

YELLOWSTONE NATIONAL PARK BISON

Committee on Natural Resources

Subcommittee on National Parks, Forests & Public Lands

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My name is Jim Hagenbarth. I am thankful to the Committee for the opportunity to testify on behalf of my family and the Montana Stockgrowers Association, one of the oldest livestock associations in the United States and offer you insight into the issues that involve the “Yellowstone National Park Bison”. My brother, son and I own and manage a livestock operation in southwestern Montana and southeastern Idaho. This business was put together from scratch in the late 1930’s by my Father after he completed the dispersal of my Grandfather’s failed livestock holdings in the same area in the early 1930’s. Our family’s history in the Greater Yellowstone Area (GYA) began in the 1860’s in the goldfields of southwestern Montana and southeastern Idaho. As the gold disappeared, development of a livestock enterprise began in the early 1880’s and we still manage portions of the same land resource. In 1904 my grandfather, Frank Hagenbarth, had a survey made of the Targhee Forest and sponsored this area as a National Forest to President Theodore Roosevelt and the President promptly set aside the Targhee as a National Forest. The majority of the Targhee lies in the GYA and borders the west boundary of Yellowstone Park. We take great personal pride in the land resource that we manage and hopefully my testimony will provide insight to this committee on facilitating responsible management of the resources in this area under their control.

The geographic location of our livestock operation requires movement of cattle across state lines. This movement subjects our herd to the animal health requirements of both Montana and Idaho and at times the federal regulatory authority of the United States Department of Agriculture’s Animal Plant Health Inspection Service (APHIS), depending upon the livestock disease status of both states. I have been actively involved in the development of these regulations due to their potential impact on our business. This participation placed me on the Montana Board of Livestock from 1985 to 1997. During this time the brucellosis exposed bison from Yellowstone Park were migrating into Montana during the winter and the foundation was being laid for the development of the Interagency Bison Management Plan (IBMP). Due to the devastating impacts brucellosis exposure could have on our operation and interstate movement of our livestock, I studied every aspect of this disease and it’s far reaching implications. The information I have assimilated over the years and the experiences of being involved are the sources from which my testimony is drawn.

Yellowstone National Park (YNP) was established in 1872 and wide-spread hunting occurred until 1883. The earliest population estimates were 600 bison in 1880 and 300 in 1892. I am not

sure if bison were native to the Park or if these remnant populations were forced there by hunting pressure on the plains. In 1902 Congress appropriated funds to save YNP bison from extermination. Fewer than 50 wild bison remained in the Park and the herd was augmented with 21 bison from semi-domesticated herds in Montana and Texas. These introduced bison were maintained in enclosures initially at Mammoth and then at the Buffalo Ranch in the Lamar Valley until 1952. Periodically there were some wild calves added to the ranch herd and some ranch herd bison released to the wild. In 1917 tests indicated brucellosis infection in bison at the Lamar Buffalo Ranch. From 1925-1967 bison management emphasized restoring bison to previous ranges in the park and population control with a range-based carrying capacity of 425 bison. Periodic culling occurred either through capture and shipment or shooting. During this period more than 9000 bison were removed by management actions. The largest population of 1,477 head occurred in 1954. In 1967 YNP began a policy of natural regulation for bison and the actual count was 397. From 1967 until the IBMP was finalized in December of 2000 a series of federal, state and joint management plans were used to control the winter migration of brucellosis exposed bison from the Park. Some of the removal was accomplished through hunts authorized by the Montana legislature. In 1985 Montana's cattle herd became brucellosis free. In 1991 the Fund for Animals asked the U.S. District Court for injunctive relief to stop the harvesting of bison outside park boundaries. Injunctive relief was denied. In 1994 several states required additional testing requirements for exported Montana cattle due to the disease risk of disease exposed and seropositive bison outside YNP. In January of 1995 Montana filed a complaint in the U.S. District Court against the federal government, related to Department of Interior policies that caused diseased and diseased-exposed bison to enter into Montana and Department of Agriculture policies that might revoke Montana's brucellosis-free certification based on the mere presence of diseased wild bison in the State. In November of 1995 the U.S. District Court accepted the settlement agreement submitted by Montana, the federal government and the Royal Teton Ranch. Among the provisions of the settlement was a schedule for completion of a long-term management plan and Environmental Impact Statement (EIS); and, concurrence that bison management, according to the provisions of the settlement, is consistent with Montana's brucellosis-free status. In December of 2000 the IBMP was completed and dictates how bison are to be handled as they leave YNP. The plan manages the risk of brucellosis transmission from bison to cattle through area-specific strategies to maintain temporal and spatial separation between bison and cattle. This plan includes vaccination protocols appropriate for both bison and cattle. This plan is very specific as to areas (zones) where specific numbers of bison can be outside the park. This plan is adaptive and changes can be made where sound scientific research indicates that the risk of transmission is acceptable to the Montana State Veterinarian in consultation with APHIS. Provisions are made in this plan that outlines the consequences of parties not living up to their commitments. In March of 2006 the Western States Livestock Health Association (an association of state veterinarians) passed a resolution reminding the GYA states of Idaho, Montana, and Wyoming that temporal and spatial separation must be maintained between infected elk/bison and cattle. Future communications to the states clarified that compliance with the IBMP will allow the states to retain their status, but failure to do so may require the western states to consider additional requirements and sanctions upon the GYA states. In the last couple of years Wyoming and Idaho have had cattle exposed and infected

with brucellosis through contact with infected elk, not bison. Both states lost their brucellosis free status and had to go through testing procedures and re-certification by APHIS. Wyoming has since regained brucellosis free status and Idaho is under review.

