

Planning a Marketing Season for Your Calf Crop

If you've been to an extension meeting in the last 15 years you have likely heard discussion of the benefits of getting your herd synchronized into a designated calving season. Benefits include reducing labor, selling larger more uniform groups of calves, and avoiding calving in high stress times. According to the United States Department of Agriculture (USDA) only 45% of cattle operations in the U.S have a defined calving season and the majority of those only have one calving season per year, as opposed to two. Additionally, 73% of the U.S. calf crop is born in the first half of the year while only 27% are born in the later half. If you have a defined calving season, odds are it's in the spring and that your calves are born at the exact same time as nearly three quarters of all cattle born in that year.

Marketing calves is often a tricky endeavor with producers trying to get the most money possible for their cattle. However, many producers have a very short and designated window to sell cattle when trying to work around weather, herd requirements, pasture availability, calf weights and age, along with other tasks on the farm like haying and maintenance. These challenges often lead producers to market their calves whenever they are able to rather than the most ideal times and opportunities. One major way to change a producer's marketing window is to change when their calves are born.

Obviously, there are benefits and drawbacks to choosing a calving season and deciding what size calf you want to sell. Making the best choice may seem daunting and leave producers searching for some help in making their decision.

20 Year Average 300-900 lb. Steer Price by Month in Arkansas

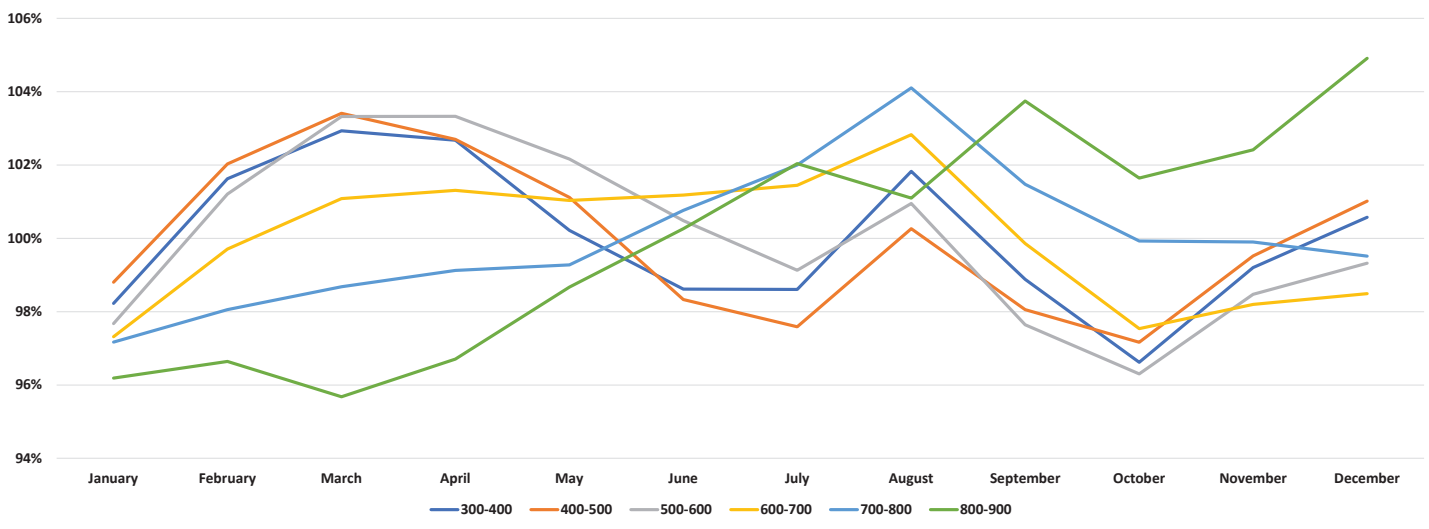


Image 1: 20-year average steer price by month and weight

Using USDA data over the last 20 years we took the average weighted price for Arkansas cattle broken out by month and weight range and predicted how marketing your calves in each month and each weight range correlated with price.

Image 1 shows there are better and worse times throughout the year to market specific weight ranges of cattle. The line that says "100%" signifies the average price received for that weight range of cattle through the entire year. When the price for that weight range is above average it rises to a higher line that signifies how much above average it is, so 102% would be 2% above average. In the same way, when the average price for that month falls below the annual average it falls to a lower line that signifies the prices for that month are below average, so 98% would mean 2% below the annual average. This information is an average over the last 20 years, so while it may not be precise year to year, it does represent larger trends in the market as a whole.

The fluctuations in price are heavily correlated with the number of calves being marketed at that time. For this reason, there is a large dip in prices in the fall when spring calves are marketed and a large peak in the spring when there are less calves available to purchase but ample grass to graze them on.

