

# Evaluating Opportunities to Market Feeder Calves

Walter Prevatt<sup>1</sup> and Tom Anton<sup>2</sup>

<sup>1</sup>Auburn University, Auburn, Alabama

<sup>2</sup>Range Cattle Research and Education Center, University of Florida, Ona, Florida

Are you a cow/calf producer worrying if this year's gross revenues will be enough to cover production expenses and leave you something for family living withdrawals? Would you like to find a way to evaluate the opportunities to market your feeder calves so that you can determine which marketing opportunity allows you to cover your expenses, provides for family living withdrawals, and perhaps even lock in a profit? Your chances of achieving this lofty goal will be greatly improved if you can identify and implement the right cattle marketing strategy.

Marketing is usually the most difficult management task that the cattle producer has to perform. Proper marketing can make the difference between profit and loss in the cattle business. Most cattle producers spend much of their time and effort on improving production practices, while spending very little time on the marketing of their product. However, time spent marketing cattle in today's complex economic environment can pay equal or larger dividends than time spent on improving certain production practices.

Today, feeder cattle producers have more flexibility in marketing than they often realize. There are numerous marketing alternatives available to cattle producers. In fact, each marketing alternative is defined by both the management and marketing programs that you select. For example, if a cow/calf producer chooses to sell his feeder calves during August in a satellite video auction after weaning and implementing a VAC 45-day program, he has defined both a production program and marketing program. Most cattle producers do not think of it this way, but your

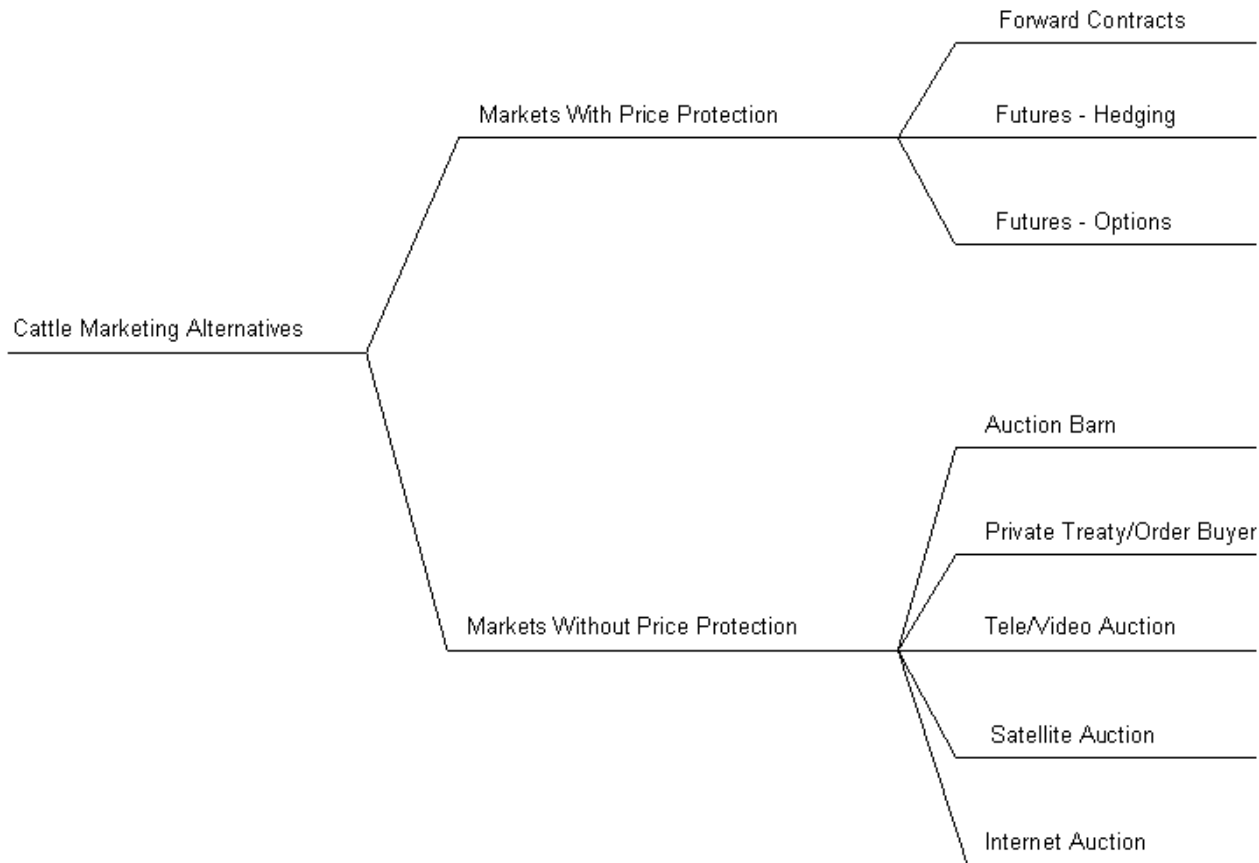
production program is part of your marketing program.

## Market Outlet

A key component of the marketing program is the market outlet chosen to sell the cattle. Currently, there are at least eight viable market outlets for cattle (Prevatt, 1994). They include the auction barn, private treaty (individual or order buyer), telephone and video auction (board sale), satellite video auction, internet auction, forward contracts, futures markets – hedging, and futures markets-options. The expanded number of market outlets coupled with the frequency of sales and numerous sale locations provides a wide range of market opportunities for today's cattle producer.

In addition, each market outlet has unique features. The primary features that may be used to describe these cattle markets include competitive bid price, market knowledge, convenience and simplicity of sale arrangement, marketing cost, market planning, and market price protection. Each of these items should be given consideration when selecting a market outlet to sell cattle. A quick review of the goals and objectives for your cattle operation will usually help producers select the best market outlets for their operation. Additionally, cattle producers may choose one or more market outlets to sell their cattle (i.e. cull cows and bulls, feeder calves, feeder cattle, slaughter cattle, open and bred replacement heifers, replacement cows, breeding bulls). These market outlets should provide the opportunity to obtain the most profitable price for each set of cattle. Please note this may or may not mean the highest price.

Figure 1. Alternative cattle marketing outlets.



