The Price Primer:

What Determines the Price You'll Receive?

A marketing manual for feeder-cattle and calf pricing.

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Did you get the best price possible when you last sold your calves? What more could you have done to get a better one? What even determines calf prices? Unfortunately, that's not a simple answer. A host of factors contribute to the price you receive for your feeder calves on sale day. Many are macro level — they apply to the entire market. Examples include supply, demand and economic trends in the cattle and beef markets. Yet, there are numerous factors that will dictate whether individual sets of calves will receive premiums or discounts from buyers.

PHOTO BY SHAUNA HERMEL

Markets can change quickly; therefore, prices for calves and feeder cattle and the magnitude of premiums and discounts have the capability to be abruptly altered. The following discussion will take a deeper dive into the variables that truly determine the value of calves and feeder cattle.

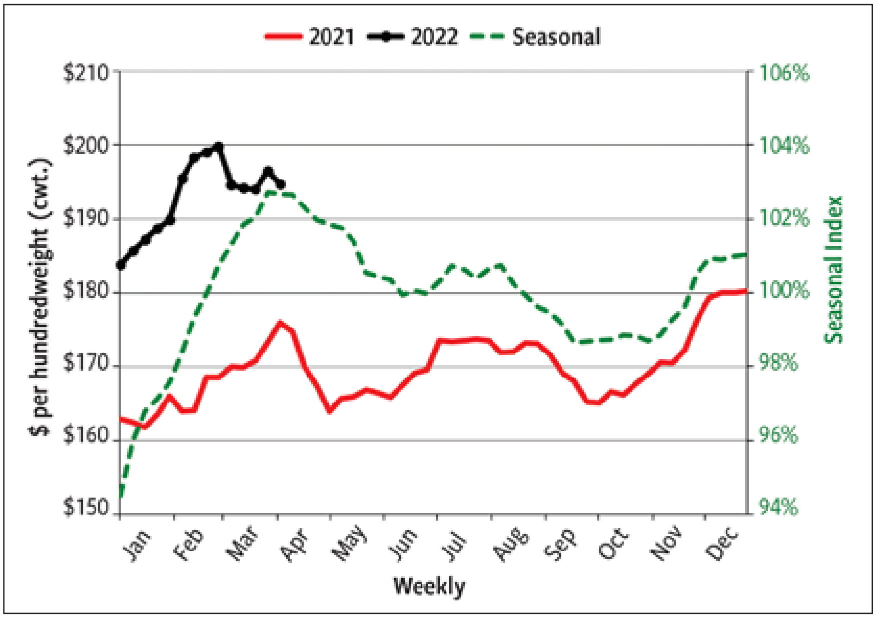
Supply and demand

Historically, cattle cycles typically last 10-12 years from peak to peak and low to low. This applies to both cattle inventory numbers and price trends. Profitability and grazing conditions are the two primary factors that drive producers to grow or contract the beef cow herd. As the cow herd declines, equating to tighter supplies of calves and feeder cattle, the market will respond over time with higher prices, giving producers incentive to expand, assuming adequate grazing resources are available.

Conversely, when supplies grow and outpace demand for calves and feeder cattle, prices trend lower, sending the signal to slow expansion or liquidate the cow herd.

While several factors influence demand for feeder cattle and calves, overall beef demand is a way to measure the health of the industry and how many dollars enter the supply chain that could potentially flow back to each segment. Retail beef demand in 2021 reached levels not seen since the late 1980s. The continued progress in product quality and consistency has been the driving force to growing beef demand. In 2021, 83% of the fed cattle harvested graded Choice or Prime, compared to 56% in 2000. While beef demand is expected to soften in 2022, the amount of consumer dollars coming into the beef production system will remain historically high.

Fig. 1: CattleFax U.S. 550-lb. steer price



SOURCE: CattleFax, 2022.

The supply of cattle at each segment, relative to the demand from the next sector in the supply chain, dictates how consumer dollars are allocated. Given the industry is currently in the contraction phase of the cattle cycle, with fewer feeder cattle and calves being produced during the next couple of years, more dollars will pass to the cow-calf segment.

Demand for calves and feeder cattle is primarily influenced by corn prices or costs of gain, feedyard profitability, and feedyard occupancy levels. Grazing demand, depending on precipitation, will also significantly affect calf prices at various times throughout the year.

