about their most valuable ecological role they play in our forests. This due in most part to grazing competition.

Cattle ranchers are allowed their cattle which are not indigenous as wild horses are and which greatly destroy forest habitat unlike the wild horses.

It is time to bring back the wild horse and allow their natural wildness integrate everywhere in our forests.

As a TV producer I have filmed wild horses eating twigs, brush and other flammables as well as filmed hoof prints around rice grass with never a hoof print on the rice grass itself.

I filmed this phenomena at Battle Mountain, Stony Creek HA in Nevada in 2012 with Craig Downer, wildlife ecologist and an expert in wild horses.

I can provide this footage upon request.

When I attended last year's Timber harvest Plan I noticed there were four ranchers protecting their cattle interest and when I mentioned what an ecological role wild horses could provide to the fire management plan the cattle ranchers protested vehemently with misinformation of the destructive harm wild horses do AS WELL AS denial that wild horses are indigenous to America .

I PROVIDE THE FOLLOWING STATEMENT FROM the book , The Wild Horse Conspiracy by Craig Downer concerning what wild horses actually do to improve our wilderness areas wherever they roam.

I also provide proof that wild horses are indigenous to America and should be allowed to roam as free as deer and other foragers.

Ecology of Wild Horses (Downer 2014, a, b & c)

Wild horses complement an ecosystem in many direct and obvious as well as more subtle ways when permitted their natural freedom to move and interrelate over a sufficiently extensive intact habitat and time period.

Like rhinos and tapirs, equids possess a caecal, or post-gastric, digestive system. This enables equids to take advantage of coarser, drier vegetation through symbiotic microbial activity that breaks down cellulose cell walls to derive sufficient nutrients, including vital proteins, from the inner cell without overtaxing their metabolism. In drier regions, this can give equids a distinct advantage over most ruminants. (See Bell 1970, Grzimek 2004, MacDonald 2001.)

Consumption by equids of coarser, drier vegetation can greatly benefit sympatric, pre-gastric (ruminant) herbivores, and energize and enrich the ecosystem as a whole. By recycling chiefly the coarse, dry grasses as well as other dry, withered herbs, forbs and bush foliage, horses, burros, and zebras expose the seedlings of many diverse species to more sun, water and air, thus permitting them to flourish. The latter can then be consumed by ruminants (Bell 1970).

Of great importance is the contribution by wild equids of significant quantities of partially degraded vegetation in the form of feces deposited on the land. These droppings provide fodder for myriad soil microorganisms; the resulting fecal decomposition builds the humus component of soils, lending ecologically valuable texture and cohesiveness. As feces slowly decompose, they gradually release their nutrients over all seasons and, thus, feed the fungal garden that exists in soils, thereby increasing the soil's absorption of water - that vital limiting factor in semi-arid and arid regions.

Equid feces lend more sustenance to decomposers and food webs that involve mutually sustaining exchanges among all classes of organisms. The latter include many diverse insects, birds, rodents, reptiles, etc. This could help bolster many native species in Arizona.

The less degraded feces of equids contain many more seeds that are intact and capable of germination and from many more types/species of plants when compared with ruminant grazers. Thus, the horses' wide-ranging life styles can greatly assist many plants, including Arizonan natives, in dispersing far and wide and, so, in filling their

respective ecological niches. This enriches the food web and allows a greater diversity of animal species, including Arizonan natives.

Horses aid myriad plant and animal species by their physical actions. As an example, breaking of ice with their hooves during winter freezes allows other animals to access forage and water. Many of these would otherwise perish. Similarly, they open trails in heavy snow or through heavy brush, allowing smaller animals to move about in search of food, water, mineral salts, shelter, warmer areas, mates, etc.

A little-recognized fact is that the wallowing habit of wild equids creates natural ponds whose impacted surfaces become catchments for scant precipitation or summer cloudbursts. These provide a longer-lasting source of water for a wide diversity of plants and animals. This can even help to create an intermittent riparian habitat for desert amphibians and many other desert species in Arizona as elsewhere. Ephemeral plants that quickly flower and set seed, including many composites, are benefited from these catchments - especially valuable in regions with clayey soils. These catchments can benefit amphibians such as Couch's Spadefoot and Southern Spadefoot which occur in TNF (USDA 2012).

Wild horses also locate water seeps through their keen sense of smell and enlarge these through pawing during critical dry periods of the year, even digging down to the sources at rocky fissures. This allows many other species to access water, species whose individual members would otherwise perish. For these and many other reasons, wild equids should be treated as keystone species that contribute positively in a variety of ecological settings.

Wild horses are natural prey of certain carnivores and omnivores including in Arizona's mountain lions, red wolves, and bears (cf. Turner et al., 2001).