A feature that is becoming increasingly important to cattle producers is price protection. Cattle markets may be divided into two price protection categories: markets with price protection and markets without price protection (Figure 1). The use of markets with price protection allows the seller to manage price risk and “choose to accept a price” that will meet a given price objective (break-even price, production costs plus profit, etc.). In sharp contrast, the distinguishing feature of markets without price protection is that the seller “willingly accepts the going price” when he or she is ready to sell cattle.

### **The Cattle Cycle and Seasonal Cattle Price Trends**

Are you familiar with the “cattle cycle” and where we happen to be on it? Do you know the “seasonal cattle price trends?” Knowing about the cattle cycle can help you

plan for production levels that will be profitable over the life of your business. Understanding the seasonal beef price trends can help you plan when to market your cattle (Prevatt, 2003).

The cattle cycle is measured from the lowest inventory of cattle and calves to the next lowest over time (trough to trough). It is generally believed that the cattle and calves inventory increases over time due to higher market prices (profits) and then declines due to lower market prices (losses from over supply, etc.). Thus, the cattle cycle typically appears to be a mound shape over time. The last five cattle cycles have ranged in length from 10-14 years (1949-58, 1958-67, 1967-79, 1979-90, 1990-?). As you might expect, the inventory of U.S. cattle and calves and U.S. average calf prices move in opposite directions. As cattle inventory builds, average calf prices decline. Likewise, as cattle

inventory numbers decline, average calf prices increase.

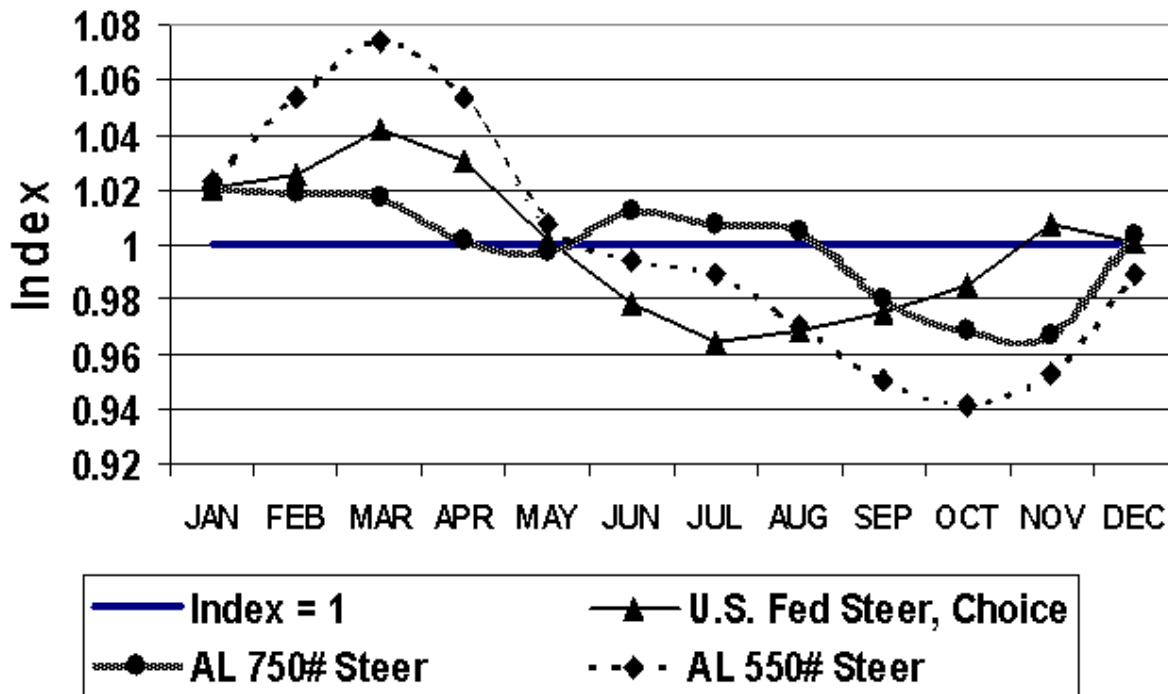
During periods of declining market prices in a cattle cycle, cow/calf producers may need to reduce their inventory in order to lower their unit cost of production (adjust inputs and keep the most productive cows) and improve profit levels. Likewise, stocker operators and feedlot finishers may need to fine tune their production and marketing programs to ensure their cost of gains are lower than the value of gain realized from putting additional weight on cattle. Alternatively, during periods of steady and/or rising market prices, cow/calf producers may expand their cowherds and/or put additional weight on feeder calves by retaining ownership in a backgrounding or stocker program to sell later as 600-800 pound feeder cattle. They may also choose to custom finish them in the feedlot to slaughter weights of 1,000-1,300 pounds.

These changes in the cattle cycle also affect seasonal cattle price trends. The seasonal cattle price variability reflect changes in beef supply and demand conditions (due to changes in cattle inventory, per capita beef consumption, exports, cost of production, weather, trade relationships, substitute meat products, food safety, etc.). Although monthly cattle market prices vary from month to month and year to year, cattle market prices do develop seasonal price patterns or trends over a number of years. By averaging cattle market prices we can develop a price index that describes the seasonal price trends. Figure 2 shows a comparison of seasonal cattle price trends for Choice, U.S. fed steer, 750-pound steer (Alabama, medium and large frame, number one muscle score), and 550-pound steer (Alabama, medium and large frame, number one muscle score) during 1993-2002. The base index of 1.00 represents the 10-year average market price. The seasonal price index describes the average monthly cattle price trend and may be expressed as a percent of the 10-year average cattle market price. For

example, the highest price index for the Choice, U.S. fed steer was during March and the lowest price index was in July (Cattle-Fax and USDA). The highest price index for the Choice, U.S. fed steer was 1.04 or 4% higher than the 10-year average price. Correspondingly, the lowest price index was about 0.96 or 4% lower than the 10-year average price. Thus, an 8% price range was realized between the lowest (July) and highest (March) average monthly cattle price. Assuming a 10-year average cattle price of \$70/hundredweight, this represents an average annual price range of about \$5.40/hundredweight or \$65/head. Please note this is the average price range over the previous 10-year period. Thus, during some years the price range will be larger and some years it will be smaller. This is where cattle marketing skills become extremely important. Which direction will prices move this year? What is the potential movement in prices this year? Those who can successfully answer these two questions will be able to identify profitable marketing opportunities.

