



Brucellosis and Elk Clash

The issue of wildlife health and management and impacts from the possible transmission of the disease brucellosis to cattle near Yellowstone National Park has been debated for more than two decades. Recent confirmations of brucellosis in cattle in the Greater Yellowstone Area (GYA), in Wyoming and Montana, have new meaning to area native wildlife and the public's interest in wildlife.

Brucellosis, a disease in livestock and wildlife causing calves to be prematurely aborted, was contracted in GYA wildlife from cattle nearly 100 years ago.

Most recently and specific to Montana, in May 2008, a heifer in a small herd of cattle outside of Pray, MT just north of Yellowstone National Park tested positive for brucellosis. This second case of brucellosis in livestock inside a year means that Montana will lose its federal brucellosis-free status and that it will be more difficult for Montana cattle producers from across the state to market their beef. This occurrence is prompting some livestock producers to demand "radical" plans that could change public wildlife management in the GYA and impact thousands of wild, free-ranging animals, primarily elk.

Sportsmen, sportswomen, biologists and wildlife officials have long recognized some brucellosis prevalence in Yellowstone Park area wild elk, bison, moose, bear and other wildlife. Brucellosis in elk and bison has not proven to be a serious issue in regards to wildlife herd health, reproduction rates, or individual, overall animal health. In fact, approximately 95,000 elk thrive in the tri-state, GYA - Yellowstone Park area including Montana, Idaho, and Wyoming.

Pressured by the U.S. Department of Agriculture, Animal and Plant Inspection Service (APHIS) attempting to eradicate brucellosis, the focus in the GYA for the past decade has been on wild bison that migrate from the Park into Montana. The draconian interagency bison management plan (IBMP) including the hazing, capture, test and the slaughter of infected bison, has resulted in the removal of more than 6,000 wild bison. After eight years since Plan implementation, the core goals to eliminate brucellosis in the GYA and preserve the brucellosis free classification for Montana livestock producers has not been accomplished. Now, following the new confirmation of the disease in a small cattle herd that has not experienced bison co-mingling for about two years, the issue over the possible transmission of the disease from elk to cattle has intensified. Some livestock groups want to move elk management in the direction of the failed bison management policies.

It didn't take long for the Montana Stockgrowers Association and the Montana Farm Bureau to quietly release a "radical" draft plan that would require ALL elk leaving the National Park to be vaccinated, captured, tested, ear tagged, radio tagged and tracked, and destroyed if found disease positive. Further, the proposal suggested that all wild bison cows outside the Park be captured and tested and those found to be negative for brucellosis should be **STERILIZED**. These organizations are only two of the many livestock interest groups in Montana. Other groups are still evaluating their positions.

Recently, the Montana Department of Livestock, State Veterinarian released the DNA testing results of the infected cow and concluded that the "...genotyping, from the brucellosis-infected cow found in Paradise Valley earlier this year have identified elk as the most likely source..." And yet, report details say that the genotyping "appears to be similar to strains recovered from bison and elk." However, the state vet went on to suggest that since bison have not been confirmed as calving in the same proximity of the infected heifer and elk are known to frequent the area – elk, must therefore be the disease vector.

Elk, Brucellosis and the Greater Yellowstone Area:

Elk migrate. They seasonally move back and forth from Wyoming, Idaho and Montana in and out of the Park. FWP is conducting GYA herd and animal migration research, yet to be completed, and there is some early data that suggests that a number of animals move from the southern Yellowstone-Wyoming border all the way into Montana. Like the sun coming up in the morning, or caddis hatching in the evening, elk are just doing what they've done for the last millennia as wild creatures.

What has been changing is the landscape where these elk thrive. The Paradise, Madison and Gallatin valleys are changing from pastoral, open landscapes to areas with ranchettes and subdivisions smack in the middle of historical elk winter ranges and migration corridors. Some large, traditional farm and ranch operations are being sold to a new breed of landowner who doesn't understand

the dynamics of public management of wildlife. Others see elk as a commodity; commercial hunting ventures precluding the everyday hunting public are resulting in herd management problems. These changes on the ground have caused some significant difficulties with animal distribution, concentrations, and managing specific elk herds. These changes and the competition between elk and cattle for the same ranges are also leading some organizations to call for increased authority of the Department of Livestock over elk, transferable tags for landowners, wildlife privatization venues, and even private hunting license distribution type proposals like Colorado. These privatization schemes that diminish public values and the management of wildlife in the public interest have failed in other states and have resulted in many, unanticipated new problems. They have been resisted and fended off with vigor by Montana sportsmen as huge departures from the successful North American Fish and Wildlife Conservation Model that has restored and sustained wildlife over the past 100 years.

