**Lessons Learned from Feeding Southeastern Cattle in Iowa: Is Perception Still Reality?**

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**Abstract.** Traditionally, southeastern calves have a tough reputation in the areas of health, performance, and carcass traits. Coming from small operations and assembled (comingled) at local salebarns and order buyers these calves then have a long road to get to Iowa feedyards. I saw the same issues even when these calves took a short ride to our stocker operations when I was in Mississippi. The Tri County Steer Carcass Futurity (TCSCF) in southeastern Iowa has looked at the feeding and health performance of southeastern calves. This work has made it clear that when calves are prepared for feedlot arrival, animal health issues are minimized for the next buyer. The objective of this presentation is to highlight things that we have learned from feeding southeastern calves in our Iowa feedlots and use this information to help change the perception of the quality of southeastern calves.

**Keywords:** southeastern calves, feedlot, Iowa, animal health

**Introduction.** In the late 1980's I got my start as a young food animal practitioner in northeastern Kansas. The practice consisted of four veterinarians, two clinics, and two animal health stores. Being located on the northern edge of the Flint Hills, we worked with cow/calf operations, small feedyard owners, and some fairly extensive stocker / backgrounding operations. As you would expect, the fall of the year was a pretty intense time as operations loaded up on cattle. Then we would get a second run in early spring as the grass started to green up. Many of these loads originated in the southeast and when they got off the truck we knew we were in for a battle. We had to deal with horns, testicles, "floppy ears", unknown genetics, and

some really tough animal health issues. This scenario was repeated all over the Midwest and really ingrained in us the way we viewed southeastern cattle.

During my 15 year tenure at the College of Veterinary Medicine at Mississippi State, I had the opportunity to work in both the cow/calf and stocker sectors of our industry. These operations came in all shapes and sizes, ranging from small independent operators to large corporate backgrounders. It became readily apparent that all of the health issues we had with the cattle in Kansas were the same when those calves moved to stocker operations. It also became clear that when calves left the cow/calf or stocker operations we worked with, the animal health issues were minimized for the next buyer. Therefore, I'd like to highlight some of the things that we have learned from feeding southeastern calves in our Iowa feedlots and see if we can apply them one step back into the stocker industry. I think some of this information may help to change our perception of the quality of southeastern calves.

**Tri County Steer Carcass Futurity (TCSCF).** For nearly 30 years, TCSCF has worked diligently to improve the profitability of Iowa feedyards. Under the direction of Mr. Darrell Busby, and now, Mr. Matt Groves, this cooperative combines the effort of local cow/calf producers and nine feedyards (capacity ranges from 1000 to 8000 head) in southwest Iowa. This group specializes in the collection of animal health, performance, and carcass data on retained ownership cattle so that it can be analyzed and benchmarked. This information is then shared with the feedyards and cattle owners to make better management decisions and improve profitability.

From 2000-2011, 76,656 steers and heifers from 23 states have been run through the program. These calves came from mostly South and East of Iowa and from Manitoba, Canada. Cattle are weighed, vaccinated and dewormed, implanted, and individually identified at arrival

by TCSCF and feedlot personnel. Each yard works closely with a veterinarian to set receiving and treatment protocols. Cattle are reweighed at 28-35 days on feed to define the "warm up" period. Individual records on health and feeding performance and kept through the feeding period. TCSCF personnel arrive at the packing plant with the cattle and collect individual carcass data. This information is analyzed and reported back to the owner and feedyard in order to make better genetic and management decisions. Producers are charged a per head fee for data collection and analysis and report generation.

**Lessons Learned.** In looking at the TCSCF data, there are some things that we can learn from all the cattle in general, but from the southeastern calves in particular. Some of this is not particularly earth-shattering as we have suspected it for a long time. However, it is important to have concrete data in hand when you are trying to decide on a course of action. Some of our lessons would include:

1. Animal health performance is critical for profitability. Preventing calves from getting sick in the first place or at least making sure that we have a high first treatment response rate is very important. We know that the more times we treat a calf, the poorer the performance (feedlot and carcass), the more we spend on medicine and the more likely we are to have a chronic or dead calf. Cattle receiving two or more treatments were worth approximately $200 less than non-treated cattle (Table 1).

2. Cattle disposition matters. We have always worried about the "wild ones" from an animal and human safety standpoint. The BQA audits have done a wonderful job of highlighting the losses associated with bruising and injuries. More recent data suggests that docility affects feedyard performance, animal health, carcass value, and profitability (Table 2). Cattle with poor temperament are worth $40 - $65 less than calm cattle. Based on both Iowa State and

Mississippi State data, the manner in which cattle are handled is highly correlated to disposition score and exit velocity. Perhaps it's time we put a disposition score on the people who work around the cattle as well – and then do some culling!