The next obvious question for cattle feeders is when should I try to target to sell my finished cattle? Figure 2 documents that average monthly prices for Choice, U.S. fed steer are above the 10-year average price from January through April. This seems like a reasonable target to sell finished cattle provided that reasonable input costs (value of feeder animal and production costs) and cattle performance are possible. Most fall calving operations are in a position to make this production and marketing program work. However, spring calving operations are usually lower cost producers and can be profitable even though they would market finished cattle during other quarters of the year. Additionally, be mindful that the folks feeding cattle today include cow/calf/stocker producers, corn producers, feedlot owners, packers, investors attempting to make a profit, investors attempting to move taxable money into a different tax year, and possibly others.

Figure 2. A comparison of seasonal fed and feeder cattle price trends.



Thus, during any given time period, the collective bidding by these groups may provide or eliminate an opportunity for the cow/calf producer to finish cattle.

Figure 2 also shows the seasonal price trends for the 750-pound (gray line with dots) and 550-pound steer (dashed line with diamonds). The 550-pound steer price index ranges from 0.94 to about 1.07, while the 750-pound steer price index ranges from 0.97 to about 1.02 of the 10-year average price. Thus, the 750-pound steer monthly average price is less variable and often a desirable marketing endpoint for many Southeastern cattle producers with adequate forage supplies. The average monthly price indexes, during the first three quarters (January – August), for the 750-pound steer is either at or above the 10-year average price. These seasonal price trends for the 550- and 750-pound feeders provide a lot of flexibility to southern cattle producers with abundant, high quality forages and/or low cost, quality feedstuffs. Lastly, the months of September through November reflect the

lowest price indexes. This is a time period when a large portion of feeder calves are marketed because cattle producers do not have the resources (land, labor, capital, management, etc.) to retain these animals. Herein lies a marketing opportunity to move these lightweight cattle from a low market price window (4<sup>th</sup> quarter) to a higher market price window during the next three quarters (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> quarters) while adding weight gain to them. We will explore this opportunity later.

By knowing the seasonal price trends, we are ready to evaluate some marketing alternatives. Let's assume we are working with a fall calving cow/calf operation that can put together truckload units of cattle. Their goal is to make as much profit as they can from their cattle. They have the resources and are willing to own the cattle as long as they can show a profit. Seven basic marketing alternatives have been outlined in Table 1 for this operation.

Table 1. A description of seven basic cattle marketing alternatives associated with a fall calving operation.

Marketing alternative number	Description of marketing alternative
(1)	Gather cows and calves. Pen, sort, group, and load calves. Sell same day, 6/15/03.
(2)	VAC 45 days. Sell 7/30/03.
(3)	VAC 45 days. Background 75 days. Sell 10/13/03.
(4)	VAC 45 days. Custom background 75 days. Sell 10/13/03.
(5)	VAC 45 days. Background 75 days. Custom feed 150 days. Sell 3/11/04.
(6)	VAC 45 days. Custom background 75 days. Custom feed 150 days. Sell 3/11/04.
(7)	VAC 45 days. Custom feed 200 days. Sell 2/5/04.

Another way to view or describe marketing alternatives is by using a decision-tree. Figure 3 provides a decision-tree for seven basic marketing alternatives associated with a fall calving operation. Note that associated with each decision point is the opportunity to sell the animal or keep and define one or more production and marketing programs that the cattle producer would like to evaluate (Prevatt, 2002). These production and marketing programs must be fully understood by the cattle producer and accurately estimated. Also, they need to be frequently monitored as conditions change during the time period. There is little room for error.

Table 2 provides a financial evaluation of seven basic marketing alternatives associated with a fall calving operation. The first six rows describe the performance and production information assumed in the financial evaluation: date sold, days post weaning, pounds of gain, gross weight, shrink, and sale weight. Row seven indicates the type of futures market contract used for price protection. In this study, it was assumed that hedging with a futures market contract would be used to manage price risk. FC denotes a feeder cattle futures contract (50,000 pounds

of 700-849 pounds, feeder steers) and LC denotes a live cattle futures market contract (40,000 pounds of 55% choice, 45% select USDA live steers averaging 1,100 to 1,300 pounds). Short (sell) futures market contracts were initiated at the beginning of production phase and offset with the opposite futures market contract (long or buy back) when the cattle were sold in the cash market. Thus, the futures market contracts simply provided a way to manage price risk. Row eight describes the futures contract month and year (corresponds with the end of the production program), while row nine denotes the futures contract price associated with the contract month and year which was attained by competitive bidding in the trading pits on the futures exchange floor of the Chicago Mercantile Exchange (CME). Row ten denotes an estimation of the basis for the futures market contract. Basis is simply the difference between the local cash market price received and the futures market price when the futures contract is offset (local cash price – futures price equals basis). As you might expect, we use historical basis information (usually a 3- to 5-year average) to provide an estimate of the expected basis for a given contract. By adding rows nine and ten (futures

contract price plus basis) we get the expected cash price for the cattle. Row eleven multiplied by row six (expected cash price times sale weight) equals row 12 (the revenue per head). Subtracting rows 13, 14, and 15 from row 12 equals row 16 (the net return for each marketing alternative). The net return per head is based on the production and marketing program specified in Table 1. The net return per head for marketing alternatives 2-7 includes the cost of the feeder calf from marketing alternative one. Thus, the net return per head for each marketing alternative is exclusive of each other. Row 17 ranks the net returns from row 16 in descending order (highest =1, lowest=7). Row 18 is the combined net return, which is the sum of the net return from marketing alternative one and the net return of each of the remaining marketing alternatives (2-7). Row 19 ranks the

combined net returns from row 18 in descending order (1=highest, 7=lowest).