> **Regardless of the marketing channel, producers investing in higher-quality genetics and/or health programs can often benefit from advertising their calves as such.**

Market seasonality

Most markets tend to track a normal or "seasonal" price pattern. Feeder-cattle and calf markets are no exception. About eight out of every 10 years the market follows a seasonal pattern.

For calves, this means prices push to a late-winter or early-spring high before trending lower to a low in the fall (see Fig. 1). Since roughly 70%-75% of the calves in the United States are born in the first half of the year, large supplies are sold at weaning in the fall. Demand cannot keep pace with the overwhelming volume, causing prices to come under pressure.

On the other hand, calf supplies are more manageable in the winter and spring due to a much smaller percent of U.S. herds calving in the second half of the year. In addition, demand for calves typically strengthens prior to turnout for

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PHOTO COURTESY JOPLIN REGIONAL STOCKYARDS

Since most cattle end up in Central or Southern Plains feedyards, transportation costs drive the amount of discount the farther cattle are from wherever the buyer's final destination may be.

spring and summer grazing.

A seasonal price pattern for feeder cattle is almost opposite of the calf market, with the annual lows typically coming in the first three months of the year, followed by an uptrend to a late-summer or fall high. While feeder-cattle supplies do affect price levels, the major factor is the fed-cattle market period the feeder cattle are placed against and are expected to be harvested.

Feeder cattle sold early in the calendar year will typically be slaughtered in the summer, when the fed market seasonally tends to be at its lows. The opposite scenario supports the late-summer and early-fall feeder market because those cattle are placed against the winter or spring fed market, when prices typically make a high. This time frame also coincides with when cattle-on-feed numbers are at their seasonal lows and feedyard demand is high to refill pen space.

When feeder cattle, and to a lesser degree calves, are sold, deferred live-cattle futures will influence the price that is received (see Fig. 2).

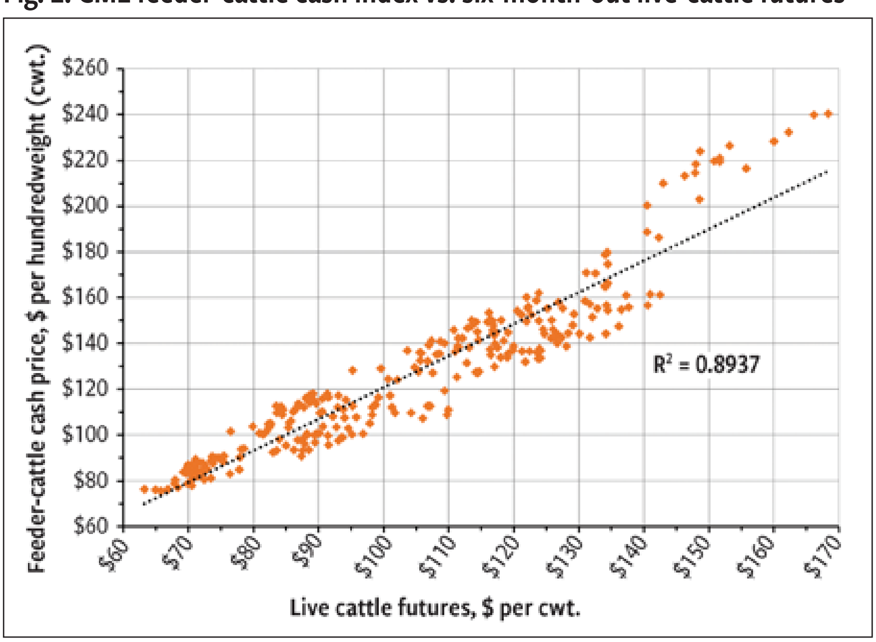
Weight and sex differences

In the cattle business, the primary driver for revenue is total pounds sold. Considering cattle are priced on a per-pound (lb.) or per-hundredweight (cwt.) basis, the more tonnage marketed, the more dollars in a producer's pocket. Demand for weight increases more when grain prices are elevated, as buyers would rather purchase heavier cattle, or more pounds, than pay high feed bills to add weight to lighter cattle.

Producers should expect heifers to be at a price discount to their steer contemporaries. Heifer performance in terms of feed conversion, average daily gain (ADG) and final weight is generally inferior to their steer mates, which generates the disparity. The magnitude of the discount will fluctuate throughout cattle cycles.

