

Attitude Makes a Difference
Max Irsik DVM, MAB
Beef Cattle Extension Veterinarian
University of Florida College of Veterinary Medicine

Anyone who handles cattle on a ranch or in a feedyard will recognize that calm animals are easier and safer to manage than wild, aggressive ones. As with most traits in beef production, part of the final product is inherited from the sire and dam, and the other part is influenced by management and environment. Disposition or temperament (attitude) is a moderately heritable trait, (.4) and producers can make improvements through genetic selection. Good animal-handling practices throughout the production system will also improve the disposition of cattle and reduce the negative effects of stress during shipping and processing.

Research shows the economic impact of cattle disposition, influencing production in the feedyard and the ultimate value of finished cattle. Early research at Colorado State University showed that more excitable animals had more borderline dark cutters and tougher meat characteristics than animals with calm temperaments. Excitable animals had carcasses that exceeded the foodservice industry's acceptable threshold for tenderness 40 percent of the time compared with 13.7 percent for steers with temperament rankings being more docile. Following the same trend 25 percent of highly excitable cattle produced dark-cutting carcasses compared with 6.7 percent for calm cattle.

More recently, data was collected on 13,315 head of beef calves fed at eight Iowa feedyards. The calves originated from 12 states and were consigned to the Iowa Tri-County Steer Carcass Futurity Program. Some differences in feedlot performance and carcass quality traits existed between cattle classified as docile or restless, but the greatest effect was in calves scored as aggressive in behavior. When compared to docile calves, feedlot gain was reduced by approximately 0.3 lb/day and the mortality rate nearly doubled in calves with aggressive behavior. When carcass quality was analyzed, only 58 percent of the aggressive calves graded choice or prime vs. 74 percent for docile calves. When calves which qualified as potential candidates for the certified Angus beef program were evaluated, the percentage of calves accepted into the program was reduced by over fifty percent in poor disposition calves. When considering a calves dispositions and its effect on quality and yield grade, feedlot gain, death loss and treatment costs, docile calves returned \$62 per head more than aggressive calves.

The temperament scoring codes utilized by the Beef Improvement federation are provided. More detailed information regarding the codes may be found on the federation website. <http://www.beefimprovement.org/library/06guidelines.pdf>

- | | |
|--------------------|---|
| 1. Docile | Mild disposition, gentle and easy to handle |
| 2. Restless | Quieter than average, but may be stubborn during processing. |
| 3. Nervous | Typical temperament is manageable, but nervous and impatient. |
| 4. Flighty (wild) | Jumpy and out of control, quivers and struggles violently |
| 5. Aggressive | May be similar to score 4 but with added aggressive behavior, |
| 6. Very Aggressive | Extremely aggressive temperament. |

Table 1 provides the economic effects of disposition reported in the Iowa State study on the dollars returned per head for different production measures.

The bottom line is that attitude can affect a calf's performance and economic returns. Correctly or incorrectly some cattle feeders have a perceived image that southeastern calves may have less than desirable attitudes. Producers should realize that the attitude a calf possesses is

influenced both by genetic selection and how a calf is handled. The return for a producer who produces more docile individuals is significant.

Table 1 Effect of disposition on the difference in net dollars returned on a per head basis.

	Disposition Score		
	Docile	Restless	Aggressive
Quality Grade Premium	\$18.73	\$12.29	Par
Yield Grade premium	Par	\$0.87	\$3.50
Light/Heavy/ carcass weight discount	-\$0.16	Par	-\$1.29
Dark cutter	Par	-\$0.19	-\$0.72
ADG bonus	\$37.80	\$28.91	Par
Death loss discount	-\$0.90	Par	-\$8.75
Treatment Costs	-\$0.54	-\$0.08	Par
Net dollars Returned	\$54.73	\$41.80	-\$7.26
\$ Difference	\$62.19	\$49.06	Par

References

1. Busby D. et al., Effect of Disposition on Feedlot Gain and Quality Grade. Iowa State University Animal Industry Report 2006
2. Ibarburu M. J.D. Lawrence, Predicting Animals in Feedlot that Produce Discounted Carcasses. Iowa State University Animal Industry Report 2005