

A popular phrase swept the nation some time ago that completely altered people's mindsets. Since that time, arguments have been made for and against this phrase that states "bigger is better". Although it may be valid in some areas, this saying should not be applied to every situation in life- especially in a cattle operation. This week we will analyze one of the most common areas that producers hold the "bigger is better" mindset, and discuss the risks associated with this way of thinking.

A frequent topic of conversation held between cattle producers is that of the size of their cattle. Often, rather than discuss how much a calf brought at sale, producers talk about how much the calf weighed, and how big the calf's dam is. Although increased pounds of calf produced per cow exposed is a good thing, more often than not these producers don't actually put a pencil to it to determine if the cattle are actually making the operation money. Below, we have done some calculations to stress the importance of knowing if your big cattle actually are *better*.

For our scenario we will compare cows from two different weight classes- 1350 pound cows, and 850 pound cows. If one piece of land has the ability to support 100- 1350 lb cows, we can presume that this same piece of land can support 158- 850 lb cows. Assuming that all cows of each weight category wean calves that are 50% of their individual body weight, we find that the total number of pounds weaned from the 1350 lb cows is 67,500 pounds. However, the 850 lb cows weaned a total of 67,150 pounds in calves. Using recent market reports from the West, Texas Livestock Auction, we see that 675 pound steers and heifers brought on average \$1.275/lb. Steers and heifers weighing 425 pounds brought an average of \$1.435/lb. With these numbers we found that the calves born to the heavier group of cows would sell for a total of \$86,062.50, but the calves out of the 850 lb group brought a total of \$96,360.25. This means that there was a \$10,297.75 advantage in this scenario when the smaller weight class of cows was used instead of the larger weight class.

Although there is financial benefit associated with managing smaller cows this does not mean that big cows are completely unprofitable. Producing big cows in order to have big calves at weaning may in fact be profitable, depending on the goals of your operation. For example, if you strictly sell calves by the pound and purchase all of your replacement heifers, you may find it profitable to implement the genetics and management steps that will result in big calves at weaning. It may be wise, however, to also purchase moderately framed heifers, and breed to bulls that have good weaning weight EPDs. This will help keep the cow cost per year low by decreasing production input, but aids in increasing pounds of calf produced per cow exposed. The main situation in which producing calves that will be big at weaning is undesirable is if you are raising your own replacement heifers. By implementing genetics that produce big cattle, these genetics are also passed down to the heifers you are planning to keep as replacements. This is undesirable because it creates the situation discussed in the example above where bigger cows generate less profit than the smaller cows.

It is difficult to manage what is not measured. Next time you hear the phrase "bigger is better", think twice, do the calculations, and determine if it is actually true. You will never know if bigger cattle are actually more profitable unless you do the calculations for your operation. If you have any questions about the calculations used or would like to know how to do this analysis on your herd, please contact us.