Docility Pays

Disposition drives feedlot, carcass performance.

*by **Laura Nelson***

Nervous and aggressive cattle are a pain in the wallet.

That was the kicker in a recent presentation at the Midwest American Society of Animal Science (Midwest ASAS) meetings in Des Moines, Iowa.

Gary Fike, beef cattle specialist for the *Certified Angus Beef®* (CAB®) brand, said cattle that were considered docile graded Premium Choice and Prime at more than double the rate of their nervous to very aggressive contemporaries.

Docility in the feedlot pays off with better performance, improved carcass merit and

Feeding & Feedstuffs

reduced morbidity and treatment costs, Fike says. Data were collected on nearly 50,000 cattle from 18 Iowa feedlots, all consigned to the Tri-County Steer Carcass Futurity (TCSCF) during a span of eight years (2002-2009).

Using the six-point Beef Improvement Federation (BIF) scoring system for disposition, calves in the Futurity were scored three to four times during the feeding period. Based on their average scores, they were grouped into three categories: docile (DC), restless (R), and nervous to very aggressive (NVA).

While calves in the study had similar

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arrival weights (see Table 1), Fike notes the DC and R calves were, on average, 10 days younger than the NVA calves. DC calves more than made up for their age, gaining 3.21 pounds (lb.) per day compared to the NVA's 3.01 lb., and outweighing them by 39 lb. in final live weight.

"Once those docile calves arrive and get on feed, they eat more, have heavier weights and gain more quickly simply because they're spending more time at the bunks," Fike surmises. "They're able to perform better when they're not taking off from the bunk every time there's a disturbance."

That feedlot performance proved increasingly valuable in the carcass data (Table 2). With a 30.7-point difference in marbling score between the most and least docile cattle, it's not surprising the former have better CAB brand acceptance rates.

"For lack of a better term," Fike says, "they're just easy keepers." Applied to a study on nearly 50,000 head, "that's very significant data," he added.

A $40 difference in profit is also pretty significant. Taking into account quality and yield grade, cost of gain, death loss, and treatment costs, the DC calves brought in an average profit of $46.63 per head, while NVA calves made $7.62.

"There's no doubt cattlemen need to understand the heritability of disposition traits in their herds. You really have to look at things like disposition in sire selection and in the cow herd," Fike says, noting that expected progeny difference (EPD) tools are now available as a guide.

The bottom line? "Nobody likes having to chase cattle — these are the ones that cause all the trouble at home, then they don't perform in the yard, either," Fike says. "There's just no reason to keep them around when all these points are against them."

Table 1: Effect of disposition on feedlot performance and profitability

Item	Disposition score		
	DC	R	NVA
Arrival wt., lb.	643	642	642
Delivery age, days	297.1[a]	295.0[b]	306.4[c]
Final adj. wt., lb.	1,183[a]	1,169[b]	1,144[c]
Avg. daily gain, lb.	3.21[a]	3.15[b]	3.01[c]
Days on feed	169.4[a]	168.6[b]	168.5[a,b]
F:G, lb./lb.	6.86[a]	6.84[b]	6.97[c]
Est. DM intake, lb.	22.02	21.55	20.98
Cost of gain, $/cwt.	$60.45[a]	$67.27[b]	$68.64[c]
Profit, US$/hd.	$46.63[a]	$26.16[b]	$7.62[c]

[a,b,c]Means within a row with unlike superscripts differ (P<0.05).

Table 2: Effect of disposition on carcass traits

Item	Disposition score		
	DC	R	NVA
HCW, lb.	728[a]	721[b]	710[c]
Dressing %	61.40[a]	61.55[b]	61.76[c]
REA, sq. in.	12.8[a]	12.8[a]	12.9[b]
Rib fat, in.	0.46[a]	0.46[a]	0.42[b]
Calculated YG	2.86[a]	2.84[b]	2.67[c]
Marbling score[1]	431.7[a]	422.1[b]	401.0[c]
%CAB®[2]	20.65	15.21	9.08

[a,b,c]Means within a row with unlike superscripts differ (P<0.05).

[1]Marbling score 400 = Small⁰.

[2]Disposition score influenced CAB® acceptance rate (P<0.0001).

Editor's note: *Laura Nelson is an industry information specialist for Certified Angus Beef LLC.*