When feeder cattle and calf supplies increase and/or demand softens, heifers tend to fall further behind steer prices. Fewer replacement females are kept, and heifer supplies are amplified. When numbers are tighter and demand strengthens, the heifer discount tends to narrow as buyers become less selective on what fills their pens or pastures. This is particularly true when major cow-calf regions of the

Fig. 2: CME feeder-cattle cash index vs. six-month-out live-cattle futures



SOURCE: CME, CattleFax, 2022.
Monthly averages.

country receive adequate moisture, as more heifers are kept back as replacements, further restraining the heifer supply.

Last year the spread between 550-lb. steers and heifers averaged nearly $22 per cwt., or 13% (see Fig. 3). The spread should narrow, on a percent basis, into the middle of the decade.

Geography

Regional price differences across the country are also important to keep in mind (see Fig. 4). Several factors lead to these differences, some that hold true over time and others that shift.

Since most cattle end up in Central or Southern Plains feedyards, transportation costs drive the amount of the discount the farther away the cattle are from the feedyard, or wherever the buyer's final destination may be. Higher fuel costs, as are being seen today, tend to make these differences more pronounced.

Regions with more abundant and relatively lower-cost feed resources can carry premiums, as buyers can afford to pay more for cattle. This applies to both feedyard costs of gain and grazing operations.

Regional differences also shift seasonally due to varied calving and growing seasons, both often driven by climate.

Regional tendencies in breed, quality and health can drive calf and feeder-cattle value variations. However, producers can always distance themselves from these effects with attention to management and marketing.

Quality, performance and reputation

Cattle are, at their essence, a commodity; but that doesn't mean all cattle are worth the same. Quality and performance of calves equates to significant differences in value (see Fig. 5, page 19).

CattleFax surveys consistently find that producers buying higher-priced bulls tend to sell higher-priced calves. Simply throwing more dollars at bull purchases will not necessarily increase the bottom line, but it does suggest that investing in higher-quality bulls results in higher-quality, higher-value calves.

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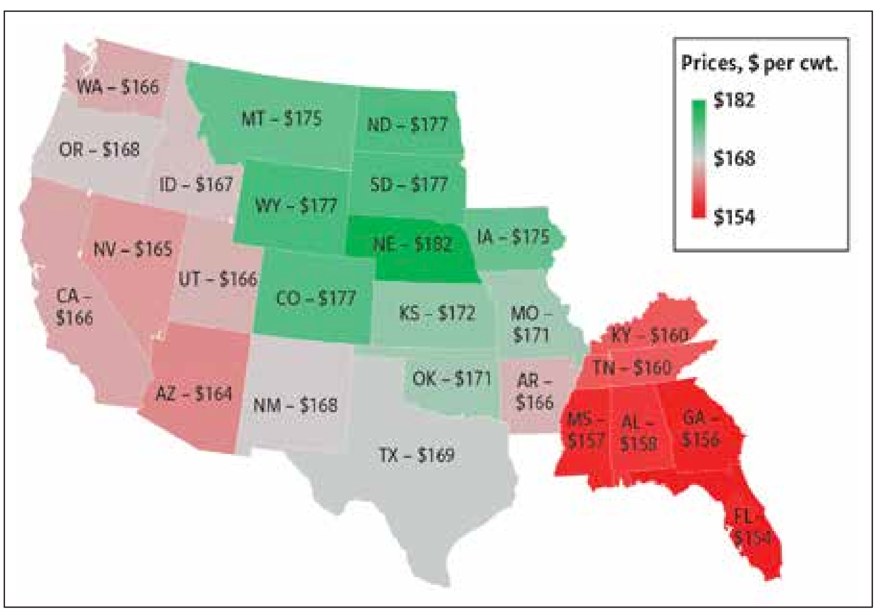
Fig. 3: 2021 U.S. average feeder-cattle and calf prices, for heifers and steers, by weight

SOURCE: CattleFax, 2022.

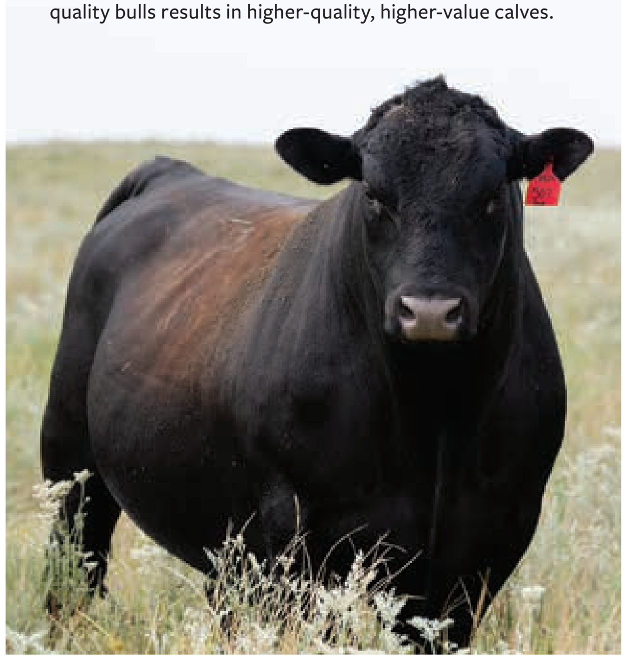
Fig. 4: CattleFax 2021 annual average prices for a 550-lb. steer calf, by state



