

Wild Horses on the Range

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Introduction

Long before cattle utilized the resources of the vast rangelands in the U.S., a different type of animal roamed. Although not seen much today, wild horses historically had a large population in the United States. These majestic animals date back to the Ice Age. After leaving North America for a short amount of time, the horses returned when they were brought back over by Spaniards. A few hundred years after they were reintroduced, these horses, along with wild burros, got protection from hunters with a couple different preservation acts. Although good for the horses and burros, the acts drastically increased the population of both of these animals. A larger population damages the rangelands that the animals rely on for their food and water. The population of these wild animals must be carefully managed to keep the rangelands as healthy as possible.

Wild Horses in North America

The first wild horses roamed North America with the American Camel, Saber Tooth Tiger, and Woolly Mammoth. Called Dawn horses, these animals look very different compared to the horses we see today. Due to climate change, the number of these animals in North America dropped greatly. The horses crossed over the land bridge and were scarce in America for many years. The domestication of wild horses began around 4,000 years ago in Europe. When the conquistadors began to explore North America, newly evolved horses were brought back and were raised in America beginning in the 1600's. As more Spaniards came to the America's, more horses also came. Horses would sometimes escape and return to their old ways of roaming free on the prairies. Because of this, the wild horse population began to grow again in the U.S. These horses were named "Mustangs", after the Spanish word mesteno, meaning a stray or free-running animal. Wild horses lived peacefully in the U.S. up until late in the 1900's.

Decline and Preservation

In the 19th century, the wild horse population exceeded 2 million. In 1972, the number of wild horses in the U.S. had decreased drastically to only about 17,000 horses. Around 1 million horses were used in World War I and the rest were being harvested to be used for pet food. The horses were unprotected from a decline in numbers until a lady named Velma Bronn Johnston stood up for them. Known as “Wild Horse Annie”, Velma saw the cruelty these horses were going through. In 1950, on her way to work, she witnessed a truck being stuffed with wild horses which were destined for a slaughterhouse for pet food. Underneath all the horses was a yearling, which had been trampled to death. This is when she realized that something must be done. She campaigned for protection of wild horses and in 1959 a law was put into place. Known as the Wild Horse Annie Act, this law made it illegal to use motorized vehicles to capture wild horses. By 1971, with horse populations still declining due to over-harvesting, another law was set into place to protect horses. The “Wild Free-Roaming Horses and Burros Act” made it illegal for anyone to kill wild horses or burros on federal lands. Only three years after the act was put into place, the population of wild horses had grown to 42,000 horses.

Population Growth Impacts

With the 1971 act, the number of wild horses is hard to manage. Herd sizes can double in only 4-5 years, and with harvesting now illegal and a low number of predators, it happens easily. The Bureau of Land Management, or BLM, reports, as of March 1, 2018, over 82,000 horses and burros graze on their public land with an additional 10,000 animals on the ground owned by the United States Forest Service. To keep the ecosystem in balance, and to keep rangelands healthy, the United States should only have around 27,000 wild horses and burros. This means

that there are around 65,000 extra wild horses and burros in the U.S. Having too many horses and burros on public rangelands can damage the ranges greatly.

Too many animals can lead to overgrazing of primary plant species. This can cause water pollution, the natural beauty of these range sites disappearing, and a decline in the health of the animals on the range. Overgrazing the range can lead to an unhealthy ecological site and even desertification of the range if the problem persists. The plants that are the most palatable will decrease and then die off first, since the animals enjoy eating them the most. Less palatable plants increase, and with continued over-grazing, invasive plants take their place. These invasive plants aren't only unhealthy for the animals, but also for the rangeland ecosystem. A troublesome invader on the rangelands occupied by wild horses is cheatgrass which is an annual, low production grass. The roots of cheatgrass are shallower than perennial grasses and other range plants which means excessive erosion. Since the roots aren't deep enough to hold the soil in place, wind and water erosion worsens. Once erosion starts, it is hard to stop. This is because erosion can cause the nutrients in the soil to wash away, making it hard for plants to get the necessary nutrients they need.

Reduced plant litter is another factor that increases erosion. Without the litter produced by the range plants, water runoff increases. Plant litter protects the soil surface which allows water to infiltrate through the soil instead of running off. A decrease in litter can also lead to less soil organic matter. Soil organic matter can break down into nutrients for plants. Decreased soil organic matter can lead to more plants dying because they're not obtaining the nutrients they need.

Not only are the ecological sites at risk when they are over grazed, but also the health of the animals on the site. The horses will eat whatever new growth they can find, which increases

the scarcity for food on the site. The weaker horses may not be able to find enough food to keep them healthy, which can lead to starvation and even death.

Rangeland Health

To keep rangelands healthy, a few management practices are used to control herd populations. First, the Bureau of Land Management determines the AML of their public rangelands. AML stands for the appropriate management level. This number represents the number of horses and burros a certain area can support while keeping the rangelands and the other animals on the rangeland healthy. If populations rise above the AML, they can then manage herd population.

One way of managing the herd is by using gathers. By using helicopters or bait traps, extra horses on the site can be rounded up and taken to holding facilities. Around 2,000 to 3,500 animals are allowed in each holding facility. In 2018, 9,749 horses and 1,733 burros were brought off the range sites to these facilities for a total of 11,472 animals. One such BLM handling facility is near Reno, Nevada.

While in the facilities, the once wild horses and burros can be adopted through the Adopt-a-Horse Foundation. Founded in 1976, the Adopt-a-Horse Foundation has allowed 200,000 horses and burros to be adopted and taken to a new home. The foundation charges 125 dollars per animal and makes a contract for the animal that is bought. The contract ensures that the new buyers will keep the animals for at least one year. This makes it hard for the buyer to afford to sell the animal since they will have more into the animal than they can get out of it. The animals that aren't adopted remain in the holding facilities for the remainder of their lives. This results in a tremendous cost to U.S. taxpayers for holding these horses due to feed and care for their health.

Herds are also managed using fertility control. This involves injecting mares with vaccines so that they aren't fertile for a short amount of time. There are two kinds that are used. Porcine Zona Pellucida, or PZP, is one kind. PZP lasts one year and has a 90 percent reduction rate, but has to be ground darted throughout the whole range. PZP-22 is the other vaccine. This vaccine has to be hand injected. PZP-22 lasts 1-2 years but only has a 30-75 percent reduction rate, which means one fourth of the animals injected still get pregnant.

Colorado has four Herd Management Areas, or HMAs, that span over about 400,000 acres and can have an AML of 812 combined. Herd Management Areas are areas of ground which BLM or other conservation groups own. This is the ground that wild horses and burros reside on. The Little Book Cliffs range, Piceance-East Douglas Area, South Wash Basin, and the Spring Creek Basin are all HMAs that are located in Colorado.

Conclusion

Wild horses are still around today, but in much smaller more controlled numbers than historically. Protection acts have been set into place to protect these historic animals and they have millions of acres, just in the U.S., to seek protection. The BLM owns and manages most of the ground that the horses live on and have to use certain herd management techniques to keep the AML of the area. The sites for these feral horses has to be properly managed to maintain a healthy ecosystem, as well as a healthy rangeland, while protecting and maintaining healthy wild horses.

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