Wild horses and burros are well suited to life in arid and semi-arid ecosystems. One reason is obvious: their great mobility. With their long limbs and sturdy, single-unit (soliped) hooves, they are made for movement. In such semi-arid or arid regions, this extensive movement is vital for survival. In order to obtain enough forage, a wild horse must often roam over several square miles each day, selecting appropriate plants to prune; reaching a water hole may involve traveling over one-hundred miles round trip in a grazing circuit of two or three days. Wild horses do not generally camp on riparian habitats as do cattle, though in the case of the Salt River, the wild horses have become more dependent upon and adapted to this source of food, shelter, and water. However, their daily and seasonal movements still involve the drier Sonoran desert hills surrounding the Salt River. Indeed, their movement to these areas and deposition of feces benefits the upland soils by transferring soil-building nutrients from this very productive river ecosystem, and this benefit is passed on up through the food chain/web to benefit many diverse species.

During very hot, dry spells, a wild horse band must stay close to water, tanking up every day with approximately ten to twelve gallons for a mature horse. A spring, river or other water source can be shared by several bands. These form an orderly hierarchy for watering should more than one band arrive at a limited source, such as a spring, at the same time, often late in the day. When melting snow or fresh cloudbursts paint the land with ephemeral water sources, wild horses can disperse into areas further away from perennial lakes and streams and to these ephemeral sources. Here they employ their keen sense of smell in detecting even very small and hidden water sources. They can also negotiate rougher, steeper, and rockier terrain than domestic cattle, and prevent flammable vegetation from building up here.

Through a hammer-like hoof action upon the ground, wild equids aid vegetation by pushing seeds firmly into the soil where they may successfully germinate. Their feces also provide a fertile bed for the germination of seeds.

Equids' post-gastric digestive system does not emit as much gas as is the case with pre-gastric ruminant grazers. This same system permits them to greatly reduce dry, fire-prone vegetation over vast areas without overtaxing

their metabolism. Thus, they help to prevent catastrophic fires that global warming, or more to the point, human civilization's pollution of the atmosphere, is causing (deHaan et al., 2006).

By drying out vegetation and provoking catastrophic fires-rampant in western and southern North America, Australia, and much of the world - the catchall "global climate change" threatens planetary life as we know it. This will especially be the case if global ocean currents stop circulating due to glacial and ice cap melting, etc. Wild equids can greatly help to save the day if allowed to play their own special role in reducing flammable vegetation, in building soils, in seed dispersal, in preventing catastrophic, soil-sterilizing fires, etc. They stand ready to counter imbalances brought on by human civilization and its contamination of the atmosphere, much of which is caused by hordes of domestic livestock (de Haan et al. 2006).

Equid feces build the humus content of soils to a substantial degree. This humus allows soil to gain more texture and retain more water, which dampens out fires; humus promotes more productive and bio-diverse plant and animal communities. Because their feces are not as thoroughly degraded in the gut as those of ruminant grazers, they contribute more to food chains/webs, e.g., dung beetles to birds and lizards to higher trophic predators such as cats and eagles, etc.

Equine feces aid the watershed by creating damper conditions, because the soil particles to which they reduce (micelles) retain more moisture, i.e., more water adheres to the surface area of these particles (Ricklefs 1979). Hence ground water tables are replenished, feeding more seeps and springs more continuously. And upon these springs and seeps, many species of plants and animals depend. Some fire is of benefit to an ecosystem, but fires that over-consume, over-extend, and over-intensify can set the evolution of a terrestrial life community way back and result in a very sterile environment that could take thousands of years of "peace" to recover.

Equids possess both upper & lower incisors that permit them to selectively nip pieces of vegetation such as grass or the leaves of bushes or trees. Major ruminant grazers such as cattle and sheep do not have upper incisors and consequently can and do rip up plants by their roots more frequently with the action of their lower teeth and tongue against their hard upper palates. This often exposes soils to destructive wind and rain erosion, especially when too many of the ruminants are placed upon any given area of land. And wild horses are much more mobile in their daily and seasonal feeding rounds than are cattle.

Equid species diversify and strengthen the community they inhabit in a variety of ways when allowed to achieve population stability over time and when not over-imposed upon by humanity (Donlow et al., 2005; Martin 2005). The process of natural selection must be allowed to operate sufficiently long for this to be the case. Then these equids can and do create a greater variety of environmental conditions that make possible a greater variety of niches that can be occupied by coevolving species. Being large, powerful animals, equids can push their way through thickets of brush to form trails. Specifically, they open thick vegetative understories to light and air, and the more diverse exposures resulting from equine activities create conditions intermediary to the extremes of wind, temperature, and various soil conditions. This physically defines a greater variety of niches fillable by a more diverse array of species.

When allowed to integrate into wilderness, the individual life histories of wild equids come to reflect natural oscillations, such as annual seasons and more long-term cycles. This they do along with the plants and animals that share their habitat. They harmoniously blend over time. As large animals that eat relatively large quantities especially of fibrous vegetation and disperse their grazing and browsing activity over broad areas as semi-nomads, equids can become the harvesters and the renewers over vast ecosystems, true to their keystone role (Duncan 1992, Grzimek 2004, MacDonald 2001). Their cropping of vegetation, often dry and coarse, reduces the possibility for major, soil-sterilizing fires. This cropping sparks vegetative renewal, the re-budding of new and tender shoots of greater nutritional value, especially to ruminants whose digestive and metabolic systems are over-taxed by the coarse, dry vegetation that equids can better handle. And thus the overall productivity of the land is annually increased, as studies prove (Fahnestock and Detling 1999 a & b).

