

Weighing the Returns

Increased post-weaning growth may not offset increased cow cost.

by *David Lalman and Wes Ishmael*

“Without significant focus on controlling mature cow weight, cows are going to continue to increase in size, and that’s important because cow weight is a proxy for feed intake,” says David Lalman, Extension beef cattle specialist at Oklahoma State University (OSU).

Even though OSU’s pioneering research into cow feed efficiency on forage identifies some outliers, such as big cows that consume less low- to moderate-quality forage than smaller ones and some smaller cattle that are less efficient than their heavier counterparts, generally speaking, Lalman explains feed consumption increases with cow weight.

In fact, according to OSU research, cow feed consumption (ad libitum) increases 2.1 to 2.5 pounds per day for every 100 pounds of additional mature cow weight. That can be a concern for individual operations, as well as for the collective beef cow business.

Added cow weight costs

Looking at USDA data, Lalman says steer carcass weights have increased an average of 5 to 6 pounds every year since 1971. The equivalent mature cow weight increased 7.3 pounds per year over the same period (Figure 1). Increases for both are due in part to many breeds’ aggressive selection for increased post-weaning and yearling growth over the past couple of decades (Figures 2 and 3).

In terms of input expense, in a majority of operations Lalman says each additional 100 pounds of mature cow weight costs \$75-\$100 per year in increased feed consumption.

On the production side of the equation, Lalman explains, “As a general rule of thumb, based on our research, an additional 100 pounds of mature cow weight yields an added 6 to 28 pounds of calf weaning weight in commercial operations.”

More specifically, Lalman explains the lower end of the weight range for additional calf weaning weight is expected in a tough environment where nutritional

resources are limited. Conversely, the upward end of the range favors an environment where nutrition is adequate or abundant.

“In general, you’re not going to be able to pay for the added weaning weight if you sell calves at weaning unless you have customers willing to pay more for the added growth potential of the calves or you retain ownership in the calf beyond weaning,” Lalman says.

Otherwise, you incur the cost of maintaining larger mature cow weights without also benefiting from the extra post-weaning growth.

“The industry assumes the additional income from extra-weaning growth far outweighs the increased cost of mature cow weight,” Lalman says.

As mentioned, additional economic benefit can be reaped if marketed appropriately. Even then, however, Lalman points out maintaining larger cows comes with added production risk.

“During times that forage resources are challenged, such as drought, you’re going to have to sell more cows, and if you don’t modify the environment artificially through supplemental feeding and higher input costs in order to avoid reproductive failure, you could have a disaster on your hands,” Lalman says. “It might not be evident every year, but cattle further away from matching their environment are going to be more susceptible to environmental extremes.”

Reaching the weaning weight plateau

Thinking back to the average 7.3 pounds of increased mature cow weight each year — that’s an added 73 pounds across a decade.

“How much added production can an individual ranch stand?” Lalman wonders.

Various data suggests the average weaning weight growth at the ranch level is about tapped out.

Based on breed phenotypic data for Angus, Charolais and others, weaning weight is beginning to plateau,

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according to Lalman. Standardized Performance Analysis across decades suggests weaning weight is mainly stagnant to declining.

Moreover, Lalman worked with analysts at Kansas State University to evaluate data from Superior Livestock Video auctions. They looked at sale lots identified as un-weaned calves and projected delivery weights based on delivery dates as a proxy for weaning weight. Weaning weights for cattle in the northern tier of the country (Kansas and further north) began to plateau in approximately 2005-06. Across the southern tier, researchers see continued weaning weight growth, similar to what occurred in the north. The working hypothesis is that weaning weights in the south will also reach a plateau.

“The important thing is for you to know what’s going on in your own operation,” Lalman says. “If your calf weaning weights continue to increase to offset the added cost of heavier cows and you’re selecting aggressively for growth, then there’s a good chance it can pay off if you have a good relationship with those purchasing your cattle or if you retain ownership.”

On the other hand, Lalman says, “If your weaning weights have stabilized, then it suggests more focus on cow cost is likely appropriate.”

As time goes on, OSU research also indicates there is an opportunity to identify individuals that bend the curve by producing the heaviest weaning weights while consuming the least feed. That’s a topic Lalman will discuss in the January issue of *Baldy Advantage*. **BA**

Figure 1: Steer and Cow Carcass Weights

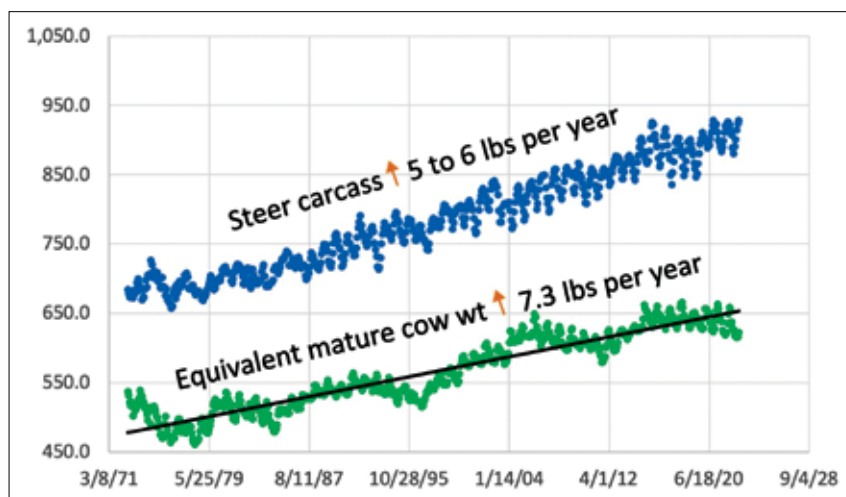


Figure 2: Genetic Trend Weight: Angus

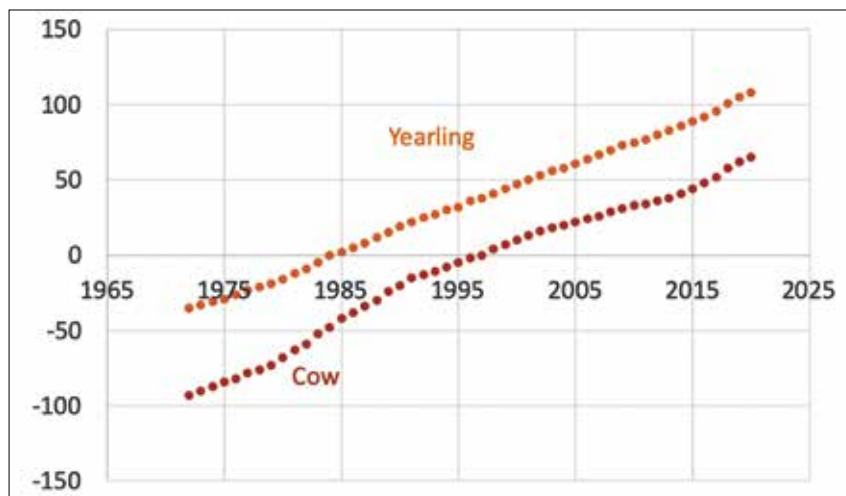


Figure 3: Genetic Trend Weight: Hereford