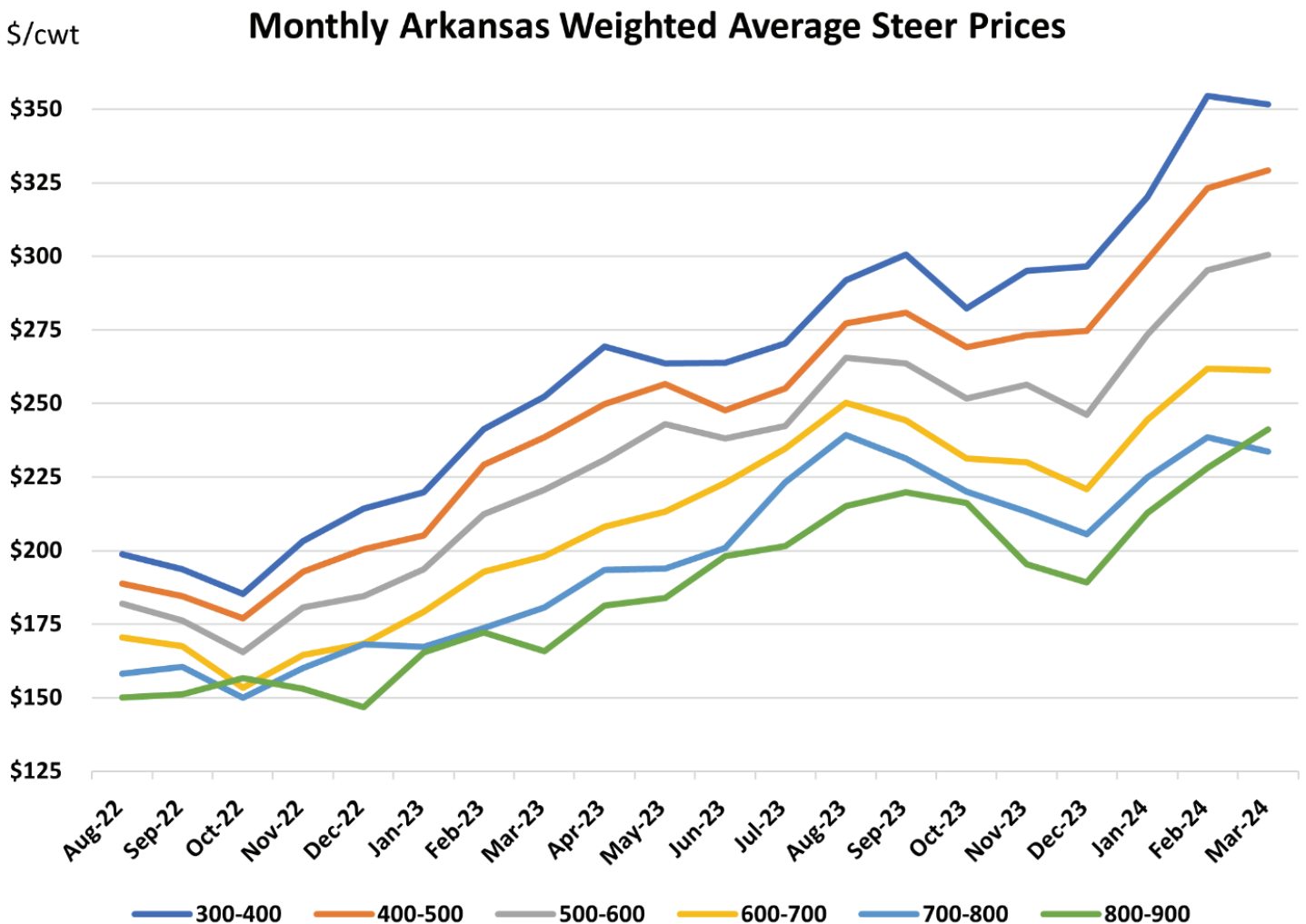


Image 2: Arkansas monthly weighted average steer prices August 2022 – present

While it would be useful to attach prices to this chart, given that we are using a 20-year average, it becomes inaccurate using the average price since inflation has made the prices of 20 years ago far less than those today. Similarly, trends in the U.S. cattle cycle make cattle prices higher and lower some years based on total inventory of cattle. Image 2 shows cattle prices over the last two years as an example of how much prices have risen.

