

Preconditioning Pays

Add value to weaned calves at auction.

by John Hutcheson, Ph.D.

Even though cattle prices are historically high, buyers are still willing to pay more for calves developed through strategic management and preconditioning programs, according to a recent analysis of how much calf buyers at auction are willing to pay for various attributes.

Insights come from an ongoing partnership between Merck Animal Health, Superior Livestock Auction and Kansas State University (K-State), which looks at prices and price factors for calves sold through Superior Livestock Auction each year. Data shared here represents 851,181 calves trading through Superior Livestock Auction sales in 2024. These calves weighed an average of 572 pounds¹ and sold for an average price of \$294 per hundredweight (cwt.). Keep in mind that the average price was 90% more than in 2019.

Analysts evaluated price factors, relative to the base averages. For each factor examined, all other factors were held constant so that each one is additive to the base averages. In other words, extra value from one value-added attribute can be added to that of another.

Certified preconditioning programs lead

Buyers vote with their dollars and were willing to pay the most for recognized preconditioning programs of any price factors examined. Preconditioning boosts the immune system and increases weight, helping equip weaned calves to thrive in the stocker pasture, backgrounding operation or feedlot. Successful preconditioning programs are built upon a series of vaccinations and management practices, such as weaning, deworming, implanting and transitioning calves to dry feed, as well as castrating and dehorning.

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— John Hutcheson, Merck Animal Health

Preconditioning programs are generally categorized as VAC24, VAC34, VAC45, VAC60 or VAC PRECON. Different vaccination protocols and timing are associated with each category, as well as whether calves are weaned, and if so, for how long.

For instance, VAC45 calves have been vaccinated with two doses of a clostridial vaccine, two doses of a five-way modified live viral vaccine and at least one dose of Mannheimia haemolytica and/or Pasteurella multocida vaccine and have been weaned at home for 45 days before delivery. Buyers in the analysis paid \$8.46 per cwt. more for VAC45 calves than those receiving only one dose of each of the three vaccines and weaned at shipping. So, relative to the base average weight, buyers paid \$48 more per head for VAC45 calves.

Working with a veterinarian to follow a certified preconditioning program can help producers give calves the healthiest start in the marketing channel, while adding value. A preconditioning certificate at auction can also further establish a ranch's reputation for selling calves that are ready for the next step.

PrimeVAC™ preconditioning programs by Merck Animal Health serve as an example. They are certified programs focusing on respiratory and clostridial vaccinations, protection against internal parasites and include optional implant protocols. For more information on the PrimeVAC

program, talk to your veterinarian or visit PrimeVAC.com.

The QR code at the end of this article leads to a decision tool created by K-State and Merck Animal Health to help producers evaluate the cost-return of calf vaccination programs.

Buyers don't discount implants

Over the last five years, and nearly 5 million head of cattle evaluated, there is no difference in the price per pound paid for implanted and non-implanted calves.²

Implants consistently increase average daily gain by 20%.³ Calves implanted at 2 months of age and older weigh 23 pounds more, on average, than non-implanted calves, are more muscular and have a slight increase in frame.⁴

Applying calf prices during this period to the additional pounds gained equates to a \$66 per head advantage compared to non-implanted calves. Combined with a VAC45 program, this data suggests producers could potentially sell calves for \$115 per head more than the base average.

Costs and benefits of value-added programs

Value-added programs may provide an opportunity to set your calves apart at sale and increase revenue. For instance, marketing calves in verified Non-Hormone Treated Cattle (NHTC) programs brought \$20 more per head than calves not enrolled in a program. Global Animal Partnership

(GAP) program calves sold for \$18 more per head.

Unless the premium of marketing your calves in an NHTC-type program outweighs the productivity and efficiency of gains from implants, calves destined for finishing and sale to a terminal market should be implanted to capture increased revenue. Consider the cost of participating in these programs when gauging the potential return on investment.

Other value factors

Buyers were willing to pay \$22 more per head for calves classified as medium to medium-large frame versus small frame. Calves with Continental breeding were discounted \$10 per head compared to English breeding.

Significant weight variation also impacted price paid per pound. Lots described as ‘very uneven’ brought \$3.29 per cwt. less than those that were described as ‘uneven’ or had no classification. Lots described as ‘fairly even’ stood to gain an additional \$1.14 per cwt., a total of \$25 per head.

Tighter calving seasons can add uniformity. A heat synchronization program paired with natural service can shorten the calving interval and get more cows bred earlier in the breeding season. Studies have shown that a single shot of a prostaglandin four or five days after bull turnout can result in heavier, more uniform calves.⁵

Don’t leave money on the table at auction. Take stock of current management practices and health

protocols that buyers pay more for at auction and consider what you can do to increase revenue by strategically marketing your calves. **BA**

Editor’s Note: John Hutcheson, Ph.D., is director, Cattle Technical Services, Merck Animal Health.



References:

¹ Superior Livestock Auction Data, 2024.

² Tonsor, Glynn T. Kansas State University. Evaluation of 2024 Superior Livestock Auction data.

³ Merck Animal Health. Technical Bulletin #11. Kentucky Comparative Study with Steers: Revalor®-G (trenbolone acetate and estradiol), Ralgro® (zeranol), Synovex®-S (progesterone/estradiol benzoate) and Control. May 2017.

⁴ Selk, G. Implants for Suckling Steer and Heifer Calves and Potential Replacement Heifers. Symposium Proceedings: Impact of Implants on Performance and Carcass Value of Beef Cattle. 1997. Oklahoma Agricultural Experiment Station. P-957.

⁵ Cushman, RA, Kill, LK, Funston, RN, Mousel, EM, Perry, GA. Heifer calving date positively influences calf weaning weights through six parturitions. *J. Anim. Sci.* 2013;91:4486-4491.