## Natural Self-Stabilization of Population and Reserve Design (Downer 2010, 2014 a & c)

Wild horses form tight-knit stallion- and elder-mare-governed bands. Over time, each band searches out and establishes its own home range, which may cover hundreds of square miles on an annual basis in drier regions (Berger 1986). The ecological mosaic that results among all such particular band home ranges in a given area prevents over-crowding and overgrazing. Once available habitat is filled, the horse, as a climax species, limits its own population as density-dependent controls are triggered.

In the immediate future, true wild-equid-containing sanctuaries need to be established. Here livestock and other nature-exploiting activities should be excluded or at least greatly minimized and wild equids allowed to establish viable populations in the thousands of individuals (Duncan 1992). These fairly populated sanctuaries will provide for herds that are viable in the long-term. They will preserve the vigor of the horses and burros they were designed to conserve, true to the pure intent of the Wild Free-Roaming Horses & Burros Act (Animal Welfare Institute 2007, Germaine 2009).

Employing principles of Reserve Design, the following directives will serve as guides to achieve the above goals:

- (a) Allow each wild equid herd to fully fill its ecological niche space within each given area bounded by natural or where necessary artificial barriers, and by buffer zones. Then allow each specific herd to self-stabilize, or auto-regulate, its population, within this area. Such auto-regulation can happen if we humans allow. Equids are "climax species," which is to say, members of the "climax successional sere," or stage, and do not expand out of control to destroy their habitat and ultimately themselves, as their prejudiced enemies contend. Each band within a herd population is usually governed by a lead stallion (patron). He watches out for and defends the band and does most of the breeding. A usually older, lead mare also aids in this role. This mare is very wise as to where the best foraging, watering, mineral procurement, sheltering areas, etc., are located. She leads the band along paths uniting these habitat components, which include longer seasonal migratory routes between higher summering and lower wintering habitats. Both patron and lead mare socially inhibit reproduction among younger members of their band. As resources become limiting, physiological and social responses result in decreased reproduction in any given band or herd (Rogovin and Moshkin 2007, Sussman 2008).
- (b) Employ natural barriers where possible, or, where such do not exist, semi-permeable, artificial barriers, where necessary, in designing each wild horse sanctuary.
- (c) Design and employ buffer zones around the wild horse sanctuaries. Here a gradual tapering off of wild horse presence would occur through the implementation of discouragements to their transiting into areas where danger exists for them, such as in farms or cities. This may involve the use of what wildlife managers term "adverse conditioning" as well as "positive reinforcement". Also employ underpasses or preferably overpasses where roads impede the natural movements of the wild horses.
- (d) In order to realize healthy, balanced wild-horse-containing ecosystems, as full a complement of plant and animal species as possible should be allowed. Wherever possible, this should include large carnivores/omnivores native to the region in question, such as the puma, or mountain lion, and the red wolf. These will provide an additional limitation on wild horse populations (also wild burro), one that will act through natural selection to make any given population more fit for survival in the wild and more harmoniously adapted to its particular ecosystem.

## Important Ecological Considerations that need more attention from TNF

A major factor that should be thoroughly taken into account concerns the prevalence of cattle on the northern side of the Salt River. These are owned by the Indian Reservation, including the Pima Maricopa tribe; and they cross over the Salt River to forage on Tonto National Forest lands. As described in my earlier report on the lower

Salt River ecosystem and its wild horses (Downer 2012), these cattle are having a very damaging effect on the ecosystem together with the poorly maintained, broken- down barbed wire fences constructed to contain them. Of course, such fences are very difficult to maintain given the erratic dam releases of water, or river flows. When these flows are high, they literally scour the terrain and readily uproot fence posts, except those strongly and deeply anchored. The tangle of barbed wire intertwined with riparian vegetation constitutes a serious hazard for many species, including horses, deer, beaver, muskrats, and many bird species, as well as us humans. These barbed-wire, sharp stake, and other menaces should be removed in order to curtail further mayhem, suffering and death. End

I also provide you with the link concerning wild horses being indigenous to America.

The Surprising History of America's Wild Horses - Live Science

[www.livescience.com](http://www.livescience.com) <<http://www.livescience.com/>> › Animals

Jul 24, 2008 - Wild horses may be considered native. ... of the modern horse originated in North America between 1 million and 2 million years ago. When ...also provide a link to the following article on wild horse fossil findings in North America

Please consider introducing wild horses and burros into the Colville National Forest for the many reasons provided.

Thank you for your consideration in this matter.

Sincerely,

Lorna Moffat 33569 Darrin Rd.

Valley, Wa 99181