Clearly something needs to be done relative to the distribution of herds and animal concentrations that perpetuate disease. Many ranches in the GYA that harbor or refuge elk have basically become de facto feedlots. Scientific evidence recognizes the dangers of animal concentrations, the higher risks and especially how feed grounds can increase disease prevalence rates. In 2004, it has been strongly suggested that Wyoming lost its federal brucellosis-free status because of hay-fed elk that concentrate in small areas allowing the disease to circulate within the herd and then transmitted the disease to cattle as they roamed away from the agency maintained feed grounds. A 2005 APHIS report said that brucellosis infection rates on feed grounds run as high as 50 to 80 percent. Other, more recent reports suggest 28 to 50 percent infection rates depending on the location of the feed ground. Compare these rates with the estimated infection rates of 1 to 3 percent in wild, free-ranging elk in Montana around Yellowstone Park.

Logically it seems that significantly increasing risk management measures and developing a more efficient, disease preventive drug for cattle should be the highest action priorities. There are far fewer cattle that can be easily vaccinated and may be affected by the disease than wildlife, and it would be far less difficult than the impractical, intrusive, and impossible task of inoculating thousands of free-roaming wildlife. The problem here is that the current brucellosis vaccine for cattle is only about 65 percent effective. In a recent Associate Press story in the Billings Gazette, Terry Cleveland, the director of the Wyoming Game and Fish Department is reported as saying, "It's my personal belief that the ultimate solution for the livestock industry would be researching and developing a vaccine that's 100 percent effective in cattle." He said that he believes it is currently impossible to purge brucellosis from wild bison and elk in the GYA but that reducing opportunities for contact between elk and livestock – risk management - during the four months when the disease may be transmitted, seems to be a far more reasonable strategy. Jim Magagna, executive vice president of the Wyoming Stock Growers Association in the same article agreed that eradicating the disease from elk and bison in the GYA is not currently possible.

At the same time, according to Kurt Alt, FWP, Region 3, Wildlife Manager, "While the goal in the U.S. is to eradicate brucellosis, until Wyoming closes their feedgrounds our only and best tool is risk management in Montana." Alt went on to say that, "Although Yellowstone Park bison present a reservoir of brucellosis for elk, it is most likely that Wyoming elk present an even higher – more significant brucellosis reservoir, based on an estimated three to four percent exchange rate between elk in Montana and Wyoming in the Yellowstone system."

Many scientists have made it clear that while we would all like to see brucellosis eradicated, it is a pipe dream considering the tools available and the Wyoming feedgrounds and that managing brucellosis in cattle is far more plausible. Addressing how elk are distributed across the GYA landscape, working to eliminate the intentional harboring of game and expanding public hunting opportunities to manage elk herd populations and distribution, a review of when cattle are turned-out on summer ranges and when elk utilize those same ranges would diminish the risk of transmission. These approaches are far more in-line with the North American wildlife management model, and would preserve our public wildlife heritage. MWF believes focusing on managing the risk to cattle is more financially prudent, practical, and would result in some immediate positive outcomes

It cannot be forgotten that we are talking about free-ranging, public wildlife - treating them as if they are livestock through intense, intrusive measures or as if they are secondary to livestock, MWF believes, is backward thinking.

MWF stands firm in its support of elk management based in science, the North American Model, and the democratic allocation of licenses. We also understand that solutions need to be found to help landowners deal with a set of archaic rules foisted on them by an out of touch federal agency who has not updated their rules significantly since the Model A.

While MWF has been actively engaged in the brucellosis issue for many years attempting to work within the framework of the IBMP, working directly with the State Veterinarian, FWP, legislators, and the Governor's office, we believe that many new approaches are needed. The antiquated federal regulations need to be updated. The USDA first crafted policies with the inception of the Cooperative State-Federal Brucellosis Program in 1934 when there was a risk from the human form of brucellosis - undulant fever.

Is brucellosis a human health risk today? Do we in fact need to eradicate brucellosis in the GYA? Does the brucellosis classification for livestock producers work or is it needed whereby thousands of ranchers are penalized for a small localized disease confirmation? These are just a few unanswered questions that need to be addressed.

Recently, state veterinarian Dr. Zaluski was directed by the Board of Livestock to set up a joint task force with Montana Fish, Wildlife and Parks, livestock producers and sportsmen to “help design both short and long term wildlife disease management policies.” Equal representation of all stakeholders from across the state is critical. MWF is guarded about this approach waiting to see who will be appointed and what direction the group will take. MWF will submit nominations and we are committed to finding a seat at the table to ensure that the voice of sportsmen and sportswomen is loud and clear – “wildlife is a precious resource and any management recommendation must consider elk and bison as public resources, and that the North American Model must be upheld.”

The value of free-ranging, healthy wildlife populations and wildlife sustaining habitats have long been recognized as crucial to the spirit of the West, our quality of life and culture and economy. It is critical that these principles and values continue to be applied as the management of wildlife evolves to new circumstances, and changing attitudes in the areas around Yellowstone National Park and the GYA.