

Long-day Feed Efficiency

Hereford genetics add marketing flexibility.

by *Wes Ishmael*

Feeding cattle to maximize economic return is a constant game of antagonistic tradeoffs, such as grid premiums for quality grade versus grid discounts for yield grade and too-heavy carcasses, cost of gain versus total pounds gained and all the rest.

Along the way, Lee Mayo, partner and general manager of HRC Feed Yards LLC, Scott City, Kan., says feedlots typically want to maximize economic returns while finishing cattle as quickly as possible to minimize the cost of gain, which is a key driver of cattle feeding returns.

Generally speaking, the longer cattle are fed past an optimum point, the more feed efficiency suffers and the more the cost of gain increases. This reality garnered more focus last year as cheaper feed prices, high fed cattle prices, declining cattle numbers, historically high purchase prices of feeder cattle and economics surrounding feedlot capacity utilization encouraged feeding cattle for significantly more days.

Extended efficiency magnifies returns

“Understanding differences in feed efficiency as days on feed increase is probably something we’ve not paid as much attention to as needed, as an industry” Mayo says. He shares Central Plains benchmarks and data from a pen of commingled steers from the American Hereford

Association Feedout Programs (see Hereford Feedout Programs Grow) to illustrate his point.

Mayo looked at a pen of commingled steers HRC fed through the winter of 2024 (H24), which included 161 steers from 13 different owners. The pen was mainly straightbred Hereford steers sprinkled with Hereford-sired red and black baldies. They were harvested late last summer.

Compared to a similar pen fed and harvested during the same period a year earlier, the H24 group was fed 41 more days (223 days), yet pounds of feed per pound gain increased by only 0.09 pounds to 5.59 pounds, which was still 0.76 pounds more efficient than the Central Plains average (see Table 1).

“We’ve always known Hereford cattle are more feed efficient than other breeds, but I never dreamed in a million years that if we fed them another 41 days, we would only impact feed efficiency by .09 pounds of gain,” Mayo says.

Besides its impact on the bottom line, Mayo explains customers use cost of gain as a key comparative metric between cattle feeding organizations.

“Ninety percent of the people I feed cattle for feed cattle every day and receive closeouts every week. The one thing they complain most about is cost of gain,” Mayo says. “I’m in competition with every other feedyard in the country on cost of gain.”

All Choice and Prime

Straight Hereford steers produced through the American Hereford Association (AHA) National Reference Sire Program (NRSP) underscore the breed’s significant improvement in carcass quality while maintaining the breed’s maternal superiority and production efficiency.

Olsen Ranches, Harrisburg, Neb., the mainstay NRSP herd, randomly mated their commercial Hereford cow herd via one-time AI to 14 different NRSP Hereford sires. The resulting 300 head of steers, born June-July 2022, were ultimately harvested in February 2024 (six weeks later than normal due to weather).

The steers graded 51.1% Prime with the remainder grading Choice, predominantly in the upper two-thirds of Choice, and posted an average yield grade of 3.6. Among other performance metrics for the pen: 4.3 pounds average daily gain; 26.2 pounds daily dry matter intake; 6:1 feed conversion; 858-pound carcass weight; 13.8 square inch ribeye.

For proper context, the Olsens employ a low-input philosophy. Calves are born June-July, weaned October-November and then roughed on winter pastures with little to no feed supplement until the feeding trial in June. Likewise, cows receive no supplement except during extreme weather conditions.

With low inputs in mind, the Olsens emphasize feed efficiency, place downward genetic selection pressure on mature cow size and milk, and use sires that are breed average for growth but above breed average for calving ease. Among sires that fit these criteria, they select for as much end-product merit as is available. In 1999, steers from the program averaged high Select/low Choice. This year, they averaged high Choice/low Prime. **BA**

**Table 1
Comingled Steers**

	2023	2024
Head	161	161
In Weight	720	666
Terminal Re-implant Wt.	1,239	1,174
Out Weight	1,423	1,476
Dressing %	64.94%	63.90%
DOF	182	223
ADG	3.88	3.66
% Deaths	1.86%	0.62%
% Choice	78%	77%
% Prime	0%	6%
% PR/CH	78%	83%
% YG 1/2	37%	19%
% YG 4/5	22%	46%
HCW	924	943
Yield Grade	2.8	3.3
BF	0.72	0.80
REA	15.1	14.2
MARB	455	493
\$/Head	\$2,626.71	\$2,831.81
\$/CWT	\$284.10	\$300.27
F:G (DM)	5.50	5.59
F:G (DM) - Central Plains Avg.	6.32	6.35
Difference	0.82	0.76

Efficiently adding more total pounds drove revenue significantly higher.

Compared to the similar pen in 2023, HRC added an average of 107 pounds per head to the H24 pen for a total added feed cost of \$99.21 per head, which resulted in an additional \$197.95 more per head in carcass value. The net added value due to carcass weight was \$98.74 per head (added carcass weight value minus added feed cost).

The comparison reflects averaging feed costs on a dry matter basis across the two years. Cost of gain for the H24 pen was 83.9 cents per pound, only 1.4 cents per pound more than the pen fed in 2023.

“Increased feed efficiency makes money for cattle feeders,” Mayo says. “And, I’m not a fan of buzzwords, but when you look at it, feed efficiency is sustainability. There are fewer acres and more people every day. If cattle can gain a pound with 5.5 pounds of feed instead of 6.5 pounds, it’s huge.”

Plus, 5% more the H24 pen graded Choice and Prime, resulting in an additional \$16.49 per head across the entire pen. As with feed cost, Mayo averaged the fed cattle price, along with carcass premiums and discounts across both years to calculate the difference. All told, the H24 pen generated \$115.23 per head more than similar steers the previous year. See All Choice and Prime for another example of Hereford carcass quality performance. **BA**

Hereford Feedout Programs Grow

More Hereford breeders and commercial users of Hereford genetics are learning how their genetics perform in the feedlot and on the rail through the American Hereford Association (AHA) Feedout Programs. Last year, 103 participants from 23 states sent 2,379 Hereford and Hereford-influenced calves to feed at HRC Feed Yards LLC in Scott City, Kan.

“The value of this information and being closely engaged with the cattle feeding sector has always been important. It is becoming invaluable as more cattle are channeled into specification-based, value-added areas of the supply chain,” explains Trey Befort, AHA director of commercial programs. “By learning their herd’s genetic potential and understanding what performance traits cattle feeders and beef packers find the most valuable, producers can build a more effective marketing plan to make sounder marketing decisions year after year.”

The experience also informs production decisions.

“We needed to find a way to make sure our genetics were doing what they’re supposed to be doing. What better way to do that than to take calves that you’re raising at home and send them to the feedlot,” says Denise Loyning of L Bar W Cattle Co., Absarokee, Mont. “Let’s get back carcass data. Let’s find out if our health protocols at home are working. Are the bulls that we’re selecting right for what the industry is needing today? Are those carcass bulls truly performing? Are all those things coming together?”

Last year was the third year L Bar W Cattle Co. sent calves to the feedout.

“Every year, we see increased interest in these programs from our members and their customers because of the value they find in benchmarking feedlot and carcass performance in their programs and then tracking subsequent performance relative to their benchmark,” Befort says. **BA**