

Statistics show the Nelore cattle breed of Brazil is dominant, and comprises 65 per cent of the world's beef population



First Impressions

BY DYLAN BIGGS

Another calving season has begun for some folks. We calve our cows in May and June, so it's still a ways off for us.

Regardless of when producers calve, many handle the calves as newborns to tag, band bull calves or take birth weights, etc.

I have always wondered what effect (if any) that first experience of being handled by humans might have on the calf. Does the experience of being chased to be caught and restrained set a behavioural precedent for the future? Is it any different if the calf is caught at a standstill with no flight involved or if the curiosity of the calf inspires it to walk up to you and be caught?

I have always assumed avoiding a fearful reaction is ideal, but that is purely speculation. Possibly, the calf doesn't remember any of it regardless of how it reacted to being handled, and it has no bearing on future behaviour in response to being handled by people.

Then there is the question of temperament. There most certainly is an inherited contribution from the parents with regard to the sensitivity or degree of docility in response to people. Over the years that we bred with artificial insemination, we observed progeny of specific sires that were consistently more sensitive and other sires that consistently sired very docile calves. Those who have attempted to calculate and quantify the genetic contribution to an animal's disposition suggest about 40 per cent is a result of inheritance, and 60 per cent is learned. So it is safe to say that cattle learn, which confirms memory, and so whether we acknowledge it or not, every interaction they have with people has the potential to teach them something.

This begs the question: what are calves learning as newborns from being handled? What do their first experiences teach them, and how does it influence future behaviour in response to being handled by people?

It is acknowledged as confirmed by research that the brain of newborns is more malleable and is more capable of learning and/or influence compared to the more mature brain. The brain of calves is most impressionable during the first 30 days of their lives, with the first seven days being the most receptive period. Might this relatively short window of optimal brain malleability or plasticity offer an opportunity to set a positive precedent for the calves' future health and behaviour?

Interestingly, there has been research done in Brazil on dairy calves to determine best management practices. One of the practices identified was massage, or what is referred to as tactile stimulation. Calves exposed to the combination of best management practices demonstrated decreased pneumonia and diarrhea and increased weight gain.

These positive results initiated a more specific study on tactile stimulation in around 1,300 calves per year of the Nelore beef herd in Brazil. When processing newborn calves, the last procedure was to give the calf a one-minute firm massage. The massage is done in a manner that mimics the cow licking her calf. Half the calves were massaged the other half were not. A surprising result observed in the massaged heifer calves when they gave birth to their first calves was a marked decrease in protective behaviour directed at the cowboys ▶



Premium Box Stalls



Portable Event Stalls

High Quality Equine Equipment
Solid Welded Construction using Hi-Tensile
North American Steel Tubing



Round Pens / Lunging Pens



Portable Corrals

Call us at 1-800-661-7002
Visit us at www.hi-hog.com



COWBOY WAY |
Photo credit: Carmen Perez from Orvalho das Flores Ranch - Brazil.



handling the calves. The massage is the last thing done after navel dipping, vaccination and tagging.

Since 2021, Neilson Cattle Development, a beef cow-calf producer based in Stettler, AB, has initiated a pilot study on the tactile stimulation in newborn calves, instructed by Dr. Désirée Gellatly, a research scientist at the Technology Access Centre for Livestock Production (TACLIP) at Olds College.

Results of this study show that tactile

“... a marked decrease in protective behaviour directed at the cowboys...”

stimulation had a positive benefit in growth and less incidence of health complications.

The results have encouraged the TACLIP to continue investigating the subject of tactile stimulation. Beef producers who wish to learn more or get involved in future applied research can contact Sean Thompson, the TACLIP manager, via the Olds College website. OldsCollege.ca/tacip

I find this very intriguing and will take steps to experiment and potentially participate in future research. There is always more to learn.

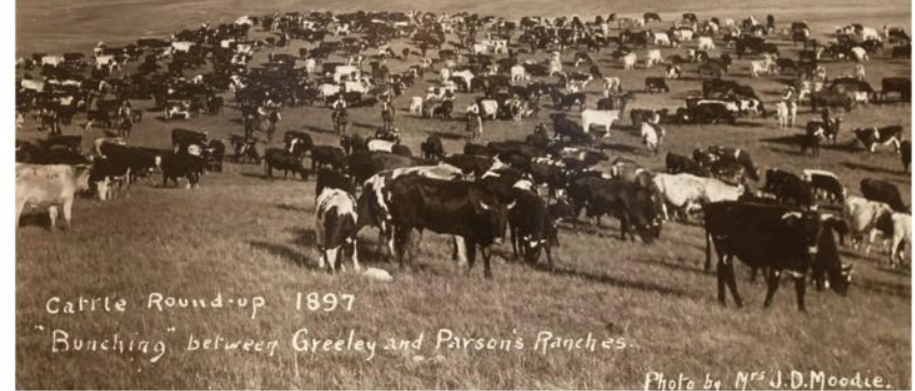
I hope you find this information interesting and that you have enjoyed my contribution to *Canadian Cowboy*. This is my last article for the magazine for now, and it has been a pleasure. Thank you, Terri, for your interest and encouragement.

I wish everyone a successful calving season in 2023. ☛

WHAT WORKS FOR US

Pure Prairie Gold

BY TERRI MASON



This 1897 photo by Geraldine Moodie was photographed about a half mile north of the current McDougald Reservoir

Cattle Round-up 1897
"Bunching" between Greeley and Parson's Ranches.

Photo by Mrs J.D. Moodie.

— Interview with Ray McDougald

“Originally, our place was a National Park for a brief period of time — Menissawok National Park.

It was one of four blocks set aside for antelope regeneration as they were dangerously overhunted. Because there was no fresh salad bar on this ranch, just mature prairie wool grass, and antelope always wanted fresh pickings, they wouldn't stay put.

By the mid-teens [1917], the Dominion Government pretty much ceased the operation of the Park. My grandfather leased the former Park in 1917 and ran steers. On this land is where the east and west forks of Maple Creek join. Before the Park and after, the ranch has been known as the Y Bar, hence the brand.

It wasn't until my dad [Jack] and his brother Alex took over in the 1950s that it became a cow/calf operation. My brother Angus and I were influenced to run a closed herd. [Raise their own bulls with no outside genetics.] My uncle ran one, and our neighbour, Bill Gilchrist, was very successful with their closed herd. Ray Bannister from one of the big research stations in Montana stated that if you have a herd of over 300 head, you have little risk of inbreeding.

Our place is practically all native grass, probably 95 per cent native. If you ask the area ranchers, they'll probably say we're understocked. By grazing more months of the year, we run less cows. When times are great, we sacrifice some profit, but in bad times we can still make a profit and come through in good shape.

A lot of people spend their whole ranching career trying to produce more pounds of beef, and if they're lucky, they might increase their weaning weights by 25 per cent. If you focus your time on growing grass, you can probably increase your production by 25 per cent in five or six years.

My philosophy is that we're growing grass — that's our crop, and a cow is like a combine doing the harvesting. So, when you go out the door in the morning, are you thinking about your cows, or are you thinking about your grass?

It was this thinking that prompted us to harvest native grass seed. We use a seed stripper, similar to a street sweeper brush, mounted on the front end of a tractor.

The first year we harvested was 1994. As you go up in the [Cypress] Hills, plain rough ▶