Sell at weaning, marketing alternative one, resulted in the greatest net return (\$109). The VAC 45-day program, marketing alternative two, shows only a very marginal net return (\$11). However, this program is highly important for all other marketing alternatives since it prepares the feeder calf for future production programs (backgrounding, grazing, feedlot, etc.) and improves cattle performance. Unfortunately, the net returns from retaining ownership in marketing alternatives 2-7 in this data set are presently very small. The net returns and rankings of these marketing alternatives will change from year to year, as well as, during the marketing period. Thus, it is important to monitor market prices daily and analyze any movements in the market.

Figure 3. A decision-tree for seven basic marketing alternatives associated with a fall calving operation.

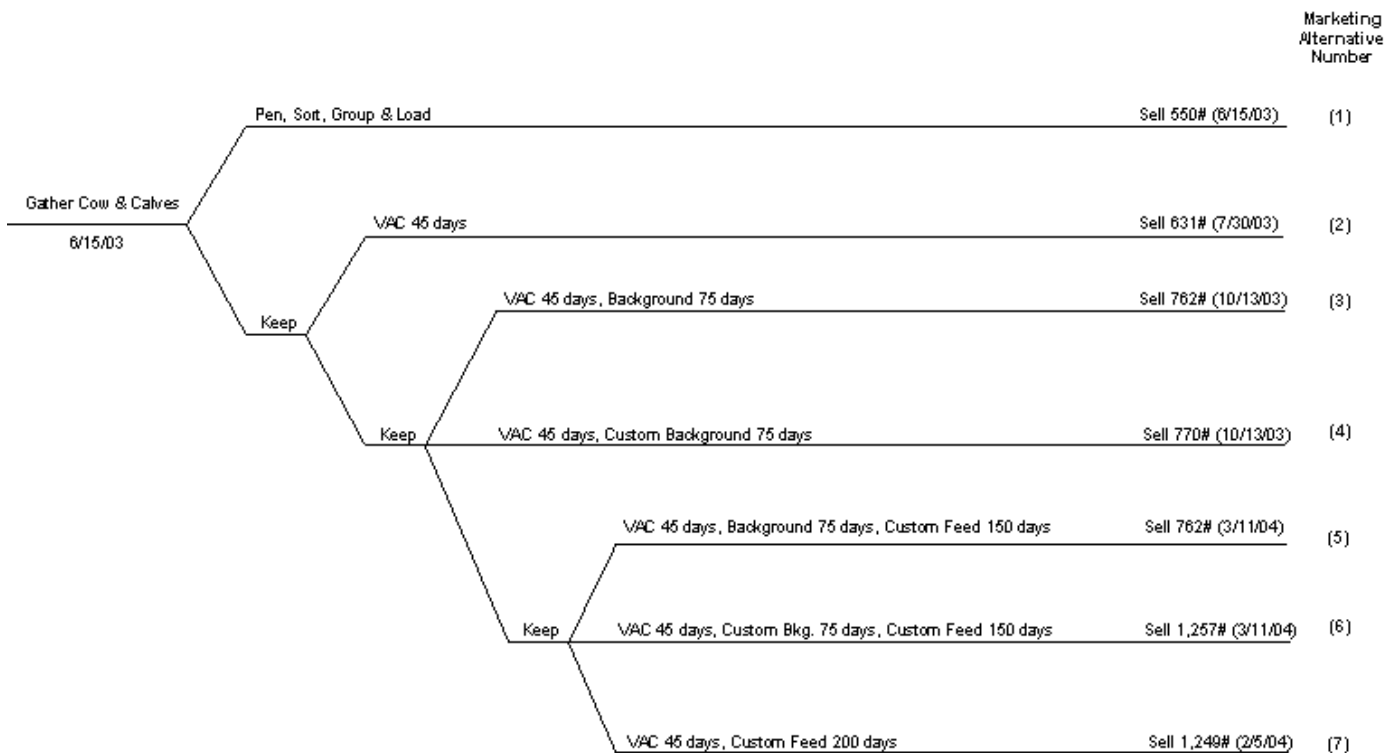


Table 2. A financial evaluation of seven basic marketing opportunities associated with a fall calving operation.

Row	Item	Marketing alternative number						
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Date sold	6/15/03	7/30/03	10/13/03	10/13/03	3/11/04	3/11/04	2/5/04
2	Days post weaning	0	45	120	120	270	270	235
3	Pounds of gain, lb/head	0	81	212	220	700	707	699
4	Gross weight, lb	550	631	762	770	1,250	1,257	1,249
5	Shrink, %	2.00%	2.00%	2.00%	2.00%	4.00%	4.00%	4.00%
6	Sale weight, lb	539	618	747	754	1,200	1,207	1,199
7	Futures contract	FC	FC	FC	FC	LC	LC	LC
8	Futures contract month	Aug-03	Aug-03	Nov-03	Nov-03	Apr-04	Apr-04	Feb-04
9	Futures contract price, \$/cwt <sup>1</sup>	81.10	81.10	81.65	81.65	72.90	72.90	72.77
10	Estimated basis, \$/cwt	5.03	0.32	-6.56	-6.56	-0.69	-0.69	-1.04
11	Expected cash price, \$/cwt	86.13	81.42	75.09	75.09	72.21	72.21	71.73
12	Revenue/head, \$/head	464	503	561	566	866	872	860
13	Feeder value, \$/head	0	464	464	464	464	464	464
14	Production cost, \$/head	355	28	74	84	338	340	349
15	Transportation costs, \$/head	0	0	0	0	50	50	40
16	Net return, \$/head	109	11	22	18	15	17	6
17	Rank	1	6	2	3	5	4	7
18	Combined net return, \$/head	109	120	132	128	124	126	115
19	Rank	7	5	1	2	4	3	6

<sup>1</sup>CME futures contract price as of 3/28/03.

The combined net return is simply the sum of the net return of sell at weaning plus the net return associated with each of the retained ownership marketing alternatives. The largest combined net return was realized from keeping the weaned calf, implementing the VAC 45-day program, and backgrounding for 75 days (\$109 + \$11 + \$22 = \$132/head). In this particular example, all of the marketing alternatives (2-7) resulted in combined net returns that were greater than sell at weaning (marketing alternative one). Obviously, this is not always the case. In some market situations, retaining ownership can result in lower net returns than selling at weaning. This is why following the market on a routine basis allows the cattle producer to assess marketing opportunities in advance and hopefully avoid those losses.

