

HEALTH & HUSBANDRY

Benchmarking your herd: Is average enough?

by Brad White, Kansas State University Beef Cattle Institute



Finals week. Remember from high school or college? It's a stressful, but exciting, time.

How well did you do through the semester? Did you get enough work done along the way?

The culmination of finals week is getting a grade that represents how well you did for the entire semester. Selling calves from cow-calf operations is also a form of final exam. It's a cumulative test, with often at least 18 months of preparation from the time the calves were conceived to the time they are sold.

This comprehensive final exam covers reproductive efficiency, health management and growth performance over the entire period. Instead of just getting our exam results and moving on to the next task, this is a great time to evaluate our results and identify areas for improvement.

Average is just average

Benchmarking your herd involves finding a relative group for comparison and using this information to highlight opportunities for greater efficiency. Herds have different resource availability, and this leads to tremendous variability in economic and production outcomes. One temptation in benchmarking is to try to be at least as good as an "average" herd.

A report on the Kansas Farm



Management Association economic data from cow-calf operations from 2014 to 2018 illustrated average net return to management over total costs was -\$148.71 per cow. The average number does not tell the entire story, as producers in the top one-third profitability category averaged \$60.53 net return per cow, while those in the lowest one-third averaged -\$351.71.

Choosing the appropriate group to benchmark against allows for a comparison that can identify specific focus areas to increase herd productivity and profitability. Differences between high- and low-net-return herds were driven by multiple factors, but overall sale price of the calves and total feed costs were the biggest discrepancies among the groups.

Benchmarking is important. Choosing to benchmark your herd against the top one-third of producers in your area can foster improvement, because being an "average" producer may not result in optimum production or profitability.

Collecting the right data

Weaning (or calf sale) is an ideal opportunity to collect data on your herd to generate numbers allowing comparison with other herds. Weaned calves and cull cows represent the largest sources of income on most cow-calf ranches.

The number of calves sold is influenced by a variety of factors, but one of the initial measures is to evaluate the number of calves weaned per cow exposed, which can provide some overall information on the herd status. (For more information on how to calculate and interpret this number, please see the February 2020 column: "Is your herd healthy? Check the dashboard.")

The number of calves weaned is

Choosing to benchmark your herd against the top one-third of producers in your area can foster improvement, because being an "average" producer may not result in optimum production or profitability.

influenced by several factors, but two of the main areas to evaluate are health and reproduction. For calf health, evaluating the number of calves that died between birth and weaning is an important number.

Average calf death loss in beef operations in 2015 was reported as 5.5% of the calf crop [USDA National Animal Health Monitoring System (NAHMS) 2015 data]. This national average is a high number and would be difficult to be sustainable in the long term for an individual herd — again, our target is to be better than average.

Death loss in preweaned calves can result from many factors, including infectious disease (scours, pneumonia), predators and other factors near birth (weather). If the herd death loss is approaching the national average, further investigation is warranted to determine the specific causes of death loss and optimum prevention methods.

Reproduction is critical for long-term success of the cow-calf herd. Weaning is a great time for evaluation, as reproductive success for both this year's calf crop and next can be determined by establishing the number of calves sold and pregnancy testing the current cow herd.

The national average calving percent for all herds in the USDA NAHMS 2017 data was 93.5% among cows and 83.0% among heifers. However, a further

evaluation of these numbers reveals that herds of 200 head or more have a higher average calving percentage among heifers (91.6%) than herds with fewer than 50 head (74.2%). This illustrates some herds can have higher calving percentages, and you must determine what is optimum for your herd.

Setting targets

Once you have identified which parameters are most important for your herd, setting some key targets is important. Several areas drive overall production. Table 1 outlines some example targets I have used for evaluating overall herd success. Each parameter has a target and a level at which to consider further investigation or some intervention if

Table 1: Targets for evaluating overall herd success

Parameter	Target	Intervene if
Pregnancy rate in first 21 days	> 60%	< 50%
Pregnancy rate after 60 days	> 93%	< 85%
% calves weaned per cow exposed	> 90%	< 80%
Total preweaning calf mortality	< 3%	> 5%
Involuntary culling rate	< 10%	> 15%

your herd goes below this line.

These are general targets and may not be suitable for your herd. Please consult with your veterinarian to determine the best comparison group for your operation.

These targets also only consider

Continued on page 40

the production side of the equation. Economic areas such as stored feed cost per cow and average sale price of calves are also very important, but vary by operation.

I encourage you to track these variables over time on your operation and use them to quantify your improvements in each area.

Here are some resources on the web to find information to benchmark your herd:

- ▶ USDA NAHMS 2015 data: <https://bit.ly/2015cdl>
- ▶ USDA NAHMS 2017 data: <https://bit.ly/2017NAHMSP1>
- ▶ Kansas Farm Management Association 2014-2018 summary: <https://bit.ly/KansasLow-high>

Conclusions

Benchmarking your herd can be

Benchmarking your herd involves finding a relative group for comparison and using this information to highlight opportunities for greater efficiency.

a valuable tool to identify areas for improvement. Finding the right numbers for comparison is important and will help focus your efforts on the areas of your operation where you can make the biggest changes.

Don't be average. Make a plan to ace your final exams! █

Editor's note: "Health & Husbandry" is a regular *Angus Beef Bulletin* column devoted to the care and well-being of the herd. Author Brad White is on faculty at Kansas State University College of Veterinary medicine and serves as director of the Beef Cattle Institute. To learn more on this and other beef herd health topics, tune in to the weekly Beef Cattle Institute *Cattle Chat* podcast available on iTunes, GooglePlay or directly from KSUBCI.org.