



NEWS

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Temperament: The Hidden Asset of Gelbvieh

By Susan Willmon, American Gelbvieh Association Director of Breed Improvement

The early Meat Animal Research Center (MARC) data led many seedstock producers to the Gelbvieh breed. The combination of growth and maternal characteristics added the appropriate punch for many breeders in the 1970s and 1980s to their predominately British-based cowherds.

While those traits have played a significant role through the years, still today one of the consistently mentioned traits as to why those Gelbvieh cows are still on the place is their excellent disposition. Some of the comments AGA staff frequently hears are: "I am often working by myself, I need to be able to easily work my cowherd", or "We are getting older and I don't run the 40-yard dash across the corral as fast as I used to" and finally "There's a difference between protective and aggressive in a momma cow. I'll tolerate protective, aggressive buys a one-way ticket to the sale barn come weaning day."

Many Gelbvieh members mention that they didn't fully appreciate how good the cows were until they brought a second breed on the place. Some have known it all along. As a breed, Gelbvieh has probably taken this asset a bit for granted and many have suggested we ought to promote this facet of our breed more. Recent research has increased the value placed on calmer disposition cattle, something individual breeders should emphasize in their programs. These benefits come in a variety of forms.

Calm in the Feedlot

One of the questions that some of the initial researchers sought to answer was if temperament or docility impacted performance of the animals once they reached the feedlot. In most cases these calves were scored prior to entering the feedlot. Most were scored via a combination of subjective observations. A Pen Score evaluates the calves in a corral or pen environment and a Chute Score evaluates their activity moving through a chute or alleyway. An objective measure was also taken as an Exit Velocity or the time the animal takes to leave the chute once the head catch is released. You could compare this to a how fast a ski racer breaks from the gate once the buzzer sounds at the start of a race.

Recent research at Texas A&M and Mississippi State University scored feedlot steers on the measures of temperament. Increased Exit Velocity and Pen Score (more

aggressive and more agitated) had increased Warner Bratzler Shear Force (tenderness) values in carcass evaluation. Less calm animals equals more tough meat.

Colorado State University also did a study that showed quieter and calmer animals during handling had higher average daily gains (ADG) than cattle with more excitable temperaments. The first phase of some ongoing research at the University of Missouri showed similar results from a gain perspective. Steers with faster Exit Velocities had lower average daily gains. The difference in this initial study between the calmest group and the ones that bolted out of the chute was close to 1.4 lbs of ADG. Future research at Missouri will look at individual intake data and carcass traits with the goal of further defining the relationship between disposition, feed efficiency, gain and carcass merit.

Other Benefits of Calm Temperaments

While some true economic value can be tied to the performance benefits of the calmer temperament cattle in the feedlot, it is not the only place where we can see some return on investment for selection for this trait. Additional research done at Texas A&M also showed that after a 168-day grazing period more temperamental calves had reduced growth performance and body composition. As well the calmer calves had a better response to vaccination at weaning, which translates to a higher likelihood of these calves not getting sick or dying of disease once they enter the feedlot. Several studies in both dairy and beef cows have shown that calmer cows have higher levels of milk production.

One factor producers must consider is their own handling practices. Animals can differentiate between types of human interaction, aversive and non-aversive. Elephants aren't the only ones that never forget. Studies have also shown that the levels of fearfulness to a person or environment change relatively little across multiple handling experiences, thus agitation levels or temperament of an animal will tend to stay pretty constant over time.

An animal's aversion to a person or situation is best measured in terms of the "cost" the animal is willing to pay to avoid that person or situation. In the simplest terms that translates to dollars in the feedlot; calmer animals equal increased average daily gains and a potentially more resistant immune system. In a backgrounding operation gains can be impacted as well. On the ranch, the calmer cow produces more milk that translates to more pounds of calf weaned.

What's the Next Step?

The most obvious, but somewhat intangible, value from a calmer temperament cowherd is the saving in wear and tear on facilities, equipment and personnel. The question can be posed are we as Gelbvieh breeders doing enough to insure this asset remains a bankable one?

Research has categorized temperament as a moderately heritable trait. Thus producers can impact this trait through selection in subsequent generations. How would you answer the following questions:

- Do I select bulls and heifers for my program with good-temperament not just cull those with bad ones?
- Do I track records of those cows that I have culled for temperament and watch daughters closely as well?
- When I select replacement heifers do I make my first cut with 10 to 15 percent more than I need and work back through them with a more critical

eye for structural issues and temperament before I make my final selection?

- Could my program benefit from a scoring system that I could use internally for my own selection decisions (see BIF Guidelines for Disposition Scoring)?
- Could I then use these values to promote the docility within my program?

When you think about it cattle are not much different than people. We all know that guy, John, who's always going a hundred miles an hour, loses his temper at the slightest thing and is constantly sick with something. People will describe him as a "heart attack" waiting to happen. Contrast that with the Mike who always has time to talk, doesn't seem to have any problem packing on the pounds and is always ready to help you out when the time comes. He's the laid back guy that doesn't seem to ever let anything bother him. Our Gelbvieh cattle are probably more like Mike and we all probably need to do a better job of putting the word out.

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SIDEBAR 1

Beef Improvement Federation Guidelines for Disposition Scoring

In the current edition of the Beef Improvement Federation (BIF) guidelines there is a section on behavioral traits, which include the scores and definitions listed below for evaluating temperament and disposition. It is recommended that the scoring be done at weaning or yearling age, which will reduce the extent that the current behavior is influenced by prior handling experiences.

Score 1 – Docile. Mild disposition. Gentle and easily handled. Stand and moves slowly during processing. Undisturbed, settled, somewhat dull. Does not pull on headgate when in chute. Exits chute calmly.

Score 2 – Restless. Quieter than average, but may be stubborn during processing. May try to back out of chute or pull back on headgate. Some flicking of tail. Exits chute promptly.

Score 3 – Nervous. Typical temperament is manageable, but nervous and impatient. A moderate amount of struggling, movement and tail flicking. Repeated pushing and pulling on headgate. Exits chute briskly.

Score 4 – Flighty (Wild). Jumpy and out of control, quivers and struggles violently. May bellow and froth at the mouth. Continuous tail flicking. Defecates and urinates during processing. Frantically runs fence line and may jump when penned individually. Exhibits long flight distance and exits chute wildly.

Score 5 – Aggressive. May be similar to Score 4, but with added aggressive behavior, fearfulness, extreme agitation, and continuous movement which may include jumping and bellowing while in chute. Exits chute frantically and may exhibit attack behavior when handled alone.

Score 6 – Very Aggressive. Extremely aggressive temperament. Thrashes about or attacks wildly when confined in small, tight places. Pronounced attack behavior.

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