### **Factors to Consider When Seizing Marketing Opportunities**

Knowing which marketing opportunities to seize and which to forgo is the art of management. In addition, rarely do you make one change in an operation without causing one or more items to also change. Thus, some advantages and disadvantages are listed in Table 3 for your consideration.

### **Concluding Remarks**

There are an infinite number of marketing opportunities available to today's cattle producer. Each one of these marketing opportunities has potential advantages and disadvantages. Therein lies the challenge for cattle producers. Does the market opportunity fit with the goals of your cattle operation? Do the advantages outweigh the disadvantages? Does the market opportunity allow you to attain your profit objective?

Identifying marketing opportunities is not easy work. It takes time, research, and commitment. Also, none of the marketing opportunities will provide the highest cattle price or profit year after year. Therefore, to take advantage of market opportunities, the cattle producer must become a market watcher and an analyst. Watching the market will require 15-30 minutes each day to gather and evaluate the market information. Of course, as the cattle producer becomes interested and successful, he will spend more time on this aspect of the operation. This small investment of time can pay large dividends and help avoid catastrophic market situations and losses.

Anyone can sell cattle, but few producers market cattle with skill. Profit in many years is the difference between employing a well-researched marketing strategy versus simply accepting what the cash market will provide. When developing cattle marketing strategies, the cattle producer should strive to understand the production and marketing requirements of each market opportunity. In addition, an assessment of the potential boundaries of expected price movements is essential.

In most instances, bad markets cannot be blamed for financial losses. A thoughtful cattle producer offsets the hazards of bad markets by following well-laid plans and safe marketing practices. Reliable and effective marketing practices do not come to a person naturally – they must be learned through study and experience. There are no magical formulas for making a profit with cattle, but a thorough examination of market opportunities in the various market outlets will increase the chances of realizing a profit. Good luck and may your marketing efforts be rewarded.

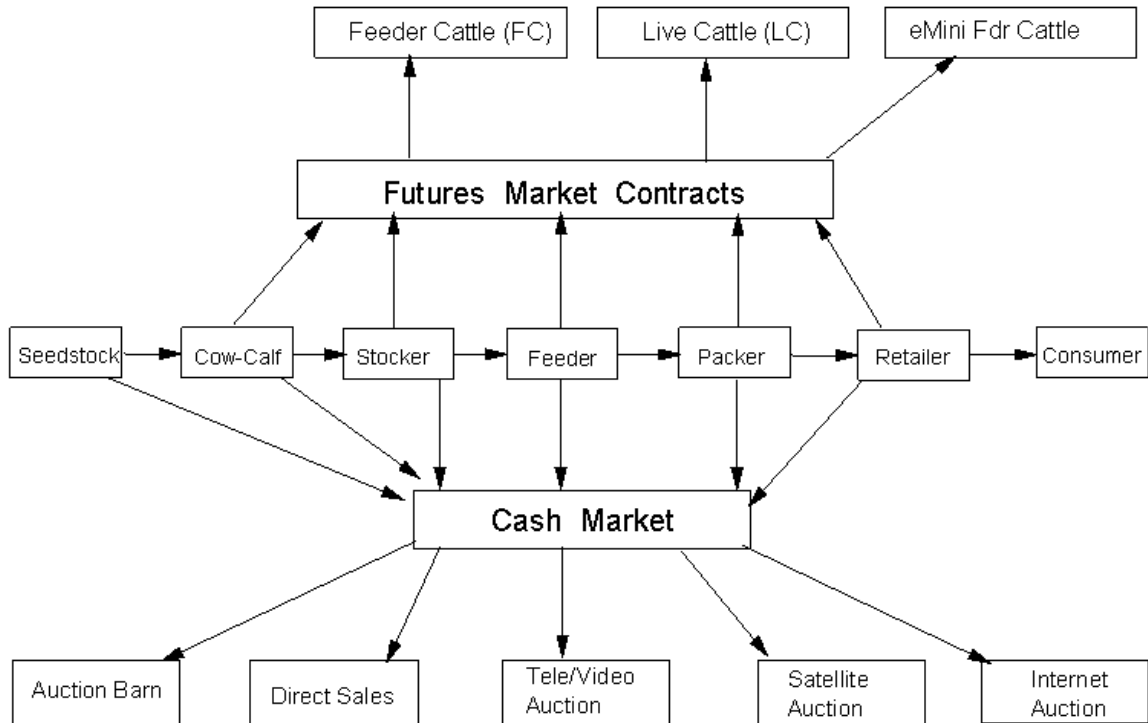
Table 3. Advantages and disadvantages of the seven example cattle marketing alternatives for a fall calving operation.

Marketing alternative number	Description of marketing alternative	Advantages	Disadvantages
(1)	Gather cows and calves. Pen, sort, group, and load calves. Sell same day, 6/15/03	Requires less effort, knowledge, and time to sell cattle in this manner.	Significant shrink left in the cowpen and/or market outlet. Limits producers' ability to take advantage of genetic improvements.
(2)	VAC 45 days. Sell 7/30/03.	Adds value to the animal (trained to eat and drink from a trough, calm around people, improved health program, etc.).	Requires adequate facilities to wean and feed calves. Requires more effort, knowledge, and time to market cattle.
(3)	VAC 45 days. Background 75 days. Sell 10/13/03.	Adds value to the animal (trained to eat and drink from a trough, calm around people, improved health program, etc.).	Seasonal price trend is typically the lowest during this time period. Must monitor cost of production, performance, and market prices frequently. Requires more effort, knowledge, and time to market cattle.
(4)	VAC 45 days. Custom background 75 days. Sell 10/13/03.	Adds value to the animal (trained to eat and drink from a trough, calm around people, improved health program, etc.).	Seasonal price trend is typically the lowest during this time period. Must monitor cost of production, performance, and market prices frequently. Requires more effort, knowledge, and time to market cattle.
(5)	VAC 45 days. Background 75 days. Custom feed 150 days. Sell 3/11/04.	Seasonal price trend is usually the highest during this time period.	Must monitor cost of production, performance, and market prices frequently. Affects cash flow and Federal and State Income Tax reporting during first year.
(6)	VAC 45 days. Custom background 75 days. Custom feed 150 days. Sell 3/11/04.	Seasonal price trend is usually the highest during this time period.	Must monitor cost of production, performance, and market prices frequently. Affects cash flow and Federal and State Income Tax reporting during first year.
(7)	VAC 45 days. Custom feed 200 days. Sell 2/5/04.	Seasonal price trend is usually the highest during this time period.	Must monitor cost of production, performance, and market prices frequently. Affects cash flow and Federal and State Income Tax reporting during first year.