When eradicating brucellosis from YNP bison was being discussed in the early 1980's, it was the general consensus that if the bison became disease free, brucellosis would not sustain itself in the wild elk herds. This does not seem to be the case now. Eighty percent of the elk population in Wyoming is dependent upon winter feed grounds. These elk are being fed to either give them subsistence because of lack of native winter range to sustain the current numbers or keep the elk from using livestock feed lines and exposing cattle to brucellosis. There are twenty plus feed grounds in Wyoming and the incidence of disease vary between areas, but it can be as high as twenty percent seropositivity. Congregating elk on winter feed grounds exposes large numbers of animals to disease due to abortions of infected females. The aborted fetus and birthing fluids and membranes pose the greatest risk of infection with this disease. Some feeding of elk in southeastern Idaho occurs because of loss of winter range to development, elk populations wintering in non traditional areas, and strategic feeding to keep separation between elk and livestock. Feeding of elk by any entity other than the Fish and Game department is illegal. In Montana feeding of wildlife is illegal. Due to displacement of some elk by development and large numbers, wintering herds are growing and concentrating on winter ranges in southwestern Montana valleys. This is causing concern because the concentration of elk during this period exposes more numbers of the herd to disease. Predation and harassment of elk by wolves has impact on the behavior of elk. In Wyoming wolves are moving elk off feed grounds into nontraditional poor winter ranges or close to cattle feed lines. In Montana wolves are concentrating elk into large herds and often close to the valley floors where livestock reside. Management of these herds is becoming more difficult and brucellosis will sustain itself in these populations, regardless of the brucellosis in the bison. Consequently, brucellosis eradication in the GYA includes YNP bison and many of the elk herds in the GYA states that are exposed. The brucellosis infection of cattle from elk in Wyoming and Idaho is testimony that elk are a real threat and need to be dealt with. The fact that cattle have not been infected by infected park bison relates to the efficacy of the IBMP.

Brucellosis is an infectious and contagious intracellular parasitic bacterial disease of animals and humans. It was first recognized in the Mediterranean area and was at first thought to be an exotic form of typhoid fever. In 1886 a British surgeon, Sir David Bruce, first isolated the bacteria from the spleen of a human fatal case. In 1887 Bernard Bangs, a Danish physician, found cattle to be reservoirs of undulant fever which was causing abortion in dairy cattle. Brucellosis was undoubtedly introduced to America via livestock brought by the early explorers and settlements. *Brucella abortus*, the species most commonly associated with brucellosis in cattle in the U.S., causes abortion, dead or weak calves, reduced milk yield, lower weaning weight, and lowered fertility. In humans, *Brucella abortus* causes undulant fever, a disease characterized by intermittent fever, headaches, fatigue, joint and bone pain, psychotic disturbances and other symptoms. It is contracted through exposure to infected animals and their products. Livestock and slaughter industry workers and consumers of non pasteurized milk products have typically

been at highest risk of contracting the disease. Cases have decreased as brucellosis eradication in domestic livestock has progressed and dairy products were pasteurized. Two of the last cases in Montana involved hunters that contracted brucellosis from dressing cow elk during a late season elk hunt northwest of YNP in the Ennis, Montana area.

Since the cooperative State-Federal program was begun in 1951, approximately \$3.5 billion in State, Federal and Industry funds have been spent on brucellosis eradication. Using surveillance, vaccination, quarantine, herd management, and herd depopulation with indemnity payment, the program has been successful in reducing the number of known infected herds from 124,000 in 1957 to 0 at this time. Texas and Idaho are in the process of applying to APHIS for reinstatement of their class free status classification. After 50 plus years of experience in eradicating this disease in cattle and the availability of a vaccine that is only 70% efficacious, APHIS and producers have recognized that whole herd eradication is the preferred method for domestic livestock. The nature of the disease and the poor immune response of its host to vaccination render mitigation through risk management a dangerous alternative to depopulation. Latent infections have often caused major setbacks in eradication efforts. Most producers who have not dealt directly with eradication efforts and practically all other publics do not understand the tenacity displayed by APHIS and state veterinarians when asked to allow risk management strategies other than depopulation and total eradication. Only with the development of more efficacious vaccines that can be delivered orally or injected, will brucellosis be eradicated from the elk and bison that are infected in the GYA.

