

TWENTY-FIVE YEARS STUDYING BISON BEHAVIOR – IMPLICATIONS FOR RANCHERS & PEOPLE

1. INTRODUCTION

Animal behavior findings, whether sanctioned by the academic community or presented by lay observers, are based on and limited to, the experiences, biases and backgrounds of that individual.

For example, a researcher who is a more solitary type of individual may assume a certain species contains no leaders because each day, different animals are to the front as the herd grazes along. A totally different finding can be obtained from a “family” oriented observer. They can look to their own family and remember all the times their kids ran ahead of them to the store. As long as the kids picked the right store, there was no need for him or his wife to exhibit leadership. That researcher can look beyond everyday grazing behavior to search for more relevant indicators of leadership.

He is still not home free with solutions, though, if he uses solely human characteristics to define limits and behavior on another separate entity – another species. That person has to first have respect for the animal(s) he is studying before he can assimilate information and come to conclusions on the behavior of that animal.

The animal I report on is the buffalo. This report is very simplistic. The complexity of this animal is of such a high nature that many of the Native American tribes that depended on it used its characteristics to structure their own lives.

I do not profess to think that everything I write down is concrete fact. I have spent many years in Yellowstone back country – sometimes not coming out to the front country for three to five months. Not all of this time was spent in the midst of buffalo, but all of it was spent surrounded by wildlife.

I also have raised bison for over 20 years. The advantage (if one can call additional stress on animals an advantage) I see on raising captive herds with social order (natural instincts still mostly intact) is that we can accelerate

observations of animal behavior by introducing artificial inputs such as hay in the Winter and changing of pastures in the Summer.

If one wonders what all this has to do with cattle, just remember cattle and bison are such close relatives that they can interbreed and have first generation fertile female offspring!!

Lastly, my purpose is not to convert cattle raisers to bison or to “bisonize” cattle. My purpose is to stimulate thought. If any of this you can incorporate into your own operation, fine. If you can see net energy gain – and thus more dollars in your bank account, fine. Good luck to you all.

-- Robert L. Jackson

2. **BENEFITS OF SOCIAL GROUPINGS**

(a) **Division of Labor**

For example, nurseries are formed so most mothers can graze more effectively.

(b) **Dispersal Grazing**

One cannot have truly nomadic animals like bison without the confidence generated from a complex organization. It has to rival that of a large military crusade going into strange territory. For example, in Thorofare, the distance from our cabin that horses graze is directly proportionate to the numbers and familiarity of the horses involved. If we take out, say three out of five stock, the two remaining revert to grazing close to the cabin. If we put in three new horses, all five stay around the cabin.

(c) **Young Learn From the Old**

For example, in our private bison herd, the calves, out of natural instinct, want to run from us. Their tame mothers show them by not running that we can be trusted.

(d) **The Old Delegate Approval and Status To Selected Young**

For example, in Thorofare, I have had the same “main” horse for 15 years. For ten of those years, he was the “top gun” horse of the park’s 80-horse stable. It didn’t matter if he was fourth in line going down the trail. He still looked around and had the alertness of the one in the lead. Other horses preferred my horse was in the lead. With age gaining on him, he saw another horse (Sharon’s) that had the energy and spirit that he trusted. Sharon’s horse took over the job of chasing moose away from the salt. After each chase, he’d go back to my horse, touch noses and seemingly say, “Did I do good”? This year, at 20 years of age, Blondie insists that Aziim (eight years old) take the lead going down the trail. Blondie is still the top horse of our bunch of five, but he’s passing the torch on.

(e) **A Purpose To Live Is Achieved**

- When an animal has the drive and will to live, it will find a way to live.
- Whether one calls it emotion or instinct, the distress call of a calf brings the entire herd a running. In animals of social order, the complexity of 100’s more distinct instincts (emotions) are called into play. I feel that is what facilitates *will to live*.

(f) **Less Stress**

Fewer uncertainties of life means more time, whether human or animal, for productivity.

3. **WHAT I WOULD LOOK FOR IN STARTING A HERD OF BISON OR CATTLE**

(a) **From Herds With No More Than Masses of Individuals**

- Smart Ones: Those that can open a gate. Those that come first when called.
- Animals With a Will To Live: Those that stand by a gate wanting out of cramped quarters or overgrazed pastures.

- Animals With Any Sign of Pecking Order: Those that insist on space at the feed bunks.
- Cows That Go Off By Themselves to Calve
- Cows That Actively Protect Their Calves

(b) **From Herds With Some Form of Pecking Order**

- Same as above, but it's easier to pick out "will to live" traits.

(c) **From Herds With Social Order**

- Selection is by groups themselves. Human input is recognizing animals that don't fit in.
- Out of respect to the owner and to the herd, I would not select lead cows. I'd look for animals "apprenticing" for a leadership and offspring of those lead cows.
- Choose from herds that have the longest-standing social order. Self-selection for generations would be hard to beat if I had any options.

4. **STARTING FAMILY GROUPINGS FROM WITHIN ONE'S OWN HERD**

- (a) If weaning and age segregation has previously been practiced, a fresh start with selected females would probably be in order.
- (b) If my operation included keeping back 10% replacement females, I'd start by retaining as many generation offspring of individual cows as I could (instead of wholesale substitution of year classes).
- (c) Separation from the rest of the herd would be needed so disorder doesn't overwhelm embryonic order.

- (d) Once multiple social groupings were established, I'd keep track of which herds occupied the best grazing areas and which groups surrounded the big bales first.
- (e) I'd use my best herds to spin-off naturally occurring groupings.

5. WHY FAMILY GROUPINGS PREDOMINATE OVER “STRANGERS” IN FORMING SOCIAL ORDER – IT HAPPENS BOTH WAYS

- (a) Disorder requires energy to achieve order.
 - With any new groupings, instability, confusion and dominance must be established before maximum benefit of herding and social order can be achieved.
- (b) With family groups, order is present from birth.
- (c) Whether its humans or animals, “melting pot” situations make it only if raw resources are available.
 - For example, colonization of North American by Europeans.
 - Failure can be expected if niches are already filled – unless conquering opens up that niche. To conquer requires pre-existing order.
- (d) Psychiatrists tell us it takes three years for the “principals” of a newly formed company to be at ease with each other – before they can work as a well synchronized unit. Why would it be different with animals?
- (e) In our own herd, I've witnessed a 20+ year old daughter remove itself from our herd to stay with its feeble, aging mother. This continued until the mother could not function on her own – over a month in time. Only then did the daughter leave her mother to go back to the herd.