The Mountain Bison of Yellowstone: A Breed Apart By Bob Jackson April 24, 2008

In 1893, the geologist, Arnold Hague provided the following description of Yellowstone's original bison:

"The Park buffalo may all be classed under the head of mountain buffalo and even in this elevated region they live for the greater part of the year in the timber . . . most unusual, save in midwinter, to find them in open valley or on the treeless mountain slope. They haunt the most inaccessible and out-of-the-way places, . . . living in open glades and pastures, the oases of the dense forest, . . . the rapidity of their disappearance on being alarmed. It is surprising how few buffalo have been seen in midsummer, even by those most familiar with their haunts and habits. They wander about in small bands. . . "

In the summer of 1972 while packing supplies to a fireguard stationed in a remote lookout, high above central Yellowstone's Pelican Valley, I saw a most amazing sight. A small herd of buffalo charged away full speed ahead even though I was over a quarter mile away. They had been in trees, not meadows. Then when they ran across a small meadow to an even thicker forest, I knew there was something different about these animals. They did not act like the buffalo I saw at the lower elevations, the mellow bison Yellowstone's tourists see while traveling through its roadside valleys. The animals I saw ran and they ran fast.

With my background, my first conclusion was these animals were getting poached. This preliminary assessment was wrong, however. These buffalo were behaving the way they did because that is what this particular bison had done for thousands of years. These were Mountain Bison and they were holdovers from an animal everyone thought was gone from the face of this planet.

The Mountain Bison are still there today, alive and kicking the same as Arnold Hague saw and described more than a century ago.

Compared to the introduced Plains Bison the tourists see, these Mountain Bison are small in numbers, totaling no more than 300 animals at any given time. They winter in the lower elevations of Pelican Valley and spend summers high up on the Mirror Plateau. What I saw in these high mountains from the back of my horse in 1972 is the same animal I saw and studied for the 30 years while patrolling the backcountry of Yellowstone. It is the Pelican-Mirror Plateau Mountain Bison herd, named as such by the Park but not identified as being the unique self-contained herd they are.

Why does the Park give no special recognition to the Mountain Bison? First, because most all herd science looks only to the larger population density for answers. They are limited to all

encompassing population studies. The park biologists do not know that bison consists of families and extended families the same as elephants, and that the combined social structure of these smaller groups makes up the larger herds they study. Thus, biologists do not see the uniqueness of the herd in Pelican Valley even when this uniqueness is slapping them in the face.

Second, with advances in gene and DNA technology, science has gone whole hog into looking at living, breathing and snorting animal life as simply a study in hard science. Behavioral or applied science is getting pushed to the side of the road when "proof" of ancestor-ship dominates. The problem is, without seeing how animals are different from one another in the first place, biologists are not inquiring beyond for any other criteria than broad blanket DNA and genetic makeup.

Biologists say this Pelican herd is the same as the rest of Yellowstone's bison. They say it has been polluted with Plains Bison genes so it has to be a part of a larger herd. These same biologists say accounts show this herd intermingling with the Lamar's Plains bison herds on several occasions. Thus, it is argued, these herds must be one and the same.

This "scientific" approach would have us believe the Navajo, the Cheyenne and the Blackfoot tribes are extinct because their genetics have co-mingled with European blood. Common sense tells us their culture has remained, so therefore they, as a distinct group, have remained. Why should we think differently of any other population, be it human or buffalo?

But for the moment, let's put aside whether the Mountain Bison herd is a distinct population. Let's look at behavior. This bison herd I speak of does not migrate out of its home within the depths of Yellowstone. It is the ONLY herd that does not go out of Yellowstone to get mixed up into all the brucellosis issues. This fact alone should have at least switched on a low wattage light bulb in the brains of those in Yellowstone trying to figure out how to keep their bison from being slaughtered on its boundaries.

Additionally, by lumping this bison into a larger genetic "population density" Yellowstone biologists are forgetting this herd has stayed separate and intact for thousands of years. It was the only wild herd remaining (23 animals) in the United States after the slaughter of the 1800's. How could this herd not be of note to science when it reestablished itself to an ecological sustainable 200-300 animals in very short order, then remained at these numbers for 80 years?

Why would biologists not think of this herd as worthy of some very serious study as a comparison to its counterpart, the *introduced* Plains Bison herds? This is a herd that which has increased from a few individuals to now one of thousands? These Plains Bison are the animals now leaving the Park to get shot, leaving their Mountain Bison brethren in splendid isolation.

Even Yellowstone admits that the Woods Bison of Canada are unique, even though a major trail used by Plains Bison goes through the heart of the Woods Bison home. The Mountain Buffalo acts a lot more like the Woods Bison than the Plains Bison. Some historians even use the names interchangeably or hyphenate to include both names.

To put the "gene" issue in perspective, I say there is not a single population out there, human or animal, that does not seek out differences within that species to give that population added vigor and vitality. It is why a certain girl or guy from the high school in the next town is more exciting than the guys and girls in their own. It would have been going against all biological principles to think this isolated Mountain Bison herd would not have sought out "new blood".

That, however, does not mean this herd lost its identity. If biologists understood culture as part of animal life then they would know this need trumps the mix and match of "population densities".

One has to ask why these supposedly efficient Mountain Bison did not out-compete the Plains Bison for the turf they once had. The answer lies in the identifying descriptions given by early observers. These Mountain Bison were, and remain, very wary of humans:

- Yellowstone Superintendent Norris (1880) described them as, "*most keen of scent and difficult of approach of all mountain animals*"; and
- Nowlin (1912) of the Biological Survey said, "I have never seen buffaloes on the range so wary and difficult to locate as the wild ones in the Yellowstone Park."

Yellowstone, with all its geysers and other wonders, attracted a lot of tourists and the Mountain Bison could not tolerate them. Except for the herds deep within its bowls, Yellowstone's original bison lost their identity. Wherever the stage coach roads went the Mountain Bison disappeared.

In 1972 in Yellowstone's backcountry, I saw what these early observers saw. These same bison ran lickity-split away from me as they have done for thousands of years

Unfortunately, the Mountain Bison today are not secure in their sanctuary. In fact they are in dire danger of losing their existence. There isn't much time.

The Mountain Bison range of modern times has already shrunk in half. In the mid 1980's, they left half their range, the upper Lamar river drainage, never to return. It was attributed to "population shift" but in reality these animals could not tolerate a generation of newly adventuresome recreational tourists who penetrated into Yellowstone's backcountry.

The same demise would have occurred in Pelican Valley, an area previously so remote these 23 animals escaped poacher Billy Howell's guns, except they got unexpected help. Their summer range on the Mirror Plateau was placed off limits in the 1980's to most users because of grizzly bear needs.

But now, grizzly concerns have diminished and the pressures of civilization are closing in on this last remaining herd –

• Yellowstone in all its ignorance plunked horse user camps right in the middle of their last summer home;

- Outfitters, bringing in lots of paying sightseers, are scouring the country looking for these elusive animals. Clients love the sounds of mother and baby bison crashing through the woods and the resultant rare picture is coveted; and
- Day use is unlimited and as outfitting pressures demand more and more sight seeing trips they ride more and more into the haunts of these Mountain Bison.

These bison can not tolerate it. The effect and end result would be similar to constructing a Disney World in the heart of an aboriginal village. Soon the culture of the village would be gone. If this happens, Yellowstone biologists will finally have it right – all of its bison will be reduced to one or two interrelated "population densities".

For many, bison remind us of our nation's beginnings. This wild pure herd represents an untarnished culture, a reminder of an interactive vitality needing preservation. For a Park besieged by the brucellosis issue and other outside factors that threaten everything natural in Yellowstone, this herd holds the answers to what its wild lands confine and inspire. We can not afford to lose this primordial herd.

At the very least, this herd needs to be studied (but from afar) to see how herd animals come into balance with their environment. They need to be studied to show how these separate contained herds hold the key to managing diseases such as brucellosis.

As William Hornaday, the founder of the American Bison Society and the man recognized as most instrumental in saving the bison, said in his book, "The Extermination of the American Bison" (1889) -

"In absence of facts based on personal observations, I may be permitted to advance the opinion in regard to the wood buffalo. There is some reason for the belief that certain changes of form may have taken place in the buffaloes that have taken up a permanent residence in rugged and precipitous mountainous regions. Indeed it is hardly possible to understand how such a radical change in the habitat of an animal could fail, through successive generations, to effect certain changes in the animal itself. It seems to me that the changes which would take place in a band of plains buffaloes transferred to a permanent mountain habitat can be forecast with a marked degree of certainty. The changes that take place under such conditions in cattle, swine and goats are well known, and similar causes would certainly produce similar results in the buffalo."

Yellowstone's Mountain Bison of Pelican Valley need to be recognized for what they are -a unique herd that is worth saving.