
Calculating Shrink on Sale Calves Can Be Your Profit

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Fall weaning is always a very busy time of year and this week was one of those times. Eighty-six head of early weaned steers averaging 588 pounds finished a six week preconditioning trial and were shipped to the feed yard on Nov. 1.

The calves' pre-truck weight was 50,580 pounds. The weight will end up closer to 47,000 pounds by the time the calves weigh in at the feed yard and reports get back to us.

The true weight of living, breathing cattle is seldom known. Periodically, we attempt to estimate the true weight at some point in time and commence to barter as to what the weight really is. If a steer shrinks 6 percent when you sell him, does he expand 6 percent when you buy him? Were the calves tanked up with water? Were the calves full of silage? Was the water turned off the night before shipping? Nobody really wants to pay 85 cents a pound for calf urine that runs out the back of the truck.

The North Dakota State University Dickinson Research Extension Center cattle, gaining over 2.5 pounds a day, are consuming more than 15 pounds daily, which means more than 2.5 percent of the calves total weight equal is feed in the rumen or calf's stomach. One could note that this feed is tomorrow's 2.5 pounds of calf weight gain (i.e., 6 pounds of feed per pound of gain). If that were the conclusion, then the feed in the rumen is worth 2.5 pounds times 85 cents instead of 15 pounds times 85 cents.

In addition, the Nutrient Requirement of Beef Cattle handbook indicates 600 pound calves should drink five or more gallons of water a day--and more as day temperature goes over 40 degrees Fahrenheit. Providing the calf in not dehydrated, the excess water would leave the calf and run out the back of the truck. Daily water intake, roughly 40 pounds, also needs to be accounted for when buying or selling cattle.

If a 600 pound calf shrinks between 6 and 7 percent, almost all the shrink could be attributed to fluid loss or calf dehydration. Forty pounds of water is more than 6

percent of a 600 pound calf. Currently, our pay weight for the calves is off-truck weight plus 3.8 percent. In other words, the feed yard is adding back 3.8 percent of the calves weight, offsetting the fluid loss, to estimate the real weight of the calf, which means a calf with normal fluid levels.

It's kind of like a car running a quart low on oil. It is not something you want to do for very long. In the center's case, if a calf weighs 600 pounds after the 600-mile plus haul, the pay weight of the calf would be 624 pounds. The calf may have weighed more than 640 pounds at the ranch, but 640 pounds of calf did not walk off the truck. Realistically, an estimated 94 percent of the calf is going to walk off the truck, hopefully headed for a good drink of water and a bite of feed.

Scribbling with some ball-park estimates of weight numbers should help you think through some logic to handling cattle and reporting weights. Again, nobody really wants to buy water or feed, just a healthy calf. However, time suggests a middle-of-the-road solution seems to generally fit both the buyer and seller. The seller gives up half the shrink, and the buyer pays for half the shrink.

Keep in mind, for example, if a pound of calf is worth 85 cents, every 10 pounds of shrink is costing \$8.50. The reality of this discussion is that profit and loss can be influenced dramatically on miscalculated body weight. As a calf producer, have a good weighing process and predetermined shrink estimates before you sell your calves. Your profit may depend on it.

May you find all your ear tags.

Your comments are always welcome at www.BeefTalk.com. For more information, contact the North Dakota Beef Cattle Improvement Association, 1133 State Avenue, Dickinson, ND 58601 or go to www.CHAPS2000.com on the Internet. In correspondence about this column, refer to BT0116.

Calf Weights and Shrink

Weight Day	Total Lot Weight
On-truck weight	50,580 lbs
Off-truck weight	47,380 lbs
Total actual shrink	6.3 %
DREC pencil shrink	3.8 %
DREC pay weight	49,275 lbs

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