In a brucellosis class free state, contracting brucellosis in any domestic livestock herd will automatically require depopulation. If two herds are found infected in a state, the state loses its class free status and must meet APHIS testing protocols of large populations of test eligible animals to regain their status, not to mention the testing of all test eligible cattle that are exported out of state. It took 30 years of testing and 33 million dollars for Montana to achieve its brucellosis free status in 1985. In the early 1990's a wildlife outbreak in Wyoming cost the Parker Ranch 1.1 million dollars for loss of cattle, out-of-pocket costs and loss of future earnings. Since 1970 our business has spent over 260 thousand dollars vaccinating and testing for brucellosis and we have never had the disease. The Market Cattle Identification (MCI) trace back program requires every sexually intact female over two years of age that is processed at a federally inspected packing plant to be tested. This program is an excellent surveillance tool to identify any outbreak of brucellosis that may occur nationally. APHIS and the livestock industry have expended millions of dollars and have exerted tremendous effort while enduring much pain and agony eradicating brucellosis from our domestic cattle herds. The livestock producers in the GYA that are being exposed to infected elk and to YNP bison, if the IBMP is not adhered to, are very apprehensive that we can withstand the challenge that brucellosis infected wildlife presents. We need help from the scientific and research community to develop more efficacious vaccines that will eradicate this disease from the wildlife in the GYA and effectively protect our domestic livestock herds. There must be population control through hunting and or other methods (birth control) if brucellosis is to be contained and eventually eradicated from the elk in the GYA and the bison in YNP. For the Secretary of the Interior to not allow population control

of bison in YNP and the Park Service to use a natural regulation policy to hide behind in managing a bison herd that is infected with an exotic zoonotic disease that serves as the host for infection of elk and livestock in the GYA, is irresponsible and unimaginable. By not accepting their responsibility of population and disease management, the Department of Interior (DOI) and YNP are sentencing the YNP bison to the option of starving to death in the park or facing harassment, testing, and slaughter because they carry a disease that threatens other wildlife, livestock and the integrity of the landscape in the GYA. Due to geography and how the bison migrate, the current and past Governors of Montana, the Montana Stockgrowers Association, the Montana Board of Livestock, and APHIS have taken a stand against this disease and have gotten a black eye because we recognize the impacts this disease can have. If we cannot eradicate this disease, the livestock production from the GYA states will be discounted by those states and countries we export to, severely impacting our industry. This could also become a trade issue and used as leverage against us in the international market place for our healthy and wholesome cattle and beef products.

The landscape in the GYA is changing. Urban America has fallen in love with the open spaces of the rural west. The ranching and farming community accepted the challenge of the Homestead Act and other legislation that allowed us to settle the west and develop the infrastructure that supports what we now have. This job must have been well done because everyone is seeking the open space we nurtured. It is quickly becoming apparent that the livestock industry's value to society is the preservation of open space, rather than the production of food and fiber. The private land that was homesteaded has some of the best water and soils and provides some of the most productive wildlife habitat in the GYA. The cumulative effects of the abuse of the Endangered Species Act (ESA) to change land use, bureaucratic nightmares involving government programs along with air and water quality laws, planning and zoning, estate taxes and just the challenge of managing a private business in America today is about to take its toll. The inability of the current players involved to find solutions to the disease and population issues in the bison and elk in the GYA may very well lead to the demise of the ranching community in the GYA. One must recognize that the last crop harvested by a rancher in the GYA will be a subdivision. This development in the GYA will fragment the landscape and destroy the wildlife habitat that makes this area important to society today and tomorrow. We must not venture down this path. Just visit Jackson Hole, Wyoming, or the Teton Basin in Idaho or the Madison Valley in Montana and you will get a feeling for what is coming if we lose the working ranch community.

I have served on three consensus groups in the last fifteen years dealing with resource and watershed issues. In these groups all interests are represented and their concerns are understood. In every instance we have been able to find a solution that enhances the resource or species of concern and satisfies all interests. This process is time consuming and difficult, but once one begins listening to and trusting each other, positive solutions are produced. In talking with the scientific community, great strides are being made in disease control and tools are becoming available that will help us achieve brucellosis eradication the GYA elk and bison herds. We need all the interested parties to join together to design a long term plan with solid intermittent steps

to achieve the eradication goal. The stakes are too high to proceed down the path we are going. The loss of the livestock on our western ranges is insignificant compared to the loss of the men and women who own and manage these ranches and have the knowledge, fortitude and love of the land to keep it productive, sustainable and open. If we lose this culture, the GYA and its wildlife habitat and openness will be fragmented beyond recognition. The bison has become a symbol of the American west. How appropriate it would be to start with the YNP Bison in finding solutions that will stop this disease that is threatening to take all that we have worked for. This can be done and must be done and we need the help of our new neighbors and friends that have come west to seek the same values and opportunities that lured our predecessors out of the nest. It is time to go to work.