

# Quality Beef by the Numbers

*'A Tale of Three Calves' shows the difference genetics can make, importance of recordkeeping.*

by **TROY SMITH**, field editor &  
**SHAUNA ROSE HERMEL**, editor

Mike Kasten says he believes in keeping cow performance records and collecting progeny carcass data. The Missouri cattleman is a vocal advocate of artificial insemination (AI) — particularly fixed-time AI. He also believes in genetic selection for superior carcass merit. Kasten told how all of these practices influence profitability when he addressed the Range Beef Cow Symposium audience Dec. 5 in Rapid City, S.D.

Sharing what he called "A Tale of Three Calves," Kasten illustrated how much variation in value can exist among cattle of approximately the same age that look alike and are managed alike. The example was based on performance data that Kasten gathered on three calves born to cows raised in the same production environment. All calves were weaned on the same day and hauled to a feedyard on the same truck. They were fed to finish in the same pen and harvested on the same day. However, the calves represented significant differences in value and profitability.

Kasten noted differences in feedyard average daily gain, finished weight, carcass weight, yield grade and quality grade of carcasses produced by the three calves (see Table 1). When sold on a grid that rewards carcass merit, the heaviest carcass earning the best quality grade (Prime) represented \$320 more value than the next best carcass even though there was just a 7-lb. difference in carcass weight. The value spread between the top and bottom carcasses was \$813.



The take-home message, said Mike Kasten, is that data analysis shows where an operation makes and loses money. Just as important, he added, is that breeding and feeding high-quality cattle can be very profitable.

When all accounting was complete, including consideration of feedyard performance, the "best" calf returned a net profit of \$633. The next best calf netted \$206, and the third calf lost \$250.

The take-home message, said Kasten, is that data analysis shows where an operation makes and loses money. Just as important, he added, is that breeding and feeding high-quality cattle can be very profitable.

## Finding the right cows

"That one animal made me \$633 net profit. I don't know about you, but if I had a herd of those I would be very, very happy," Kasten emphasized. "I need to find those."

It starts with looking for the cows in your herd that are the top performers by what they contribute to your bottom line, he said, emphasizing you won't find them by going out in the pasture and looking.

Doing the exercise in his own herd uncovered a cow Kasten said he had

never paid attention to before until he found her on paper. The most profitable cow in his herd turned out to be S300 — a cow whose pedigree contained five generations of AI sires. She maintained an average calving interval of 369 days on four calves that had an average weaning weight ratio of 105.

Her three steer calves had all graded Prime. Her one heifer had GeneMax™ scores of 94-5-5.

"She's made me an average profit of \$366 every year I've fed a calf out of her, regardless of the bull I've bred her to," said

Kasten, noting the calves were all sired by different bulls.

Figuring conservatively, over her lifetime, she has the potential to net \$2,750 more in profit than the average cow in my herd, Kasten estimated.

"Isn't that worth finding?" he asked, emphasizing he would have never found her had he not kept records.

"We can create more value with our same resources by tracing these cattle, using high-quality genetics and putting them through the feedyard and using the technologies we have today right now — and not spend a dime more doing it," Kasten said.

**"Keeping records really isn't that scary, and time spent doing it will return more to the operation than anything else you do."**

— Mike Kasten

## Furthering the quality focus

Kasten shared what he considers to be key steps to furthering a quality focus. "Target genetic selection for quality," advised Kasten, emphasizing use of expected progeny difference

(EPD) values to make informed breeding decisions. "Today, through AI, we can use semen from bulls that have thousands of progeny to validate the EPDs. A DNA profile can further validate the potential of their future progeny. EPDs and DNA are tremendous risk-management tools."

Kasten also advised commercial cow-calf producers to consider

## Supplying cattle that work for all segments

Tom Brink, formerly of Colorado-based Five Rivers Cattle Feeders, sees opportunities ahead for the beef industry — particularly for cow-calf producers. That said, he encouraged producers to focus on supplying feeders and packers with healthy calves that will gain and grade.

"Everybody wins with good cattle," he said as he addressed attendees at the 2013 Range Beef Cow Symposium (RBCS) in Rapid City Dec. 4.

Regarding selection, he advised producers to balance the necessary ranch traits with above-average growth and carcass value potential.

By doing things right, cow-calf producers can make extremely good premiums on the grid, he noted. "Today I know people who are disappointed if they don't make over \$100-per-head premium."

Looking to the next five years,



Tom Brink, formerly of Colorado-based Five Rivers Cattle Feeders, sees opportunities ahead for the beef industry.