SOURCE: CattleFax, 2022.

Regardless of whether the cattle head to pasture or confinement, growth and efficiency are paramount to their individual or group value. Cattle with high average daily gains, increased feed efficiencies, and low death loss and treatment costs are more valuable no matter who is buying them.

Further down the supply chain, fed cattle represent another stage of value differentiation. Fed cattle marketed on a hanging-weight basis, and especially those sold on grids, can see stark revenue differences based on carcass performance.



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Fed cattle with heavier carcasses and higher dressing percentages are worth more on a live-weight, dressed-weight or dollars-per-head basis. Premiums for quality grade (QG) and yield grade (YG) also reward higher-quality cattle, not to mention premiums for cattle that fit into natural or non-hormone-treated cattle (NHTC) programs.

Producing higher-quality calves is one thing; capitalizing on doing so can be another. That is where reputation and historical performance play a huge role in feeder-cattle and calf values. Whether the cattle are headed to grass, backgrounding or finishing, buyers remember cattle that perform exceptionally well or exceptionally poor and adjust their bids accordingly.

How can producers capitalize on quality without a developed reputation, or if entering new markets? Regardless of the marketing channel, producers investing in higher-quality genetics and/or health programs can often benefit from advertising their calves as such.

For example, analysis of Superior Livestock Auction video data shows a premium for "Progressive Genetics" calves. Cattle marketed under this program bear the name of a participating seedstock operation whose genetics are represented in the listing, suggesting to buyers that the seller invests in high-quality, reputable genetics. This simple designation alone is worth around $2 per cwt.

Producers can advertise genetics in some form or fashion in nearly every marketing situation. Additionally, multiple programs exist to help quantify and certify genetic potential of cattle.