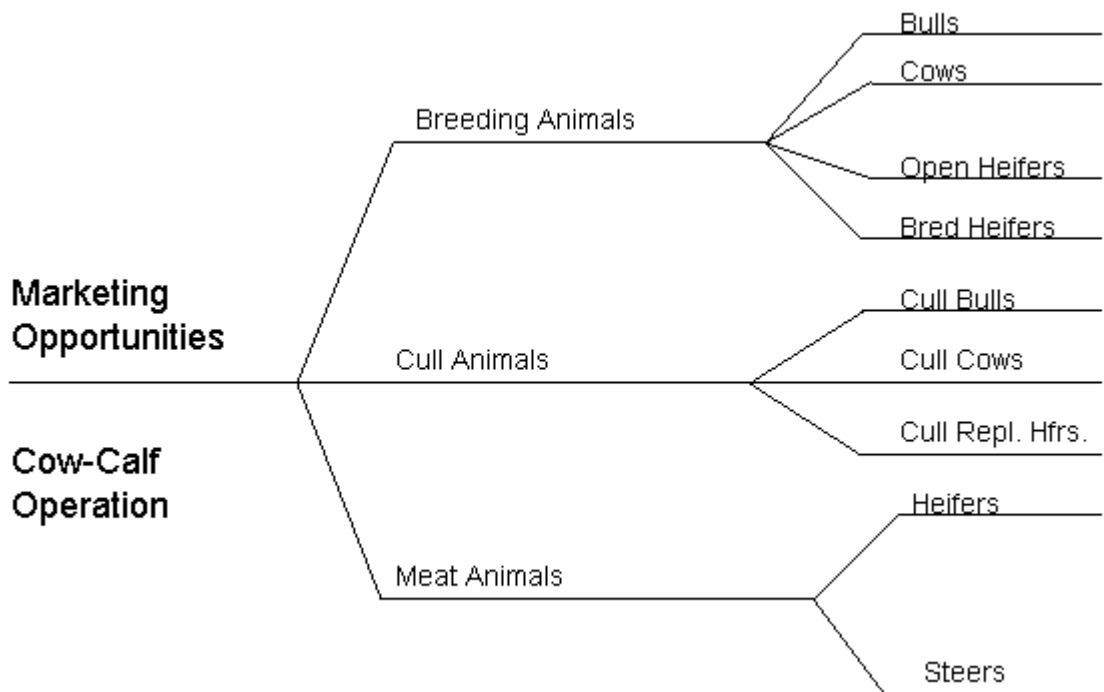
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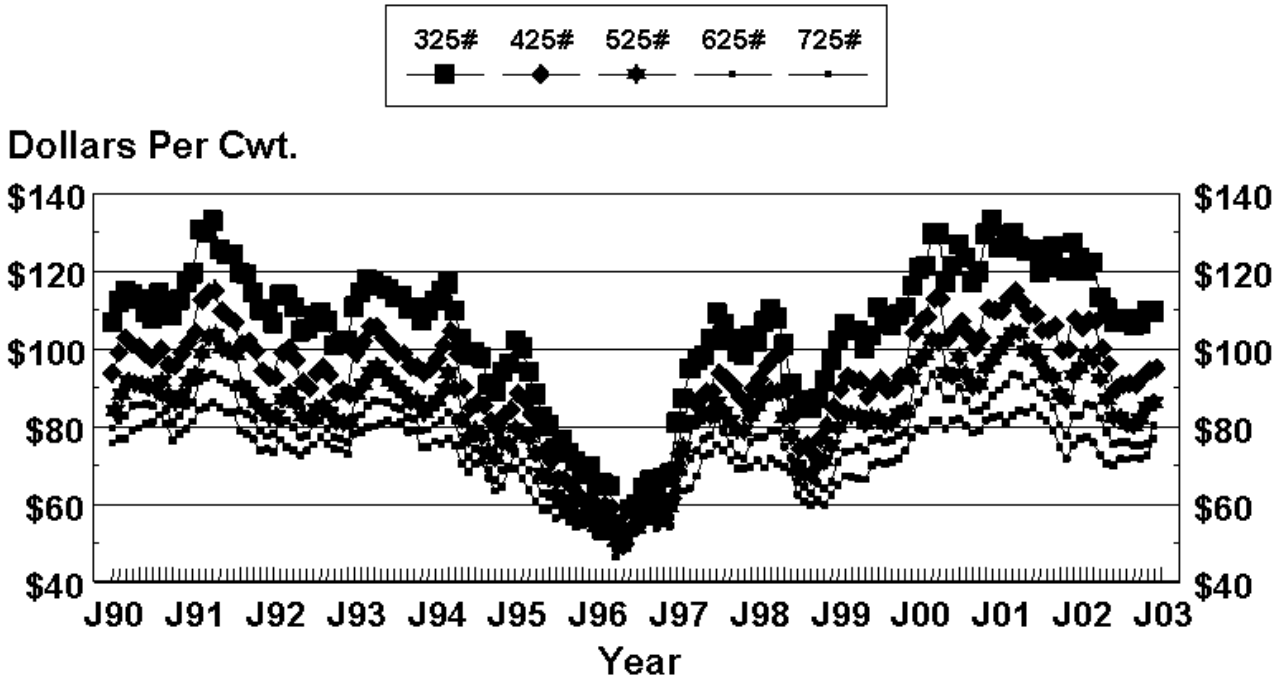
Appendix Figure 1. U.S. beef production and marketing system.