Brink shared with attendees four "game changers" that he sees on the horizon. Those include:

- Exceptional cow-calf profits. He estimated the potential returns could be \$250-\$500 per head over cash costs.
- Shrinking feedlot and packing capacity.
- Mouthwatering success with timed artificial insemination (AI) programs. Brink notes

**Table 1: Tale of three calves**

Calf no.	X294	X285	X382
Birth date	Aug. 27	Aug. 24	Sept. 6
Weaning wt., lb.	572	654	574
In wt., lb.	642	760	692
Finished wt., lb.	1,555	1,547	1,100
Feedyard ADG, lb./day	5.07	3.94	2.27
Carcass wt., lb.	997	990	705
Carcass grade	Prime	CAB	CAB
Yield grade	4.3	3.2	3.2
Sale value, \$	2,316.05	1,992.49	1,503.05
Difference over, \$		323.56	813.00
Net profit, \$	633.03	206.57	-249.97
Pen profit per hd., \$	164.35		

Source: Mike Kasten, Range Beef Cow Symposium presentation, December 2013.

implementation of fixed-time AI. He called it a practical, cost-effective way to hasten genetic improvement. Breeding “by appointment” means producers might expect to get 55%-65% of their cows bred to some of the best sires available in a single day. Kasten also emphasized the value of retaining AI-sired heifers as replacements.

“It’s often said that the most genetic improvement comes through the bull. I believe you can really make significant improvement through heifer selection, but you need information to make informed decisions,” stated Kasten.

“Keeping records really isn’t that scary, and time spent doing it will return more to the operation than anything else you do,” he added. “With records and the technology we have available today, I think we can select for cattle that do it all.”

Kasten spoke Thursday at RBCS XXIII. Visit the Newsroom at [www.rangebeefcow.com/2013](http://www.rangebeefcow.com/2013) to view his PowerPoint, read his proceedings paper or listen to his presentation.



**Editor’s Note:** *The RBCS is a biennial educational symposium offering practical production management information. It is sponsored by the Cooperative Extension Service and animal science departments of the University of Wyoming, South Dakota State University, Colorado State University and the University of Nebraska. Comprehensive coverage of the symposium is available online at [www.rangebeefcow.com](http://www.rangebeefcow.com). Compiled by the Angus Journal editorial team, the site is made possible through sponsorship of LiveAuctions.tv and the cooperation of the host committee.*

there is amazing opportunity for those willing to use this technology.

- Major impact from high-end genetics and the advent of programs built on them. Brink sees grids being used to purchase feeder cattle and reward the exceptionally valuable cattle.

In closing, Brink encouraged cow-calf producers to make the most of the times ahead, while also thinking about the entire beef business and creating value for all segments. He encouraged producers to help a young person get established in the cow business to ensure the industry’s viability for the future.

Brink spoke Wednesday at RBCS XXIII. Visit the Newsroom at [www.rangebeefcow.com/2013](http://www.rangebeefcow.com/2013) to view his PowerPoint or listen to his presentation.

— by **Kindra Gordon**,  
field editor



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# Redefining Preconditioning

by **TROY SMITH**, field editor

The opportunity to hear a veteran cattle feeder talk about old and new approaches to calf preconditioning likely intrigued cow-calf producers attending the Range Beef Cow Symposium (RBCS) Dec. 3-5 in Rapid City, S.D. That's because Craig Uden has ample experience with calf feeding. He is co-owner of Darr Feedlot, Cozad, Neb., which receives some 20,000 calves each year. A cow-calf producer as well, Uden understands the perspective of people wanting to prepare their calves for the feedlot, and the perspective of people who manage those calves in the feedlot.

While foul weather prevented Uden from traveling to Rapid City, he delivered his presentation through remote computer technology. Recounting the history of preconditioning, Uden said the management strategy began in the 1960s as an effort to reduce the incidence of bovine respiratory disease (BRD) and its negative impacts to cattle performance in the feedlot.

"Recommendations called for weaning calves for three to four weeks, getting

them bunk-broke and applying a comprehensive health program," said Uden. "Not a lot of that was done back then."

Things weren't that different in the 1980s, when Uden began his cattle-feeding career. The focus of so-called preconditioning programs often included "a couple of shots." Uden recalls little focus on nutrition to enhance preconditioning. Neither was there much communication between ranchers and cattle feeders about how to better prepare calves for the feedlot. Ranchers had very limited opportunity to gather information showing how their calves performed in the feedlot or on the packer's rail. This limited their ability to establish reputations as sources of desirable feeder cattle.

Uden said things did start to change

**"Calf health is a byproduct of cow management.**

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**It's really about whole-herd management."**

— **Craig Uden**

during his first decade as a cattle feeder. More and different vaccine products came into use, but cattle still sickened and died. A growing awareness of the role dietary minerals play in immune response and overall health of calves led to increased focus on nutrition.

"Calf health is a byproduct of cow management," stated Uden. "Preconditioning doesn't start with giving shots to calves. It's really about whole-herd management."

Uden praised the Beef Quality Assurance (BQA) program and recommended adherence to BQA practices. Particularly important are the proper handling and timely administration of vaccines to optimize efficacy. He also emphasized the value of low-stress cattle-handling practices for enhancing

cattle health. Citing the early December weather change, from 60° F Monday to -6° Wednesday, Uden said some stress is unavoidable. However, he said, minimizing stress factors that can be managed should be a priority.

"Health still is the No. 1 influence on feedlot performance and carcass outcomes," stated Uden. "Managing cattle health is a process that's constantly changing. It's a marathon; not a sprint."

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