

Studying the Behavior of the American Buffalo

by Viktor Reinhart, DVM

"You are crazy and risking your life if you approach these aggressive beasts. If I were you I would study buffaloes in the zoo where you can observe them at leisure and without danger". I did not take to this suggestion. Now that I was in Canada I wished to study buffaloes as they are kept under semi-wild conditions, showing a more natural behavior than in a zoo.

The well-meant warnings were a bit disquieting but could not keep me from my intention to investigate a herd of 25 buffaloes that were kept on Steel Rose Ranch in Saskatchewan. I did not want to challenge fate, however, so I carried out my first observations at the feeding site, separated from the indeed-fierce-looking beasts by a sturdy fence. My initial objective was to find out whether buffaloes form a rank order as cattle do.

The answer was obvious. There was much strife over the hay and at first glance everyone seemed to be against everyone else. This impression, however, was completely wrong. Once I knew the animals individually, it became very clear that disputes were settled in a strict, predictable order: between two animals it was consistently only one who threatened, butted and chased the other, the latter yielding in submission without retaliation.

Little by little the buffaloes got used to me, and I finally felt safe enough to attempt following them on their daily grazing rounds. The animals were extremely alert the first time I climbed over the fence, and the warnings were ringing in my ears. To my great relief, though, the herd calmed down within only a few minutes and put up with me. Only the big boss bull kept an eye on me all the time and invariably maneuvered his impressively huge bulk between the herd and me; he clearly let me know that he was the boss, not me, and that I had to remain at a respectful distance. I felt a little nervous but soon realized that the bull was not really mad at me; he was

just a bit suspicious. To my great relief he soon stopped intimidating me and resumed grazing with the rest of the herd. I finally started my behavioral observations, keeping a distance of at least 15 feet to the closest animal. Making sure that all animals could see me at all times, I was not an unpredictable intruder and consequently was never threatened or charged and never gave reason for panic flight.

The daily studies soon showed that the rank order was not only respected at feeding time but also during grazing or resting. Dominant animals consistently induced subordinates to stay out of their way. Subordinates had to be wary and ever ready to yield. These dominance-subordination relationships were extremely stable and formed the basic structure of the social order.

I had thought that buffaloes would be viciously aggressive among their own kind, so I was surprised to discover that quite the opposite was true. I scored more than 5,000 disputes and 85% of them were really harmless, with one animal either spontaneously yielding to another or withdrawing in response to a mere threat display. Only 15% of all disputes were significant, with one individual butting or chasing another. The buffaloes were almost diplomatic in avoiding aggressive escalations. Doing this they reduced the risk of injury. Even during the rut no spectacular fights occurred since low-ranking bulls respected the claims of high-ranking ones on oestrous cows.

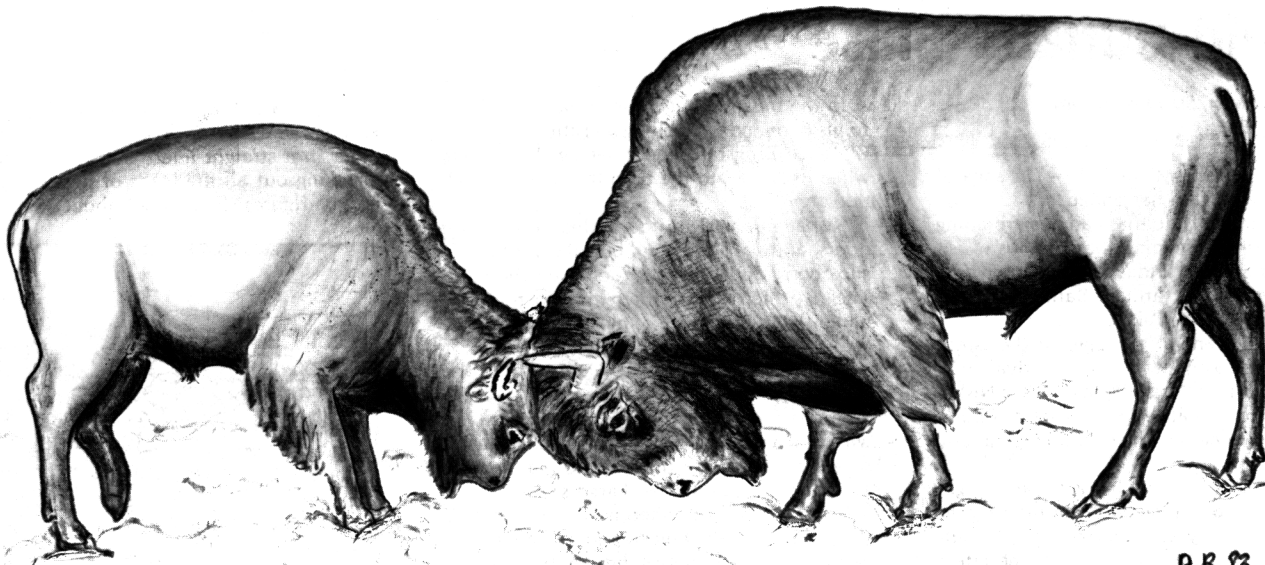
The animals also related with each other in a friendly fashion. Cow Pat and cow Dora, for instance, had formed a strong bond, and they always followed each other closely while grazing; they fed on hay in close proximity to each other and chose adjacent resting sites. Pat and Dora were not kin related; the association was therefore a real friendship. There was quite a number of such affectionate relationships, and they played a major role in promoting cohesion of the herd.

Due to their thick woolen fur, the buffaloes licked each other only rarely. They had another way of getting relief from itching: first they pawed the ground bare; then they went down on their carpi and stabbed the earth with their horns, loosening it. They finally lay down and wallowed first on one side then on the other. One animal started, others followed suit, and soon the mighty beasts were kicking in the air, gradually disappearing in a heavy cloud of dust.

Wallowing often coincided with the beginning of a play period. Male calves were the main actors. With an inviting jerk of their heads, they enticed each other to a mock fight, each partner pushing the other with its crown. Fair play rules were strictly adhered to and no one would try to intimidate the other. It was just a matter of gauging one's strength but not a means to defeat the playmate. Females usually avoided such mock fights by simply ignoring the males' invitations.

A further play, often performed in sequence with mock fights, was mounting. Again, males were more often engaged than females. The males mounted other males much more often than they mounted females, which clearly showed that this was not strictly a sexual behavior.

I conclude from my experiences that buffaloes are wrongly reputed as being mean and unpredictable. It seems to me that their reaction towards us is like a mirror of our own demeanor. Why should a buffalo charge you out of the blue if 1) he had never had any real bad experience with man, in particular with you, 2) you know his behavior and act according to it. Ignorance of animal behavior cannot only make an encounter with a fierce-looking buffalo but even with a placid looking domestic cow a frightening and dangerous event. It is not the "dull" beast that deserves the blame but the "intelligent" man.



Fair play rules are strictly respected during a mock fight.