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Two Productivity Measures for Cow-calf Farmers

Dr. Kenny Burdine, Extension Beef Cattle Marketing Specialist for the University of Kentucky wrote the following article concerning two very important indicators of production and profit in beef cattle. Weaning rate, and weaning weight are critical to beef cattle farm profitability as described below.

As we open the final month of the year, most spring-calving cow-calf operations have weaned calves and have an opportunity to assess the productivity and profitability of their herds. To that end, I wanted to quickly review two measures that I feel are of utmost importance to a cow-calf operator. Neither measure carries a dollar sign, but both have serious implications for the revenue side of the profit equation. There is no shortage of measures that can be helpful for cow-calf operators, but weaning rate and pounds of weaned calf per cow are two that I think are very important, but also relatively simple to understand and calculate.

Weaning rate is the percentage of cows exposed to a bull that wean a calf in a given year. If a farmer exposed 50 cows and weaned 45 calves, the weaning rate for that operation would be 90% (45 calves divided by 50 cows). There is a cost to maintaining and breeding cows whether they wean a calf or not, so limiting the number of cows that incur costs and fail to wean a calf is

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crucial. Holding all other things constant, herds with higher weaning rates will be more profitable than those with lower weaning rates. If weaning rate is an issue, farmers should work to determine if the issue is cows failing to breed, cows losing calves, or calf survival.

An easy way to think about weaning rate is that it converts revenue per calf to revenue per cow. For example, assume that an average calf is weaned at 550 pounds and is worth \$2.30 per lb. Then the value of each calf is \$1,265 at weaning. However, when this is discounted for cows that were maintained but did not wean a calf, the revenue picture on a per cow basis is very different. Each 5% change in weaning rate impacts revenue per cow by more than \$60. That difference expands in stronger calf markets and contracts in weaker calf markets, but the fact that weaning rate significantly impacts profit is undeniable.

The second measure that I wanted to briefly discuss is pounds of weaned calf per cow. Pounds of weaned calf per cow can be calculated by dividing the total number of weaned pounds by the number of cows exposed to a bull or by multiplying the average weaning weight for the operation by the weaning rate. I like to think of pounds of weaned calf per cow much like a yield measure for a crop operation – production per unit. Weaned pounds are the production level and cows are the unit.

Increasing the percentage of cows that wean a calf each year and/or increasing the weaning weight of calves are two of the primary ways that cow-calf operations can see increased revenues, with calf price being an important third factor.

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