Breed type and color

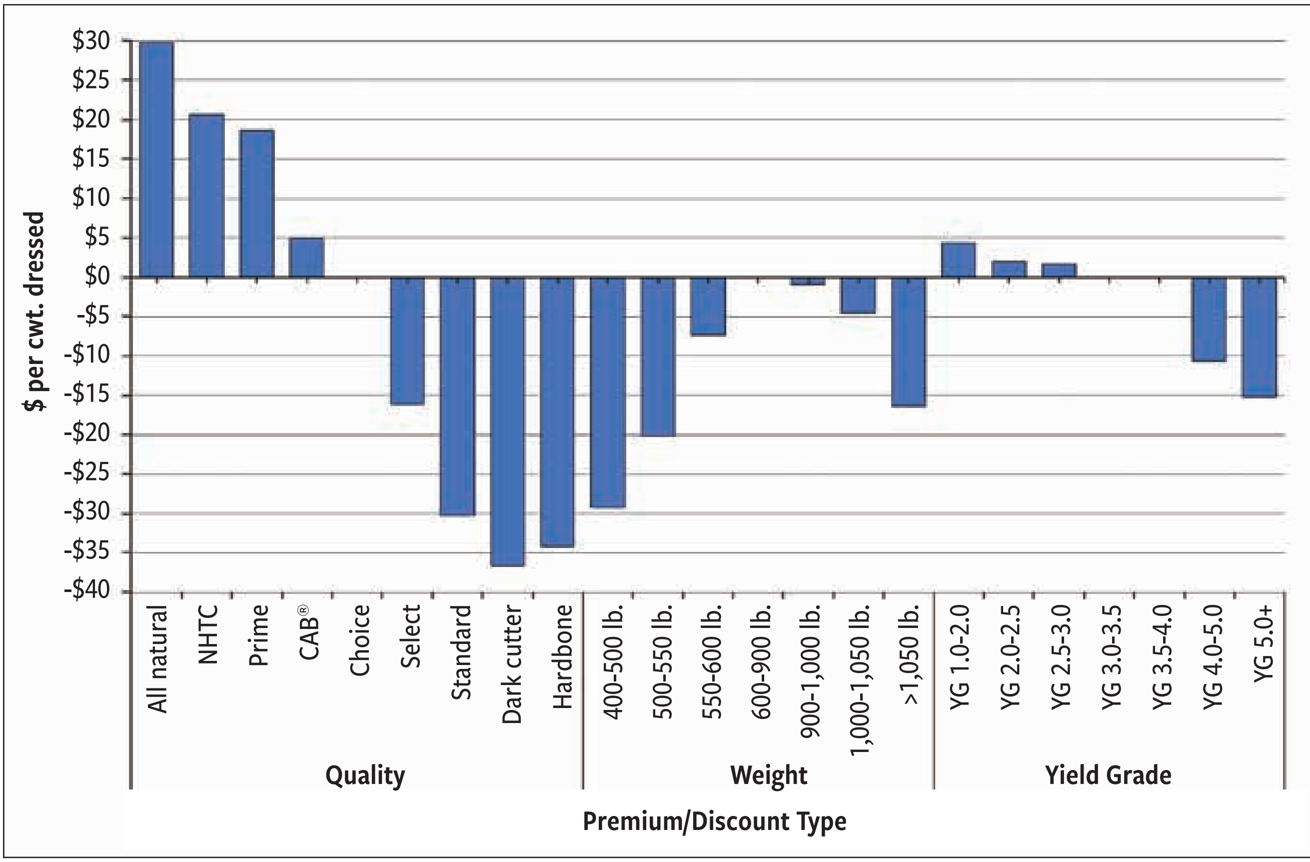
There is a lot to learn from judging a book by its cover when it comes to color and appearance of breed composition for cattle. First, consistency is important within a group of cattle in terms of hide color and breed appearance because it indicates genetic uniformity. Whether cattle are high-quality or low, consistency and uniformity are easier to manage to maximum potential. This applies to weight, too.

Cattle that are predominantly of English breed composition tend to lead in value due to the anticipation of predictable performance and quality grade on the rail. Cattle that appear to have a high percentage of Continental influence may not grade as well, and consequently often face slight discounts to their English counterparts, although there are plenty of exceptions. All else equal, English-type calves will bring $1-$2 per cwt. more than higher-percentage Continental-influenced counterparts.

A more significant discount of around $7-$8 per cwt. often applies to cattle with higher-percentage Brahman influence with the grade challenges often associated with those genetics. Similarly, cattle with dairy influence also face discounts due to slower expected growth.

Hide color can give insight into breed composition, but it can also present some degree of value on its own. Cattle that are predominantly black-hided are eligible for *Certified Angus Beef*® (CAB®) brand premiums if they grade upper two-thirds Choice or better and meet nine other specifications.

Fig. 5: USDA fed-cattle premiums and discounts



SOURCE: USDA, CattleFax. 2021 and 2022 YTD averages.

Programs for black-hided and/or Angus-influenced calves are the most prevalent, although there is no shortage of programs for other types of cattle. The key is knowing your market and the potential opportunities.

The next frontier of breed and genetic differentiation is becoming well-established, as genetic merit programs are moving past the book cover of visual genetic appraisal and reading deeper into the pages. Programs like AngusLink℠, Top Dollar Angus® and Feeder Profit Calculator™ are a few examples.

Value-added opportunities

Some factors driving calf values are outside of a producer's control. Others, such as quality, can take years to influence without aggressive herd turnover or breeding strategies. However, there are a wide range of variables that producers can manage within the year's cycle. Some involve work outside, and others involve a phone and a desk.

Health and nutrition are areas over which the producer has a significant amount of control. Managing health from Day 1 sets up calves for the greatest potential of lifetime success.

Ensuring an adequate plane of nutrition supports health and adds value via more pounds. Pasture, hay, feed grain and supplements may create some sticker shock in today's environment, but if pounds are added at a cost lower than the selling price, every pound has a positive net return.

However, not all pounds are created equal. Cattle that become overly fleshy can face a discount at sale time due to the potential loss of weight when acclimating to an unfamiliar environment and feeding program, as well as the fact that there are fewer pounds available for the buyer to add.

Weaning is one of the most tried and true methods of adding value. Returning again to Superior Livestock Auction data, weaning pays on average around $10 per cwt. Fully capitalizing on weaning often requires 45 days, if not 60 days. Weaning for shorter time periods, the producer incurs the cost, morbidity and mortality risk and may not capture the benefit of getting calves heavier, fully

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straightened out, and ready for the next owner.