3. Southeastern cattle compete well. TCSCF data that looked at over 30,000 calves of southeastern origin found that these calves were heavier, older, and had better health performance (6.3% fewer treatments) than cattle from the Midwest (Table 3). Feeding performance showed no difference in average daily gain, but midwestern cattle were more efficient. Surprisingly, there was no difference in marbling score between the two regions and the southeastern calves had a higher CAB acceptance rate. Returns on the southeastern cattle were also $13.55 higher per calf. ***NOTE: These are all retained ownership cattle that had been preconditioned (backgrounded or grazed in a stocker operation) prior to arrival in Iowa.***

4. Information is king. It really doesn't matter what you call it – data analysis, benchmarking, or evidenced-based decision making – being able to track animal information back to the pasture, lot, group, pen (or farther) can pay great dividends. The timing and degree of animal health events, grazing and feeding performance, cattle sources, and cattle receiving procedures should all be scrutinized. Retrospective analysis, while tedious at times, can have a great impact on future decisions.

5. Best management practices have no boundaries. I know that sounds suspiciously like I'm being a cheerleader, but it certainly is true. Attempts to improve each part of the cattle industry benefits all segments. I think this is especially true for those of you that background and / or graze calves. We need to continue to evaluate economically relevant traits of the cattle, our management scheme, and the people that we work with. This is especially important for consumer confidence as we strive to produce a wholesome product in a humane manner. Sharing

of processing and treatment information, implants utilized, feed additives, and grazing and feeding performance will go a long way in helping the industry improve on what we are currently doing. Our industry emphasizes family farmers and ranchers. We need to treat our animals, consumers, and fellow cattlemen like family.

**Summary.** Whether deserved or not, southeastern cattle coming into Iowa feedyards have taken a beating over the years. The perception has been that these calves have to be heavily discounted due to poor animal health performance, increased mortality, and poor carcass characteristics. The Iowa data clearly shows that this does not have to be the case if the cattle are prepared for feedyard delivery. This preparation involves a solid animal health program and adaptation to a feeding or grazing system beyond the brood cow. If the animal health issues can be mitigated prior to feedyard arrival, southeastern cattle have the genetic potential to excel in feeding and carcass performance.

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**Table 1. Difference in Dollars Returned (per hd.) Relative to the Number of Treatments**

**Busby (TCSCF)**

| | Number of treatments | | |
|---|---|---|---|
| | **NT** | **ST** | **2T** |
| **Death loss discount*, $** | PAR | –31.07 | –100.04 |
| **Treatment cost**, $** | PAR | –20.60 | –48.43 |
| **ADG reduction#, $** | PAR | –24.49 | –35.71 |
| **Yield grade premium, $** | PAR | +2.90 | +4.59 |
| **Quality grade discount, $** | PAR | –10.39 | –19.41 |
| **Light carcass discount, $** | PAR | –1.55 | –1.58 |
| **Dark cutter adjustment, $** | PAR | +0.18 | –0.58 |
| **Total difference, $** | **PAR** | **–85.02** | **–201.16** |

**Table 2. Disposition Effects on ADG, Feed to Gain, Pulls & Death Loss**

| Item | Docile | Restless | Aggressive |
|---|---|---|---|
| **No of Head**<br>**% of Total** | 27,617<br>58.2% | 15,720<br>33.2% | 4,071<br>8.6% |
| **Arrival Wt**<br>**Overall ADG**<br>**Est. Feed to Gain**<br>**Est. DMI** | 643<br>3.22 [a]<br>6.86 [a]<br>22.11 | 642<br>3.15 [b]<br>6.84 [b]<br>21.55 | 642<br>3.01 [c]<br>6.97 [c]<br>20.98 |
| **Morbidity Rate**<br>**Mortality Rate** | 17.2%<br>.95% [a] | 18.4%<br>1.06% [b] | 17.0%<br>1.69% [c] |

**Busby (TCSCF)**

**Table 3. Effect of region of origin on ADG, Final Wt, Pulls & Death Loss**

| Item | Southeast | Midwest |
|---|---|---|
| **No of Head** | 31,155 | 16,371 |
| **Arrival Wt, lb** | 649[a] | 629 [b] |
| **Delivery Age, days** | 320 [a] | 255 [b] |
| **Final Wt, lb** | 1174 [a] | 1177 [b] |
| **Days on Feed** | 167 [a] | 174 [b] |
| **Overall ADG, lb** | 3.18 | 3.18 |
| **Feed to Gain** | 6.92 [a] | 6.76 [b] |
| **Morbidity Rate** | 15.81% [a] | 22.11% [b] |
| **Treatment Cost, $/hd** | $5.53 [a] | $8.49 [b] |
| **Mortality Rate** | 1.35%[a] | 1.81%[b] |

**Busby (TCSCF)**