

Decisions, Decisions

Nebraska feedlot specialist looks at shifting economics of feedstuffs.

Story & photos by **MIRANDA REIMAN**,
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When input and output prices change dramatically, it's time to go back and crunch some numbers.

That's according to Galen Erickson, University of Nebraska feedlot specialist, who talked about everything from feedstuffs to growing and finishing decisions at the Feeding Quality Forums in La Vista, Neb., and Garden City, Kan., in August.

Corn may be king, but cattle feeders ought to think about forage, too, he said.

"The total feed needed to get a steer to market is 85% forage because there's a cow somewhere that's being fed a forage-based diet," Erickson said. He also noted intake during backgrounding and feeding, before comparing that nearly 14,000 pounds (lb.) of forage to the average 3,300 lb. of concentrate fed during the finishing phase.

"That emphasizes that forages are critically important to the beef industry," he said.

Although grain prices have come down, forage has seen a significant increase. One ag economics five-state survey shows pasture rates in the upper Midwest increased by \$35 per animal unit month (AUM) in just five years to a current \$60 average.

Distillers' grains are still competitive compared to corn, but not the significant discount they used to be.

"You got used to pricing things on a protein basis," Erickson said. "You need to price things on an energy basis, because I think it affects your bottom line more than protein. I'm not trying to say this is gospel, but to get you to think about pricing."

Feed prices are one part of the breakeven equation, but producers must consider what they'll get for finished animals, too. Many are increasing saleable pounds right now, Erickson said, noting the strong trend toward higher carcass weights. Grades have followed a similar higher plane during the last five years.

Genetics have played a role, but "increasing days on feed and making cattle into yearlings are the two quickest ways to increase mature weight," the animal scientist explained.

Yearling potential

Any advantages for calf-feds must be weighed against their generally greater health challenges and lighter finished weights, he noted.

"Yearlings always eat more per day and gain more per day, but are less efficient from a conversion



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standpoint, but they're bigger when they get done," Erickson said, sharing data to back up that claim.

In one study, his team applied a real-world filter, taking one set of calves and putting the heavier half (642 lb.) on feed right away, making the 526-lb. calves into yearlings.

"Why am I comparing apples to oranges? Because you would not feed apples and oranges in the same way," he said.

In that instance the calf-feds had a feed-to-gain ratio of 5.63, with an average daily gain (ADG) of 3.81 lb. and ended up at 1,282 lb. The backgrounded calves had a 4.53-lb. ADG and converted at 6.76 lb. of feed per 1 lb. of gain. They ended with a 1,365-lb. final weight, giving the yearlings a 52-lb. hot carcass weight (HCW) advantage.



"The risk on feeding yearlings is overweight carcasses. The risk on feeding calf-feds is yield grade (YG) 4s," Erickson said, noting the older animals had a nearly 7-point higher Choice percentage in this case study.

Research comparing cattle purchased at the same time and then randomly allocated revealed similar performance trends, but put the exclamation point on mature weight gain. The calf-feds finished with a 774-lb. HCW, compared to 919 lb. for the fall yearlings.

"If you want to add more than 140 pounds of carcass weight, you can do that just by keeping them growing on grass or on forage," he said. "That's a big impact."

Once they're in the yard, how long should cattle remain on feed?

The longer the better, Erickson said. To what point? Researchers don't know yet.

"Our job is to test the limits so you

don't have to," he said. "Average daily gain goes down as you increase days on feed. That's proven. But carcass rate of gain doesn't appear to be dropping off dramatically as we feed cattle longer. With corn prices and cattle prices where they're at today, there is an incentive to feed them longer," he said.

There is also an opportunity to take greater advantage of cornstalks.

"The data are quite clear that, on average, as we produce more corn grain, we produce exactly the same amount more corn residue," Erickson said. In turn, recent yield increases create more opportunity.

Studying silage plans, harvesting a bit later and drier could improve profitability, too.

"If you want to maximize yield and theoretically quality, harvesting silage in the black layer is the target," he said.

Earlage, steam flaking, sweet bran and other topics came up as areas to explore.

"You decide profitability in many cases when you buy the cattle, but what you do on the cost-of-gain side is important," Erickson said.

The Feeding Quality Forum is co-sponsored by Zoetis, Roto-Mix, Micronutrients, *Feedlot* magazine, Purina Mills and Certified Angus Beef LLC (CAB).

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