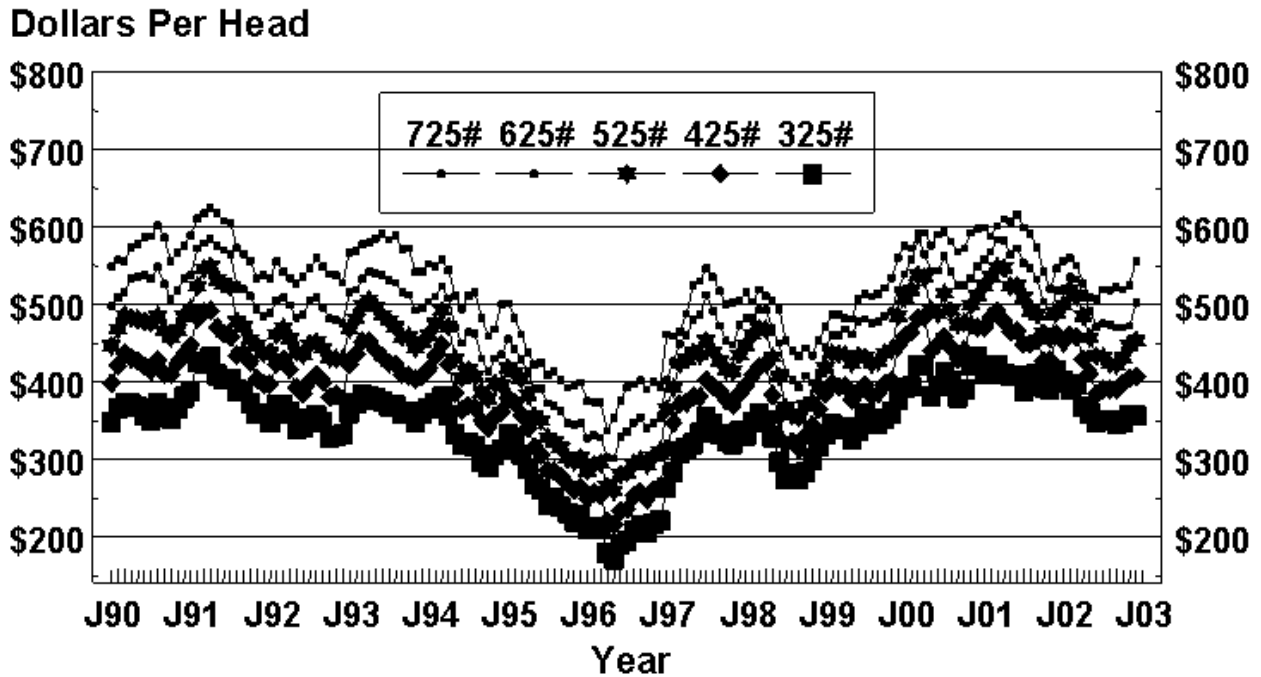
Appendix Figure 2. Marketing opportunities of the cow/calf operation.



Appendix Figure 3. Alabama feeder calf prices; steers, medium and large, #1, 1990-2002.

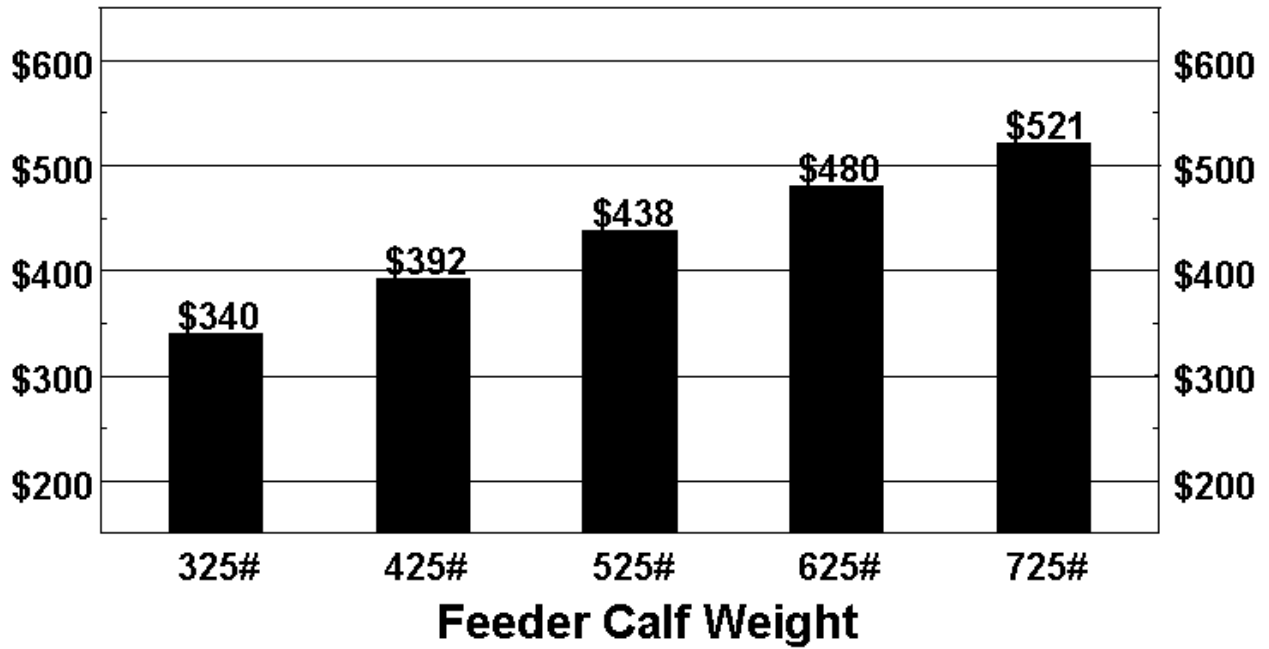


Appendix Figure 4. Alabama feeder calf prices; steers, medium and large, #1, 1990-2002.