Differentiated premium programs are another opportunity, and often catch the most buzz on major video sales where it is not uncommon for some listings to stack together $5 to $10 per cwt. worth of premium program value. NHTC claims, natural programs, Beef Quality Assurance (BQA) participation, Global Animal Partnership (GAP), BeefCARE™, and source and age verification are among the most common programs. Some may be easy additions to existing programs, while others may require more significant operational changes and/or investment.

Additional value for these programs varies widely based on the marketing channel and, more specifically, which buyers are in the market. The cost-benefit trade-offs for various programs can range significantly between different operations, but they are worth investigating.

Last, but certainly not least, is a solid vaccination program. Multiple rounds of shots were among the first "value-added" programs, and there is a reason why. Healthy cattle are simply more profitable.

Buyers certainly remember the purchased cattle that had very little performance losses due to health issues. This is the best way to establish a positive and long-lasting reputation among buyers. It is counterproductive for cow-calf producers to have the mentality that as soon as the cattle leave their place, they are somebody else's problem.

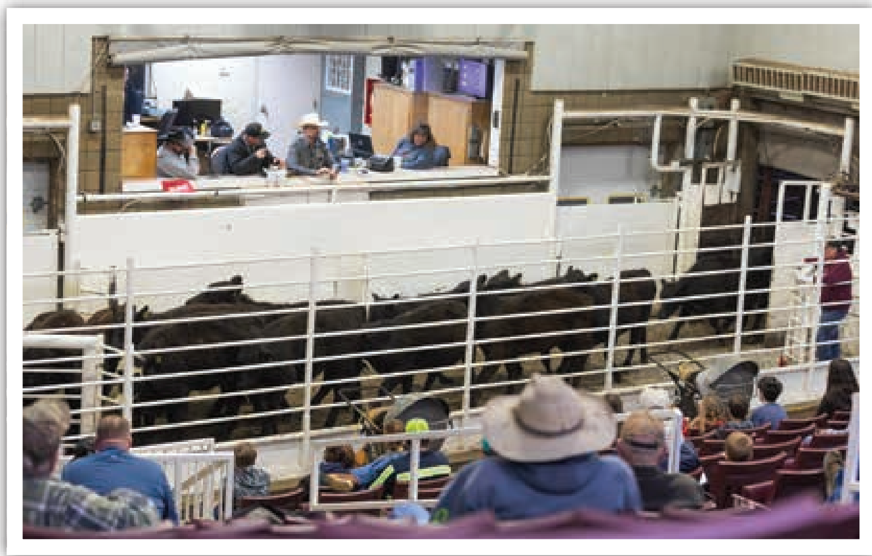

PHOTO BY WHITNEY WHITAKER

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Marketing avenues

When it comes time to market feeder cattle and calves, producers have several options from which to choose. There is no "one size fits all" way to sell cattle. Each method has advantages and disadvantages.

Over time, advanced technology has increased the exposure of cattle to more prospective buyers, and that benefits all marketing avenues. It is now common for local auction barns to stream sales via the internet each week. There are also several websites to list offerings to get more eyes on the cattle when marketing private treaty.

According to CattleFax's annual Cow-Calf Survey, selling at the auction barn is the most popular marketing method. During the last three years, about 41% of survey participants marketed through the auction barn. The second most common response was selling on video sales, with just shy of 20% of producers. About 14% of producers reported marketing calves via direct trade, or private treaty. The balance of survey participants, about 27%, retained ownership of their cattle through at least another phase of production.

As producers decide which marketing method is the best fit, it is important to understand market trends and especially the seasonality of feeder-cattle and calf markets. Since the calf market lows occur in the fall about 80% of the time, producers may want to avoid selling in the spot market during that time of the year.

If an operation's calves or feeder cattle have developed a reputation and demand attention from repeat buyers, producers might consider marketing those cattle on the same sale each year, or at least during a similar time of the year, to make it easier for those same potential customers.

With so many variables to account for, marketing cattle is by no means a simple task. It's important producers do what makes the most sense for their individual operation. ▌

Editor's note: This article was commissioned by the *Angus Beef Bulletin* as an introduction to the 2022 Feeder-Calf Marketing Guide. Tanner Aherin and Patrick Linnell are analysts for CattleFax, which has provided market information and analysis for more than 50 years.