



#### NATIONAL HORSE & BURRO RANGELAND MANAGEMENT COALITION

Advocating for commonsense, ecologically-sound approaches to managing horses and burros to promote healthy wildlife and rangelands for future generations

# RANGELAND ECOSYSTEM

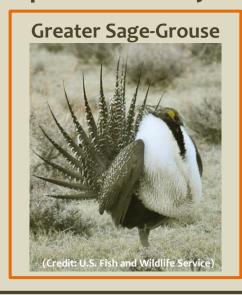
#### **Wild Horse and Burro Facts**

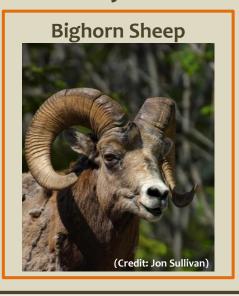
- BLM rangelands can support <27,000 horses and burros.
- There are currently >72,000 horses and burros on BLM ranges.
- Horse populations double every 4 years.
- There are >46,000 horses and burros in BLM off-range holding facilities.
- Taxpayers pay about \$50 million per year to care for horses and burros in holding.

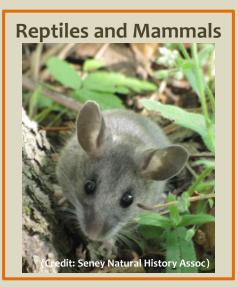
Overpopulation of horses and burros on rangeland ecosystems can lead to several negative impacts, including the spread of invasive species, water contamination, and desertification.

Horses and burros damage landscapes by **trampling vegetation, compacting soil, and over-grazing forage plants.** Areas inhabited by horses and burros tend to have fewer plant species, less vegetative cover, and an increased susceptibility to invasive plant species – which can have **ecosystem-wide implications.** 

## Species that may be affected by excess wild horses and burros:









Horses have physiological attributes that are unique for rangeland ungulates, leading to greater ecosystem damage (Mernard 2002).

## Effects on water quality and riparian areas:

Root systems break up and aerate soil, allowing rain water to penetrate. When horses and burros deplete vegetation and remove roots, erosion and soil temperatures increase. This can lead to a shift in plant and animal communities (Osterman-Kelm 2009).

Appropriate management levels (AML) are based on the amount of forage resource available in an area, with regard to multiple land uses.

### What about cattle grazing?

To prevent overgrazing, BLM bases livestock permits on available forage. Since 1954, authorized livestock grazing on BLM-managed lands has declined by over 50%. Meanwhile, horse and burro populations on BLM lands are now two-and-a-half times greater than AML.



In studies where horses and burros were excluded from plots of land, exclusion areas had higher plant density and diversity than horse-grazed areas.

The more heavily vegetated area behind the fence is a horse exclusion plot (Beever 2000).

Beever, E., P.F. Bruzzard. 2000. Examining ecological consequences of feral horse grazing using exclosures. Ecosphere 60(3):236-256

Menard, C., P.Dunkan, F. Geraldine, G. Jean-Yves, and L. Marc. 2002. Comparative foraging and nutrition of horses and cattle in European wetlands. BioMed Central

Osterman-Kelm, S., E.A. Atwill, E.S. Rubin, L.E. Hendrickson, and W.M. Boyce. 2009. Impacts of feral horses on a desert environment. BioMed Central Ecology 9(22)
Osterman-Kelm, S., E.R. Atwill, E.S. Rubin, M.C. Jorgensen, and W.M. Boyce. 2008. Interactions between feral horses and desert bighorn sheep at water. Journal of Mammalogy 89(2): 459-466.

United States Department of the Interior. Bureau of Land Management. Wild Horse and Burro Quick Facts. 2016.

<a href="http://www.blm.gov/wo/st/en/prog/whbprogram/history\_and\_facts/quick\_facts.html">http://www.blm.gov/wo/st/en/prog/whbprogram/history\_and\_facts/quick\_facts.html</a> Accessed March 2016.

United States Department of the Interior. Bureau of Land Management. Wild Horse and Burro Myths and Facts. 2016.

<a href="http://www.blm.gov/wo/st/en/prog/whbprogram/history">http://www.blm.gov/wo/st/en/prog/whbprogram/history</a> and facts/myths and facts.html> Accessed March 2016.

American Farm Bureau Federation • American Sheep Industry Association • Congressional Sportsmen's Foundation Masters of Foxhounds Association • Mule Deer Foundation • National Association of Conservation Districts National Association of Counties • National Association of State Departments of Agriculture National Cattlemen's Beef Association • National Rifle Association • National Wildlife Refuge Association Public Lands Council • Public Lands Foundation • Rocky Mountain Elk Foundation • Safari Club International Society for Range Management • The Wildlife Society • Wild Sheep Foundation