



Doc Ken's Korner

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More About Bulls—What Makes A Bull, A Bull?

Most of us buy bulls to get our cows bred. A few people in our business may buy bulls for feeding out or even just to look at and have for a hobby. But a majority of buffalo producers buy bulls to get our cows bred and to improve our herd.

Looks are not everything when considering a breeding bull for your herd. When it comes to the bottom line, what makes a bull is his **reproductive** capabilities. In the past two issue of **BUFFALO!**, I have talked about **inbreeding**, and **visual characteristics** of buffalo bulls. Before you select a buffalo bull for your herd, I would like to talk to you about what makes a bull a successful breeding bull.

Testicles: In order to settle our cows, the bull should have two normal testicles. A bull with a single descended testicle is often not near as

fertile and often seems to have a much poorer disposition. He may tend to be mean and overly aggressive toward man and other buffalo.

Semen quality: The bull's semen should be checked by a veterinarian. The vet checks the semen for concentration, motility, live/dead ratio and absence of abnormal semen (cripples, bent tails, double heads, etc.)

• **Concentration:** In testing bulls I like to see enough concentration so that it is very clear that you have an ejaculate and not just seminal vesicle fluid. It should be white to a creamy white in color.

• **Motility:** The motility should be such that under the microscope you should see swirls or eddies. As a bare minimum, you should have strong indications of swirling.

• **Live/Normal:** The vast majority of the semen should be alive. Over 90% of the sperm cells should be alive and normal. There should be less than 2% abnormal sperm present. In my years of experience I have found there to be less abnormal sperm in buffalo than in cattle.

These standards are the ones I go by and I'm sure that some day when more buffalo bulls are being tested, there will be a need for a more specific set of standards listed for buffalo.

Remember, that a bull that sires calves does not cost much at any price; however, a bull that cannot sire calves is very expensive at any price! The fertile productive bull is the cheapest breeding bull that you buy, and well worth the investment!

A Private Breeder's View of Public Herds

By Dave Raynolds

(this was Dave's talk to the Missoula meeting of public herd managers)

On reflection, most private buffalo breeders will probably agree that the public herds are complementary, rather than competitive, with the private herds. The earliest public herds were started at the urging of private conservationists on the theory that the public pockets were deeper than any private resources, both in land holdings and funding. Let me note several areas of activity where the public herds have been particularly important:

• **Subspecies preservation.** The salient examples are preservation of the Wisent in Poland, on what was formerly a Czarist hunting preserve, and preservation of the Wood buffalo in northern Canada. We have moved away from the mistakes early in this century when Canada sought to mongrelize the Wood buffalo and Yellowstone tried to cross out the Mountain buffalo.

• **Gene pool and herd sources.** The largest private herd was started with animals from the Custer State Park herd (which in turn started from a private herd). Many public herds are operated as "closed herds"; the Catalina herd actually is on an island. Movement from one area to another may provide surprises, such as the apparent dwarfing in Yellowstone buffalo moved to the Henry Mountains of Utah. Record keeping in public herds tends to have more continuity than in private herds.

• **Inter-species Competition.** This can be observed in a number of public herds, but tends to be absent in private herds. Some public herds maintain predators as well as ungulate competitors.

• **Overcrowding Research.** Yellowstone has been a leader in this, with perhaps as much as one-third herd loss from peak to valley.

• **Disease Research.** The largest pool of brucellosis in the U.S. is maintained in the Yellowstone and Jackson Hole herds of buffalo and elk. This old world disease is essentially absent in private herds. Fewer than 3,200 private cattle herds in the U.S. are brucellosis-

affected. Public herds (zoos) apparently harbor tuberculosis, and there are reports of anthrax in the Canadian Wood buffalo herd.

• **Equipment R&D.** A major line of squeeze chutes was developed for a Yellowstone project a generation ago. There is substantial innovation in public handling equipment: example, the new Wichita pens.

• **Public Awareness.** Public herds have a major educational function which can not be entirely filled by private herds.

• **Future Research.** Four main areas seem topical now:

1. Evolutionary: **Bison** is one of the newest mammals. Where did it start? Can we breed back to megafauna?

2. Genetic: What can we learn from ongoing genetic studies?

3. Disease: Can cancer be identified in **Bison**? If not, why not?

4. Human diet: What are the attributes of **Bison** meat?

Government research funding in these areas is likely to focus on the public herds, just as private research deals with private herds.

CANADIAN BISON ASSOCIATION
ASSOCIATION CANADIENNE DU BISON

DEMANDE D'ADHESION
MEMBERSHIP APPLICATION FORM

Return to: **Canadian Bison Association/Association Canadienne du Bison**
 Retourner à: Box 264, Miami, Man. R0G 1H0

Name/Nom: _____

Address/Adresse: _____

Postal Code: _____

Principal contact person: Personne contact: _____

Number of buffalo as of January 198() Combien de bison depuis Janvier 198 ()

Membership in the association runs yearly from the date of purchase. The association is a non-profit volunteer group dedicated to the promotion of the North American buffalo and buffalo products in Canada.

Full members are individual or companies or organizations which own and raise buffalo. An associate supporting membership is available to individuals and organizations with an interest in the North American buffalo and the Canadian buffalo industry and who wish to support the association's efforts. Associate members may not vote at the Annual Meeting.

Enclosed: **Full Membership** \$50.00 ☐ **Associate Membership** \$35.00 ☐ J'inclus: **Membre** ☐ **Membre Associe** ☐

All members receive the association's publication "Bison Bits" free of charge and benefit from its promotional efforts on their behalf.

La carte de membre est valide pour un an à partir de la date d'inscription. L'association est une organisation à d'Amérique ainsi que des produits de bison au Canada.

Les membres de pleins droits sont des individus, ou des compagnies ou des organisations qui font l'élevage du bison. Une carte de membre associe est disponible à tout individu ou organisation avec un intérêt dans le bison et l'industrie du bison du Canada, et qui désire appuyer leur soutien à l'association. Les membres associés n'ont pas le droit de vote à l'assemblée annuelle.

Tous les membres reçoivent, sans frais, le journal de l'association et peuvent bénéficier de l'effort de promotion du bison que fait l'association.