Utilizing the data for seasonal price changes for different weight ranges of cattle, we created an index relating calving season to marketing month and marketing advantage. Marketing advantage represents the premium or dip in the market for cattle of that weight in that month expressed as a percentage of the annual average. This index makes several assumptions to predict the weight of the cattle for the marketing month. The first is that a calf will be born at 80 pounds and the second is that the calf will steadily gain 2 pounds per day every month you have it. This puts a calf weighing 320 pounds by 4 months of age and gaining 60 pounds each month to 740 pounds by 11 months of age. Using these assumptions, we can look at marketing advantage for your calves based on the month they are born.

Marketing Month	Calving Month												
	Below Average Marketing Price						Above Average Marketing Price						
	January	February	March	April	May	June	July	August	September	October	November	December	
January			97%		97%	98%	98%	99%	98%	98%			
February			98%	100%	100%	101%	101%	102%	102%	102%			
March				99%	101%	101%	103%	103%	103%	103%	103%		
April					99%	101%	101%	103%	103%	103%	103%	103%	
May	100%					99%	101%	101%	102%	102%	101%	100%	
June	99%	99%					101%	101%	101%	100%	100%	100%	98%
July	98%	99%	99%					102%	101%	101%	99%	99%	
August	101%	100%	102%	102%					104%	103%	103%	101%	
September	98%	98%	98%	99%	99%					101%	100%	100%	
October	98%	96%	96%	97%	97%	97%					100%	98%	
November	98%	98%	98%	98%	100%	99%	99%					100%	
December	100%	98%	98%	99%	99%	101%	101%	101%					100%
SUM	-10%	-15%	-13%	-9%	-8%	-3%	6%	12%	15%	16%	9%	-1%	
Average	99%	98%	98%	99%	99%	100%	101%	101%	102%	102%	101%	100%	

Below Average Price Received
 Average Price Received
 Above Average Price Received

Image 3: Steer marketing advantage based on month calved and marketed

Marketing Month	Calving Month											
	January	February	March	April	May	June	July	August	September	October	November	December
January	80	740	680	620	560	500	440	380	320	260	200	140
February	140	80	740	680	620	560	500	440	380	320	260	200
March	200	140	80	740	680	620	560	500	440	380	320	260
April	260	200	140	80	740	680	620	560	500	440	380	320
May	320	260	200	140	80	740	680	620	560	500	440	380
June	380	320	260	200	140	80	740	680	620	560	500	440
July	440	380	320	260	200	140	80	740	680	620	560	500
August	500	440	380	320	260	200	140	80	740	680	620	560
September	560	500	440	380	320	260	200	140	80	740	680	620
October	620	560	500	440	380	320	260	200	140	80	740	680
November	680	620	560	500	440	380	320	260	200	140	80	740
December	740	680	620	560	500	440	380	320	260	200	140	80

Image 4: Supplement chart of presumed calf weights used in image 3

When you look at Image 3 there are several key things to note. The top row signifies the month the calf is born. The column of months on the left side signifies the month the calf is marketed. The "SUM" row is a useful tool

when a producer is flexible on how long they want to keep the calf and at what weight they want to market them. For instance, a calf born in October will not market for 16% above average but instead has a total of 16% greater marketing advantage throughout its life. In the same way a February calf is not worth 15% less but has 15% less

marketing advantage throughout its life. The “Average” row signifies the average advantage that calf will have throughout its life regardless of age or weight marketed.

It is important to note that this information is not necessarily accurate on a year-to-year basis. Overarching economic and market events can lead to changes in price from year to year. However, over the span of the last 20 years as a whole we have seen this trend proven.

While some of the percentages shown in the index may seem insignificant, in today’s market small percentages can add up to significant dollar figures. As an example, we can compare two sets of 30 calves, one born in the spring, and one born in the fall. The spring group would be calved in mid-March and weigh 500 pounds in October when they are marketed. The fall group would be calved in mid-September and weigh 500 pounds in April when they are marketed. For a 500-pound steer the April market is 3.3% above the annual average and the October market is 3.7% below the annual average. That is a total difference of 7% in price based on when the calf was born and marketed. In the most recent Arkansas livestock market report (3/17/24) a group of 515-pound steers brought \$318.40/cwt coming out to \$1,640 per head. A 7% drop in price from that mark would be nearly \$115 per head or over \$3,400 for a group of 30 calves.

There is a clear advantage to a producer who calves in the fall rather than the spring. While there are certainly disadvantages to fall calving, if a producer is capable of doing such, they will likely ensure a better marketing situation for their calves than a producer who calves in the spring. As U.S. and Arkansas cattle producers begin to expand their herds in the next several years the opportunity to move calving seasons or start new heifers on specific calving seasons will arise. Given this information it may be worthwhile to consider a fall calving herd.



Analysis by Jake Cartwright.

For more information, contact:

Jake at (501) 228-1475, jake.cartwright@arfb.com