

Draft for Proposed Legislative Bill, 12/1/20

Natural Wildfire Abatement And Forest Protection Plan: *'Wild Horse Fire Brigade'* ('Plan'; more at: www.WHFB.us)

Introduction:

The devastation from recent California wildfires is still unfolding at a scale that has not even begun to be fully understood. The socioeconomic impacts (loss of life, property, impact on natural resources, impact on health and healthcare, economic impacts on business, real property and tourism, etc.) from wildfires is by any measure catastrophic, with total losses in the \$-billions annually. These wildfires are also *catastrophic* due to the abnormal amount of heat they generate, which is a function of prodigious grass and brush wildfire fuel across the landscape resulting from a depleted natural herbivory. California's deer population is down approximately 2 million animals over the past fifty years, which previously were abating approximately 2.6 million tons of annual grass and brush. As a result, fire suppression resources and funding are spread thin. It will take decades to reestablish native California deer as wildfire grazers.

A novel solution that immediately addresses wildfires in remote fire-prone wilderness areas (aka: 'firesheds') is the Wild Horse Fire Brigade Plan. In these remote areas with difficult terrain, suppression costs are the highest due to the need for aerial suppression using jets and helicopters costing as much as \$1M per hour. The Plan involves the redistribution of native species American wild horses from Bureau of Land Management (BLM) and U.S. Forest Service (USFS) holding corrals into such areas where each wild horse so deployed provides \$72,000 over its life span in fuel abatement services based on comparable analysis. Extensive published peer-reviewed science and commentary from fire experts supports the foregoing. [1]

Purpose of Plan:

- (i) Reduce loss of human life and injuries, loss of capital assets, the damage to watersheds, losses of heritage forests and threatened and endangered species of wildlife from catastrophic wildfire by a reduction of grass and brush fuels in areas appropriate for native species grazing but unsuited for livestock;
- (ii) Reduce costs related to prescribed burning and mechanized fuel abatement;
- (iii) Reduce costs for aerial fire attack in remote wilderness areas (up to \$1 million/hour);
- (iv) Reduce the emissions of greenhouse gases from excessive wildfire and prescribed burning;
- (v) Reduce costs related to particulate pollution from wildfires and prescribed burning into atmosphere and subsequent additional health impacts added to those of catastrophic wildfire;
- (vi) Reduce costs related to rounding up and storing American native wild horses and related litigation costs;
- (vii) Reduce insured and uninsured losses due to catastrophic wildfire and loss/increased costs for homeowners wildfire insurance;
- (viii) Immediately mitigate the massive depletion of megafauna (deer and elk) over the last five decades which has caused the excessive overgrowth of ground fuels by substituting another native species large-bodied herbivore (E. *Caballus* – American wild horse);
- (ix) Abate prion pathogens found on forage that's causing the spread of CWD (chronic wasting disease) and death in cervids (elk, deer, moose) by grazing wild horses; the wild horse is the only large mammal/herbivore left in the U.S. that is resistant to prion disease; and
- (x) Add valuable humus to forest soils and disperse non-digested seed for re-germination by grazing wild horses.

Just A Few Supporters of Plan:

California Attorney General Becerra/Special Assistant Attorney General Ellie Blume
Former Congressman Greg Walden
Ex-Oregon Senator Alan DeBoer
Oregon Commissioners Court Boice (Curry Co.), Colleen Roberts Jackson Co.), Lilly Morgan (Josephine Co.)
Acting Chief U.S. Forest Service, Victoria Christensen
Oregon Dept. of Forestry, District Forester Southwestern Oregon, Dave Larson
ODF, Wildland Firefighter, Jacob Kurzyniec
In Defense of Animals

"... Large grazers are a valuable resource in reducing the flammable grass and brush components within our

ecosystems... It is true wild horses and burros, and other grazers, can impact vegetation and fuel loading. In specific locations, grazing can be a tool to reduce fine fuel loading." ~ Victoria Christensen - Acting Chief USFS

"Your idea of using wild horses as a potential fuels management tool may be a viable option to consider and I would be in support of the BLM investing in further research. As a fire manager responsible for 1.8 million acres of forestland, I appreciate anything that we can do to maintain a healthy forests for all to enjoy." ~ Dave Larson - Oregon Dept. of Forestry - District Forester Southwestern Oregon

"I have seen the work they have done on your property and it looked good but spotty with the low numbers they have. Additionally I really think they have a place in the fuel reduction world." ~ Jacob Kurzyniec - ODF Wildland Firefighter

Details of Bill:

- (1) This Bill supports and helps implement Wild Horse Fire Brigade (WHFB) in appropriate remote wilderness areas in California through rewilding American native wild horses, a valuable natural resource, to abate excessive ground fuels causing some of the state's mega catastrophic wildfires;
- (2) (Who/what entity in California) is charged to work cooperatively with specific California counties, the U.S. Forest Service (USFS) and the Bureau of Land Management (BLM), starting with a Pilot Project in the Six Rivers National Forest-Siskiyou Wilderness Area in NW California, utilizing the USFS Devil's Garden wild horses recently removed from their NE California public lands and at high risk for the slaughter pipeline;
- (3) Expands WHFB use to other appropriate wilderness areas under USFS, BLM or state jurisdictions utilizing potentially thousands of USFS and BLM wild horses at high risk for slaughter or euthanasia;
- (4) Helps provide funding to implement the Plan.

Methodology (Three synergistic actions):

1. Correcting Unnatural *1-hour Fuel Loading *(vegetative materials 1/4-inch in diameter and smaller; ~ CalFire):

First and foremost is correcting the fundamental problem of prodigious 1-hour fuel loading (grass and brush) in and around forests and wildlands that stems from an ecological imbalance and depletion of native deer grazers.

a. **Rewilding:** Reducing the current prodigious 1-hour fuel loading requires the rewilding of (i) large-bodied native-species herbivores (cervids and wild horses) in naturally sustainable population densities; and (ii) applying intelligent application of invasive-species grazing herbivores (cattle, sheep, goats) into suitable areas that do not contain abundant predators or sensitive ecosystems with rare and threatened native flora. The key in using any 'invasive species' of herbivore is careful application and [management of their deployment](#).

b. **Prescribed burns:** Generally, they are not the answer because (i) they cost a lot of money and must be repeated often compared to the free-of-cost year-round mixed-herbivory method proposed in this [Mixed Herbivory Plan](#), and (ii) prescribed burns release even more sequestered hydrocarbon compounds into the atmosphere, adding even more greenhouse gases, and (iii) prescribed burns can quickly turn into dangerous uncontrolled wildfires; and (iv) more burning is illogical when a mixed herbivory program can accomplish much of the needed 1-hr. fuel abatement, especially in remote rugged areas (aka: 'firesheds').

*It's important to note that when native Americans used fire to manage the landscape, there were about 100 million more large-bodied herbivores grazing on the landscape than today. Those now missing native-species herbivores **consumed about 273-Million tons of annual grass and brush (1-hour fuels)**, based on an average grazing of 15-lbs/day across various native species herbivores. [The best science informs us](#) that when native-species herbivores are depleted, catastrophic wildfire evolves.*

2. Logging And Thinning Forests:

a. Forests must be managed by *experienced managers* who have a holistic approach to forest management. Overstocked (high tree densities) forests must be culled so tree densities are optimal (based on species and carrying capacity of landscape) in order to preserve water and light resources for the best trees and this requires intelligent thinning.

In ecologically sensitive areas containing rare flora and fauna, [domestic draft horses have been well-proven to be a successful method for both logging and thinning](#). In other less sensitive areas, traditional methods (mechanized) can be employed with proven success.

b. Access Roads: Fewer access roads are needed when logging and thinning the interior areas of ecologically sensitive forests and wilderness areas are accomplished using horse logging as seen in just one of many videos on this subject ([OPB Video on Horse Logging In Oregon](#)).

For other non-ecologically sensitive areas, traditional well-designed and maintained 2-blade (two track) roads provide access into and around forest areas and also provide needed points of access for wildfire suppression by ground crews.

3. Wildfire Suppression: With the assumption that the foregoing programs and methods are implemented, *full wildfire suppression* is logical and **made far more effective** by the implementation of the best practices as outlined herein above, and therefore must be set as established policy by all agencies.

Recently, empirical data demonstrated the efficacy of this plan during the Klamathon Wildfire (38,000 acres) in Siskiyou, Co. CA. Documentary thesis film from Colorado College: <https://vimeo.com/327282987>

[1] **References** (supporting science):

[a] ***Cattle Grazing Effects on Macroinvertebrates in an Oregon Mountain Stream***; Rangeland Ecology and Management 60(3), 293-303, (1 May 2007) James D. McIver and Michael L. McInnis; [https://doi.org/10.2111/1551-5028\(2007\)60\[293:CGEOMI\]2.0.CO;2](https://doi.org/10.2111/1551-5028(2007)60[293:CGEOMI]2.0.CO;2)

[b] ***Project to Reform Public Land Grazing in Northern California*** https://wildcalifornia.org/wp-content/uploads/2016/01/Annual-Report_2015_final-final.pdf

[c] ***Evolution of wild horses and cattle and the effect on range damage***; <https://www.horsetalk.co.nz/2017/09/25/evolution-wild-horses-cattle-effect-range-damage/>

[d] ***Land Held Hostage: A History of Livestock and Politics***; Thomas L. Fleischner, Ph.D. https://www.academia.edu/11886843/Fleischner_Land_Held_Hostage_A_History_of_Livestock_and_Politics

[e] **Foods of wild horses, deer, and cattle in the Douglas Mountain area, Colorado.** Hansen, R. M., Clark, R. C., & Lawhorn, W. (1977). *Journal of Range Management*, 30(2), 116-118. <https://repository.arizona.edu/handle/10150/646893>

[f] **The U.S. Ninth Circuit Court of Appeals in California** recognized wild horses as native species, explaining that BLM “*establishes Appropriate Management Levels (“AMLs”) for populations of native species - including wild horses, burros, and other wildlife - and introduced animals, such as livestock.*” In *Defense of Animals, et al. v. U.S. Dept. Interior, et al.*, No. 12-17804, *6 (9th Cir. May 12, 2014). On Sep 28, 2011 (See Craters AR at 16698. Memorandum Decision & Order) The court addresses “sensitive” species pursuant to BLM’s 2001 Special Status Species Policy. This Policy requires that “sensitive” species be afforded, at a minimum, the same protections as candidate species for listing under the ESA. It called on BLM managers to “obtain and use the best available information deemed necessary to evaluate the status of special status species in areas affected by land use plans” See Policy at § 6840.22A. Under the Policy, those land use plans “shall be sufficiently detailed to identify and resolve significant land use conflicts with special status species without deferring conflict resolution to implementation-level planning.”

[g] ***Federal Forestlands In Oregon***: https://oregonforests.org/sites/default/files/2017-08/Federal_Forestlands.pdf

[h] **Collapse of the world's largest herbivores:** "By altering the quantity and distribution of fuel supplies, large herbivores can shape the frequency, intensity, and spatial distribution of fires across a landscape". William J. Ripple¹, Thomas M. Newsome^{1,2}, Christopher Wolf¹, Rodolfo Dirzo³, Kristoffer T. Everatt⁴, Mauro Galetti⁵, Matt W. Hayward^{4,6}, Graham I. H. Kerley⁴, Taal Levi⁷, Peter A. Lindsey^{8,9}, David W. Macdonald¹⁰, Yadvinder Malhi¹¹, Luke E. Painter⁷, Christopher J. Sandom¹⁰, John Terborgh¹² and Blaire Van Valkenburgh¹³ <http://advances.sciencemag.org/content/1/4/e1400103.full>

[i] **Rewilding:** Jozef Keulartz. "The removal of large herbivores has adverse effects on landscape structure and ecosystem functioning. In wetter ecosystems, the loss of large herbivores is associated with an increased abundance of woody plants and the development of a closed-canopy vegetation. In drier ecosystems, reductions of large grazers can lead to a high grass biomass, and thus, to an increase in the frequency and intensity of wildfires. Together, with the loss of a prey base for large carnivores, these changes in vegetation structures and fire regimes may trigger cascades of extinctions (Bakker et al., 2016; Estes et al., 2011; Hopcraft, Olf, & Sinclair, 2009; Malhi et al., 2016)."

<http://oxfordre.com/environmentalscience/view/10.1093/acrefore/9780199389414.001.0001/acrefore-9780199389414-e-545>

[j] **Wild horses: Are they being managed to extinction?** William E. Simpson II; <https://www.horsetalk.co.nz/2018/02/24/wild-horses-managed-to-extinction/>

[k] **MANAGED TO EXTINCTION? A 40th Anniversary Legal Forum assessing the 1971 Wild Free-Roaming Horses & Burros Act;** TRANSCRIPT: ROSS MACPHEE, Curator, Division of Vertebrate Zoology, American Museum of Natural History (AMNH): <https://docs.google.com/document/d/1-zNiS1uqCWZ9PimwJpaVdY7NC57hxdGKDCLXbCEYb8c/edit>

[l] **Dr. Cassandra Nunez – PhD: Published research:** <https://www.nrem.iastate.edu/people/cassandra-m-nu%C3%B1ez>

[m] **Influence of ruminant digestive processes on germination of ingested seeds;** https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/v405sq230

[n] **Ruminant Digestion:** https://www.mun.ca/biology/scarr/Ruminant_Digestion.html

[o] **Public lands bear the ecological brunt of livestock grazing:** <https://www.horsetalk.co.nz/2020/11/21/horses-public-lands-ecological-brunt-livestock/>

[p] **Wild Horse Fire Brigade - Rebalancing North American Ecosystems:** <https://grazelife.com/blog/wild-horse-fire-brigade-lessons-in-rebalancing-north-american-ecosystems-by-rewilding-equids/>

[q] **Yes world, there were horses in Native culture before the settlers came** <https://indiancountrytoday.com/news/yes-world-there-were-horses-in-native-culture-before-the-settlers-came-JGqPrqLmZk-3ka-IBqNWiQ?>

[r] **Wild Horses as Native North American Wildlife:** <https://awionline.org/content/wild-horses-native-north-american-wildlife>

[s] **'Fuel Fire and Wild Horses'** award-winning natural history documentary about wild horses and their applications in forest management: <https://vimeo.com/327282987>

[t] Additional bona-fides for author-naturalist William E. Simpson II: https://b32d739d-d185-4dd2-8388-9b640855e5bd.filesusr.com/ugd/6a30c6_9850ae624332457baf331499c1cca3e2.pdf

CONTACT: William E. Simpson II: email: gemmaster7@aol.com / Ph: 858. 212-5762