

# Wakeeney Preconditioned, Age and Source Verified Feeder Cattle Auction

Wakeeney Livestock held a special preconditioned, age and source verified feeder cattle auction on January 18, 2011. The majority of the calves had been weaned for a minimum of 45 days and followed a preconditioning and vaccination program. Several factors impacting price were recorded including, lot size, color, sex, weight, and age verification status. Data was viewed and compared using simple averages and linear regression analysis allowing us to examine how the factors interacted, along with their statistical significance. It should be noted that at the time of this auction, demand for feeder cattle and prices in general were at historically high levels; and that a great amount of effort on the part of auction management was focused on ensuring adequate numbers of both age verified cattle and “buyers” of age verified cattle.

## **IMPACT OF AGE VERIFICATION**

Age verification and animal identification are required of any cattle processed for export to Japan, where a strict 20 months, age restriction is enforced. Premiums ranging from \$10 to up to \$50 per head are often paid by processors for properly age verified (USDA approved) fed cattle. A question though, often arises as to how much premium is available to feeder calf producers for age verified calves, as they often bear much of the direct cost involved in age verification (ranging from \$3.40 to \$5.00 per head depending on the Process Verified Program and number of head).

At this auction, a total of 1,867 age verified calves were sold, representing 63% of the total. When examining the entire auction, our analysis showed that age verification added \$2.34 per cwt. and was statistically significant at the 5% level based on its t-distribution statistic. Age verification of steers added \$2.75 per cwt. but age verification of heifers only added \$1.34 per cwt.; possibly because some heifers were bid on and sold not as feeders but as replacements. Additional examination revealed that the value of age verification increased as the number of age verified animals and the competition to fill 50,000 pound semi-loads both increased, as peak premiums of \$3.52 per cwt. were available in the 650-749 pound weight range, where there were 918 head available (12.9 semi-loads). As the number of age verified cattle in specific weight ranges declined, so too did the available premiums for verification.

## **OVERVIEW**

A total of 2,951 feeder calves were sold in 115 lots at an average price of \$131.05 per cwt. Calf weights ranged from 380 to 921 pounds, with nearly 93% of the calves sold weighing between 450 and 849 pounds; and 70% falling into the 200 pound range of 550 to 749. 1,867 Age verified feeder calves were sold in 55 lots (1,427 in 41 lots were verified through the Beef Verification Solution/AgInfoLink PVP). In all, 1,868 steers were sold in 66 lots and 1,083 heifers were sold in 49 lots.

Weight	Head	Steers	Heifers	Age Verified	Age %V	Age Prem.	Perc. Prem. <sup>1</sup>	Age-V Loads <sup>2</sup>	Non-Verified
350-449	37		37		0%				37
450-549	177	94	83	88	50%	\$2.94	2.04%	0.9	89
550-649	899	417	482	518	58%	\$3.21	2.43%	6.3	381
650-749	1,174	786	388	918	78%	\$3.52	2.77%	12.9	256
750-849	488	395	93	337	69%	\$1.00	0.81%	5.2	151
850-949	176	176		6	3%				170
TOTALS	2,951	1,868	1,083	1,867	63%	\$2.34	1.78%	25.3	1,084

The 115 lots ranged in size from 5 head to 143 head sold as a single lot. 1,290 Head (44%) were predominately black in color; 305 head were red; 12 head were white; and 1,344 head (46%) were in mix colored lots.

<sup>1</sup> Percent premium is the \$/cwt. Age Premium as a percentage of the average price for that weight category.

<sup>2</sup> Number of Age V Loads = the number of age verified calves x the average weight / 50,000 pounds.



## Wakeeney Preconditioned, Age and Source Verified Feeder Cattle Auction

---

When viewing the entire 2,951 head, calf weight, as expected was the single most significant factor affecting price, followed by sex of the animal. A negative \$8.03 per cwt. slide was observed, implying that for each 100 pound increase in weight, average price decreased \$8.03. Steers added \$11.32/cwt. to the realized price versus heifers, and black color added \$2.55/cwt. relative to all other colors over the entire auction. All three of these factors were significant at the 1% level based on their *t*-distribution statistic.

**Age verification status was also a key price factor, adding an estimated \$2.34 per cwt. and significant at the 5% level.** Lot size too, was important but to a lesser extent, with a \$0.30 per cwt. price increase observed for every 10 head, peaking at lot sizes between 50 and 89 head; significant at the 20% level based on its *t*-statistic.

### **550 to 749 POUND CALVES**

Obviously this is an important weight group, representing spring-born, weaned and backgrounded calves ready to go on feed. When viewing these 2,073 calves which represented 70% of the calves sold at this auction, sex of the calf was the most statistically significant factor, with steers adding \$11.50/cwt. to the realized price versus heifers. Weight though was still very significant, with a negative \$6.84 per cwt. slide observed for each additional 100 pounds. **Age verification status was the next most important price factor, adding an estimated \$3.77 per cwt. to the value of calves in this important feeder calf weight category.** All three of these factors were significant at the 1% level based on their *t*-statistics.

Color was significant at the 20% level (based on the *t*-distribution statistic), with black calves selling for an additional \$1.47 per cwt. relative to all other colors. For calves weighing between 550 and 749 pounds, during this auction, lot size was much less significant, with a \$0.19 per cwt. price increase observed for every 10 head, peaking at lot sizes between 30 and 49 head.

### **650 to 849 POUND STEERS (CME Feeder Index Equivalent)**

This is an important weight group to focus on too, in that it represents spring-born, weaned and backgrounded calves ready to go on feed but more importantly, 650 to 849 pound steers also represent the underlying commodity corresponding to the CME Feeder Index and CME Feeder Cattle Futures Contract. Additionally, the CME Feeder Index is the price used for calculating values and indemnities for the Risk Management Agency's (RMA) Feeder Cattle–Livestock Revenue Protection product (LRP).

In all, 1,181 650-849 pound steers were sold at the January 18, Wakeeney Feeder Cattle Auction in 34 lots, for an average price of \$129.88 per cwt. On that same day, there were 21 other auctions across the nation occurring that directly contributed to the CME Feeder Index price; the average price for the 7,284 steers sold at those 21 auctions in the 650-849 pound weight range was \$128.27. **921 Age verified steers were sold in 17 lots for an average of \$133.18 per cwt. 260 Non-age verified steers sold in 17 lots, for \$126.59; a difference of \$6.59 per cwt.**

Analysis of the 1,181 steers sold showed that weight was the most statistically significant price factor, with a negative \$4.41 per cwt. slide observed. **Age verification status was the next most important price factor, adding an estimated \$4.62 per cwt. to the value of steers in this important weight category.** Both price factors, weight and age verification status were significant at the 1% level based on their *t*-statistics.

During this auction, for steers weighing between 650 and 849 pounds, lot size was less significant (20% level, *t*-stat), with a \$0.44 per cwt. price increase observed for every 10 head, peaking at lot sizes between 30 and 49 head; and on a statistical basis, color did not impact price.