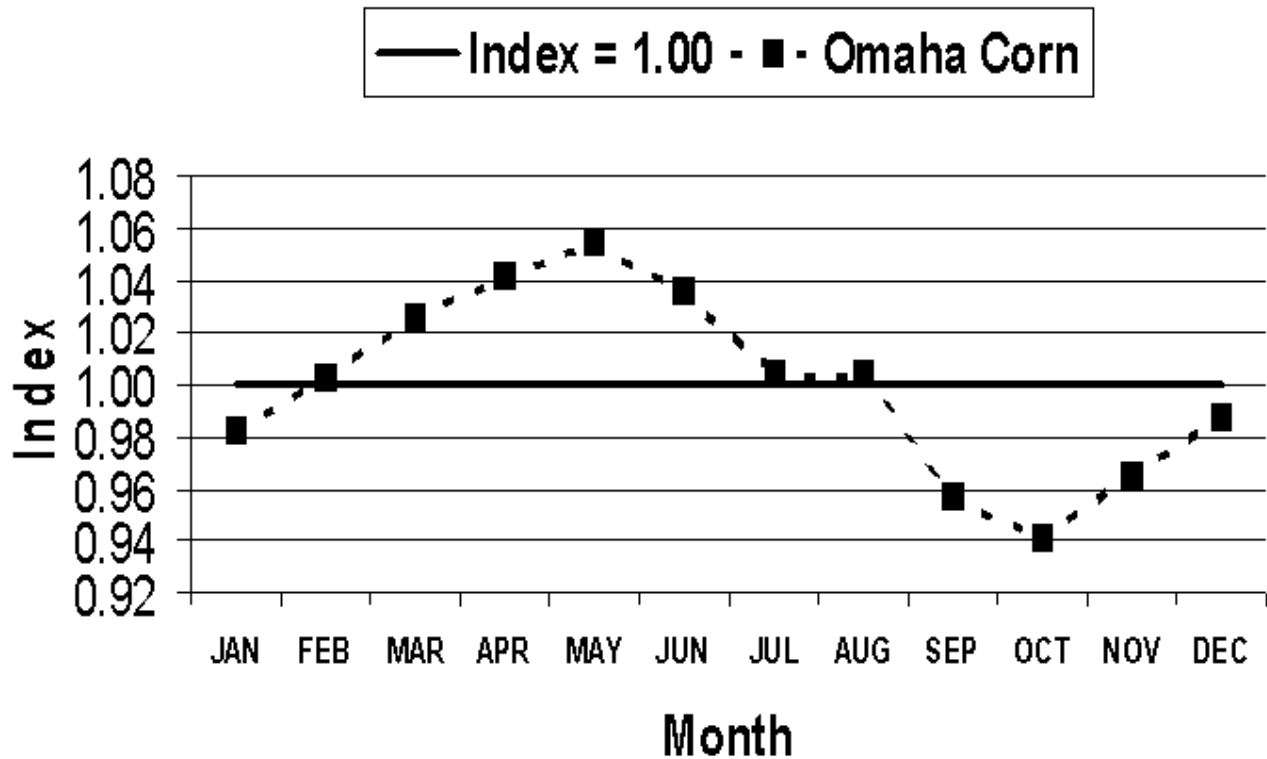


Appendix Figure 5. Thirteen year average feeder calf values; steers, medium and large, #1, Alabama, 1990-2002.

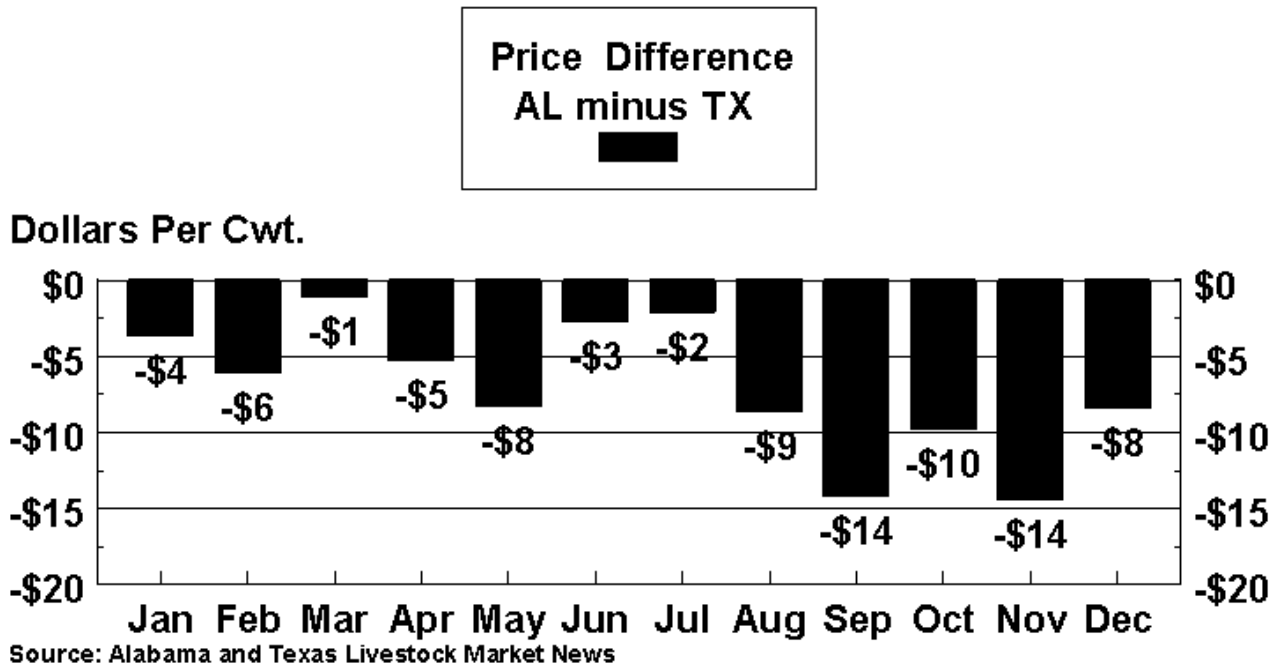
### Dollars Per Head



Appendix Figure 6. A seasonal price trend index for Omaha corn.



Appendix Figure 7. Feeder steer price difference, Alabama minus Texas, 400-500 pounds, 2002.



**Notes:**

## Notes: