

Welcome to the Mississippi Master Cattle Producer Program Self-Study Program Economics and Marketing training module. This program is administered by the Mississippi State University Extension Service. For answers to questions about this training program, contact Dr. Jane Parish, MSU-ES Extension Beef Cattle Specialist.

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Importance of Marketing

- Marketing decisions can make the difference between profit or loss in a beef cattle production enterprise
- Many beef cattle producers focus on improving production practices and spend too little time marketing their products



Marketing is the physical movement, transformation, and pricing of goods and services, with numerous buyers and sellers working to move livestock and livestock products from the point of production to the point of consumption. It involves sales, advertising and promotion, pricing, service, and other factors that fulfill customer's needs. Marketing decisions can make the difference between profit or loss in a beef cattle production enterprise. Many beef cattle producers focus on improving production practices and spend too little time marketing their products.



Marketing decisions include what to market (product), where to market (place), when to market, and how to market (promotion and price). Marketing decisions generally fall into four controllable categories. These four P's of marketing (marketing mix) include product, place, promotion, and price. The marketing manager can control these four P's subject to the constraints of the marketing environment. The goal is to make marketing decisions that center the four P's on the customers in the target market.

Marketing Decisions

- Know cost of production and breakeven prices
- ★ Know product value and how well it will perform or be valued by other industry segments
- m Understand prices
- **m** Evaluate different marketing alternatives



To make knowledgeable marketing decisions, know cost of production and breakeven prices first. Have a good understanding of product value, product performance of value in the industry, and price levels. Beef cattle producers have a wide variety of options for where and how to market their cattle. It is important to carefully evaluate different marketing alternatives.

Enterprise Budgeting

- **➡** Estimate of costs and returns associated with a production enterprise
- m Production enterprise
 - profit center
 - distinct entity that can be separated out for financial analysis
 - enterprise examples
 - · cow-calf
 - calf preconditioning
 - calf stockering
 - · cattle finishing



An enterprise budget is an estimate of the costs and returns associated with the production of some product or products, referred to as an enterprise. An enterprise, sometimes referred to as a profit center, is a distinct part of the farm or ranch business that can be separated out and analyzed as a distinct entity. Examples of enterprises in a beef cattle operation include cow-calf, calf preconditioning, stockering, and cattle finishing enterprises. For financial analysis purposes, calves are "sold" from the cow-calf enterprise to the calf preconditioning or stockering enterprise at weaning. Weaned calves are an output of the cow-calf enterprise and an input in the calf preconditioning or stockering enterprise.

Partial Budgeting

- Used to evaluate economic effect of changes in a business
 - technology adoption, enterprise expansion, enterprise diversification, production practice changes, capital improvements, marketing plan changes, etc.
- **m** Components
 - additional returns (A)
 - reduced costs (B)
 - additional costs (C)
 - reduced returns (D)
 - effect on net returns = (A + B) (C + D)



A partial budget helps managers evaluate the economic effect of minor adjustments in some portion of the business. Partial budgets are useful to evaluate changes such as technology adoption, enterprise expansion, enterprise diversification, production practice changes, capital improvements, and marketing plan changes.

The 7 components of the partial budget are additional returns, reduced costs, additional costs, reduced returns, totals of the first two and the second two, and a net difference. Consider how a particular change affects each category. Additional returns are those returns that occur if the change takes place. Reduced costs are those costs that are lower under the proposed change. Additional costs are those that are only incurred if the change is implemented. Finally, reduced returns are that income that would no longer be received if the change is initiated.

Partial budgeting consists of totaling additional returns and reduced costs of a proposed change and then subtracting out the reduced returns and additional costs associated with the proposed change. A positive difference indicates that the change is potentially profitable, whereas a negative difference indicates a potential negative effect on net returns. Consider the extent of the positive or negative difference and the confidence in the values used in making decisions using partial budgeting information.

Additional returns	Amount	Additional costs	Amount
Increased calf sales from increased cow conception rate next year	А	Increased labor costs	l
Increased calf weaning weights next year	В		
Increased sales of heifers not needed as replacements	С	Increased calf feed costs	J
Increased Quality Grade premiums (for retained calf ownership using grid marketing)	D		
Reduced costs	Amount	Reduced returns	Amount
Decreased cow feed costs	E	Decreased market cow sales	K
Decreased replacement female costs	F	Decreased carcass weights and values (for retained calf ownership)	L
Decreased feedlot feed costs (for retained calf ownership)	G		
Total additional returns and reduced costs	A+B+C+D+E +F+G=H	Total additional costs and reduced returns	I + J + K + L = M

An example early weaning partial budget is presented here. Mixed results on the economics of early weaning have been reported, with drought conditions often making early weaning compare more profitably to traditional weaning. In general, early weaning and backgrounding are associated with increased labor and feed costs. These increased costs may be justified during drought conditions or when cows and heifers are thin and run the risk of low rebreeding rates. Consider the differences in calf weights and values at marketing, cow culling rates, and weaning percentage and weights in the subsequent calf crop. The best way to assess potential profitability of early weaning versus traditional weaning is to develop a partial budget comparing the two practices for the specific cow-calf operation.

Breakeven Analysis

- Breakevens are specialized partial budgets used to evaluate cattle purchase and sale decisions
- Useful breakeven calculations depend on accurate knowledge of current and possible future calf prices, production costs, and selling prices
- **→** Determines the point at which the operation "breaks even"
- m Example breakevens
 - cattle purchase price, cost of gain, cattle sale price

Breakevens are specialized partial budgets used to evaluate cattle purchase and sale decisions. Useful breakeven calculations depend on accurate knowledge of current and possible future calf prices, production costs, and selling prices. Breakeven calculations determine points at which the operation "breaks even" (where net returns or profit equals zero). Breakevens can be calculated for cattle purchase price, cost of gain, cattle sale price, etc.



Beef consumer preferences include eating satisfaction, good nutrition and health, convenience, and product consistency. The National Beef Quality Audits survey beef consumers and provide updated benchmarks for the beef industry. Consumer preferences for beef impact demand for feeder calf attributes. When planning feeder calf marketing, consider what types of calves can be produced efficiently, what cattle buyers and consumers want, and what marketing options are available.

Producing Cattle that Fit the Industry

- m Begin with the end product in mind
- m Consider these questions
 - What do cattle buyers and consumers want?
 - How will the cattle be marketed?
 - What types of cattle can be produced efficiently?



To produce cattle that fit well with current industry demands, make production and marketing decisions with the end product in mind. Develop production and marketing targets based what cattle buyers and beef consumers want, chosen marketing alternatives, and types of cattle that can be produced efficiently in the operation's production environment.

Marketing Effectiveness

- Measured by profitability and customer satisfaction
- ➡ Profitability should be achieved by both buyer and seller
- **™** Must sell higher than breakeven price to realize profits



Marketing effectiveness is ultimately measured by operational profitability and customer satisfaction. Both the buyer and seller should achieve profitability for effective, lasting marketing relationships. Producers must consistently sell cattle and beef products at prices higher than breakeven prices to realize profits.

Beef Industry Segments

- **™** Seedstock breeder
 - markets purebred bulls, females, semen, embryos
- m Commercial cow-calf producer
 - markets feeder calves and replacement heifers
- m Preconditioner
 - markets preconditioned calves
- **➡** Stocker operator
 - markets calves raised from weaning to feedlot entry
 - primarily forage based in Mississippi



Beef industry segments include:

seedstock breeders who markets cattle genetics in the form of purebred bulls, females, semen, and embryos;

commercial cow-calf producers who market weaned calves as feeder calves and replacement heifers;

precondtioners who market weaned calves completing a preconditioning program (usually 45+ days); and

stocker operators who market calves raised from weaning to feedlot entry (in Mississippi, these operations are primarily forage based).

Beef Industry Segments

- m Cattle Feeder
 - markets fed cattle after finishing period
- **➡** Beef packer (harvest plant)
 - markets harvested cattle (beef carcasses)
- w Wholesaler, Retailer
 - examples: grocery stores, restaurants
- **™** Consumer
 - consume or utilize beef end products





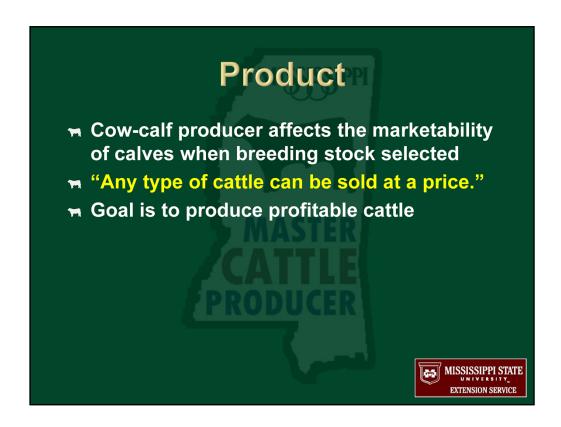
Beef industry segments also include:

cattle feeders who market fed cattle in feedlots to harvest facilities after completion of finishing;

beef packers (harvest plants/facilities) who market harvested cattle in the form of beef carcasses and wholesale cuts;

beef wholesalers and retailers (such as grocery stores or restaurants) who wholesale or retail beef products;

and beef consumers who consume or utilize the wide variety of beef end products.



Marketability of cattle is affected by genetics. Therefore, cow-calf producers affect the marketability of their calf crops through breeding stock selection. The saying, "Any type of cattle can be sold at a price," indicates that all cattle have value but that the quality of the cattle impacts the price received. Poor quality cattle will often sell for low prices and vice-versa. Beef cattle producers need to produce cattle that will market for profitable prices to operate profitably.



Product examples in the beef industry include breeding stock, registered bulls, registered females, semen, embryos, commercial females, feeder cattle, stocker cattle, fed cattle, and beef. The products of one industry segment may be inputs in another industry segment further down the production chain. For example, feeder cattle are inputs in both cattle stockering and finishing operations.

A Quality Product

- Something worth marketing
- **■** Breeder's decision
 - Produce cattle to meet own desires and preferences
 - Produce cattle to meet the desires of potential buyers
- **➡** Different perceptions of "quality"
- A commitment to quality is needed



A quality product is something worth marketing. Each producer has the decision to produce cattle to meet own desires and preferences, to produce cattle to meet the desires of potential buyers, or to produce cattle that satisfy both conditions. Perceptions of "quality" differ among beef industry participants. Individual seedstock suppliers and the rest of the industry benefit from breeder commitments to a quality product.

Marketing Approach

- m Wrong breeder attitude
 - do not wish to sell any animals
 - only wish to sell a few culls
- Must market to remain in business
- m "The quickest way to kill a poor quality product is to advertise it heavily." --- Keith Evans



Beef cattle producers must successfully market their cattle to remain in business. While cattle of all qualities can be sold, carefully consider the quality of cattle to offer. Marketing few quality animals and selling many cull animals can damage a breeder's reputation. Promoting poor quality products only further contributes to a poor seedstock supplier reputation. Reputation is essential in marketing the entire program. Produce cattle worth marketing. Then focus on marketing a quality product for operational profitability. Effective cattle marketing is more than just selling cattle. It involves market analysis, product development, market selection, production promotion, and further market development.

Marketing Plan

- **™** Identify customers
- **★** Assess competition
- m Point out product uniqueness
- Evaluate resources
 - production costs
 - marketing budget
- ➡ Produce for marketing, then market for profitability



Develop a written marketing plan for each cattle enterprise. In the marketing plan, identify potential customers, assess the competition, point out product uniqueness, and evaluate ranch resources to cover production costs and marketing budgets. By producing cattle that fit marketing programs and buyer targets, it is much easier to market cattle profitably.

Marketing Audience ➤ Listen ➤ Learn the customer's needs • know the customer's cow herd and price range • match cattle accordingly • help customer with breeding and marketing goals

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The target marketing audience is the group of potential consumers for a given product or group of products. For marketing success, it is critical to listen to consumer input and learn customer needs. By knowing the customer's cow herd, price range, and production resources, cattle marketers can supply cattle that serve the customer's needs. In listening to customer input, it is often appropriate to provide suggestions or offer the customer assistance in reaching breeding and marketing goals. Customer service is an important part of the cattle purchase package, particularly when marketing breeding animals.

Customer Satisfaction

- m Cattle business is really a people business
 - especially the registered cattle business
- Role of a private treaty salesman is "to satisfy the customer"
- Reputation, reputation, reputation
- **™** Market the entire program
- Buyer services and programs
 - hauling
 - breeding guarantees
 - calf buy-back programs



The cattle business, and registered cattle business especially, is a people business. The role of a cattle producer/marketer is "to satisfy the customer." For example, seedstock producers should:

- Listen to learn their customer's needs.
- Inquire about the prospective customer's breeding and management programs.
- Visit customer operations when possible.
- Learn the customer's herd needs and price range.
- Match bulls and replacement females accordingly.
- Help the customer with breeding and marketing goals after the sale.
- Provide buyer services and programs:
- —cattle hauling
- breeding guarantees
- —calf buy-back or placement programs

Identifying Customers Cow-calf producers seedstock, commerical Preconditioning operations Stocker operations Feedlots Packers Purveyors (beef suppliers) Retailers restaurants, grocery stores

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Effective marketing involves identifying potential customers. Potential customers of beef cattle and beef products include cow-calf producers (seedstock and commercial), preconditioning operations, stocker operations, feedlots, meat packers, beef purveyors, restaurants, retailers, and the consuming public. Some entities may own cattle or beef through multiple segments of the beef production chain.

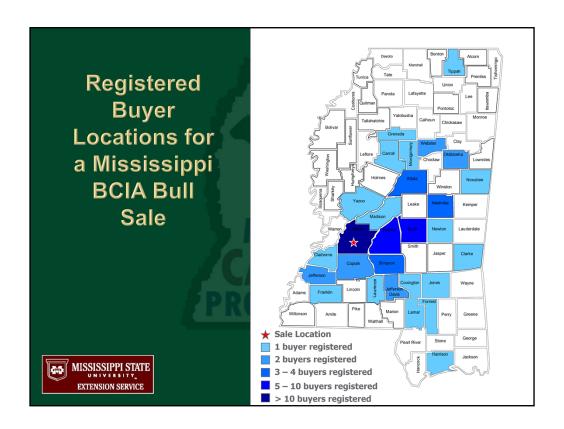
m Consuming public

Prospective Customers

- Know who has purchased cattle during the last few years that might be interested in the same quality of animals you may offer
- Know the wants, needs, and desires of potential customers
- Make the location of potential customers



Marketing program development involves knowing who has purchased cattle during recent years that might be interested in the same quality of animals the ranch offers. Recognize the wants, needs, and desires of potential customers. Learn the location of potential customers.



Analysis of Mississippi Beef Cattle Improvement Association bull sale buyers shows that while bulls often sell into states surrounding Mississippi each sale, the majority of bull buyers reside within 200 miles of the sale location.

Target Marketing

- **→** Define the market area to efficiently advertise
 - sales records for last 3 to 5 years
 - bulk of breeder's buyers usually within 200 miles (local)
 - learn commercial producer locations
 - consider competing breeder location
- **➡** Choose marketing media to fit the area
 - media options increase with market area



Target marketing involves defining the market area. It facilitates efficient use of advertising dollars. To define a target market review ranch sales records from the last 3 to 5 years. Update mailing lists accordingly. The bulk of a seedstock producer's customers usually reside within 200 miles. In other words, much of the target market is likely local. Map out commercial producer locations and identify clusters of producers. Determine what media outlets they utilize, and advertise accordingly. Media options typically increase as the geographic area of the target market widens. Factor in competing breeder locations and resources to determine strategic advantages.

Information for Marketing Purposes

- **→** Cattle identification/ registration #
- **→** Pedigree/ breed composition
- **™** Birth date
- **™** Weaning date
- **➡** Performance information
 - birth weight, weaning weight, age of dam, yearling weight, adjusted weights and ratios
 - ultrasound scan results
- **m** Expected Progeny Differences



Many cattle buyers desire relevant information on cattle and are willing to pay more for this added value. An increasing percentage of seedstock customers insist on certain pieces of information such as expected progeny differences on prospective herd sires. Information needed for seedstock marketing purposes includes but is not limited to:

cattle identification/registration number, pedigree/breed composition, birth date, weaning date, performance information (birth weight, weaning weight, age of dam, yearling weight, adjusted weights and ratios), ultrasound body composition scan results (ribeye area, intramuscular fat percentage, backfat thickness, rump fat), and expected progeny differences.

Information for Marketing Purposes

- m Management practices
 - creep feeding, nutrition
 - weaning, preconditioning
 - herd health program
 - vaccinations
 - internal and external parasites
- m Breeding information
 - breeding soundness evaluation results
 - pregnancy determination results
 - breeding dates
 - sire registration numbers



Cattle buyers are often also interested in information on previous cattle management. Keep detailed records on creep feeding, nutrition, weaning/preconditioning, and the herd health program including vaccination history and internal and external parasite control measures.

Potential buyers of breeding cattle may want to know breeding soundness evaluation results (physical exam, scrotal circumference, semen motility and morphology), pregnancy determination results, artificial insemination breeding and bull exposure dates, and registration numbers of sires to which exposed.

Program Reputation

- Reputation of a cattle or beef operation is critical to its marketing success
- **■** Involves perceptions of peers, customers, and general public of the...
 - Ranch owner
 - Ranch management
 - Product
 - Total program



The reputation of a cattle or beef operation is critical to its marketing success. Reputations involve the perceptions of peers, customers, and the general public of the ranch owner, management, product, and total program. Poor reputation can negatively impact the marketability of a product. A good reputation often takes years to develop, while a bad reputation can result from a single incident.

Commercial vs. Purebred Cattle Marketing

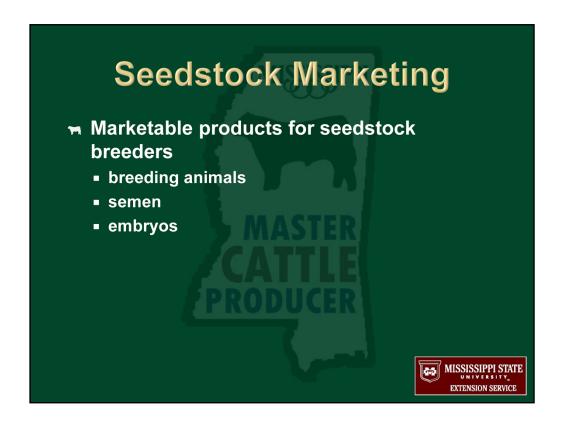
- m Different
 - products
 - product values and price fluctuation
 - target audiences (customers)
 - marketing flexibility
 - amounts of seller influence on price
- m Opportunities to add value for both



Seedstock cattle are breeding cattle typically registered with a breed association. They have documented pedigrees and estimates of genetic merit, such as expected progeny differences. Seedstock operations are considered genetic suppliers, and genetic improvement is often a key focus of a seedstock cattle operation. Seedstock operators are also called breeders.

Commercial cattle are usually not registered animals, may be crossbred, and may or may not be offered as breeding herd replacements. Commercial cattle can include purebred animals eligible for breed association registration but that are used as commercial cattle where registrations are not maintained or pursued. These cattle are often referred to as grade animals.

Marketing seedstock cattle differs greatly from marketing commercial cattle. There are differences in products, product values, price fluctuations, target audiences (customers), marketing flexibility, and amounts of seller influence on price between the two types of marketing. Opportunities exist to add value to cattle and cattle products for both seedstock suppliers and their commercial customers.



Marketable products for seedstock producers include purebred or registered bulls, cows, heifers, semen, and embryos as value-added beef cattle genetics. Refer to Mississippi State University Extension Service Publication 2514, "Beef Cattle Seedstock Marketing", for more information on this topic.

Commercial Beef Cattle Marketing Calves Sell calves at weaning as feeders Sell replacement heifers Retain ownership Stockering Finishing Breeding herd Market cows Market bulls

Commercial beef calves can be marketed as feeder calves at weaning or after preconditioning. Refer to Mississippi State University Extension Service Publication 2552, "Marketing Feeder Calves", for in depth information on feeder calf marketing. Heifers may also be marketed open (non-pregnant) or bred as replacements for breeding purposes. Commercial cow-calf producers may also choose to retain ownership of calves post-weaning through stockering and/or finishing phases of production. Joint ventures with cattle feeders where some equity in calves through finishing is retained are another ownership/marketing option for feeder calves. About 47.4% of small beef cattle operations and 37% of large operations surveyed in Mississippi in 1999 retained ownership through a stocker phase. In addition, 5.7% of small operations and 22.1% of large operations retained ownership through finishing.

Commercial beef breeding herd "culls" comprise a significant proportion of operational revenue. Surveys of Mississippi cow-calf operations indicate that mature cows and bulls make up 85 percent and 89 percent of the cattle in breeding herds on operations with fewer than 100 head and greater than 250 head, respectively. Returns from sales of market cows and bulls comprise a significant portion of a beef cattle operation's income. The 1999 National Market Cow and Bull Quality Audit reported that returns from the sale of market cows and bulls accounted for about 16 percent of the total income of the average cow-calf operation. Market cow and bull sales generally represent between 10 and 30 percent of the sales receipts from a cow-calf operation. Market cows and bulls should be marketed before becoming too thin or too lame for transport. For more information on this topic, refer to Mississippi State University Extension Service Publication 2520, "Market Cow and Bull Management and Marketing".

Pricing

m Prices

- determined by the relationship between available supply of the product and customer demand for the product
- product quality attributes impact product premiums and discounts
- depend on the marketing method used

m Goal

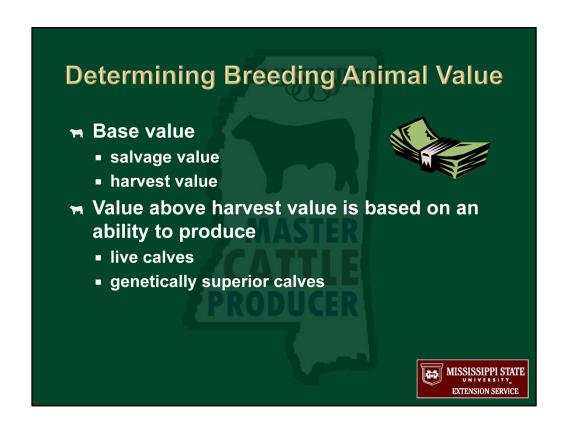
 to price at level where consumer willingness to pay for product ownership covers operational costs and leaves additional returns

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Prices are determined by the interaction of product supply and demand. As supplies increase (decrease), prices generally decrease (increase) at a given demand level. As demand increases (decreases), prices generally increase (decrease) at a given supply level. Product quality attributes impact price premiums and discounts. Product pricing also depends upon the marketing method utilized. For example, private treaty sales allow for set pricing with haggling, whereas auction markets allow for competitive bidding. The goal for a cattle/beef operation is to price cattle and beef products at levels where consumer willingness to pay for product ownership covers operational costs and leaves additional returns. In other words, the goal is to price to achieve profits from product sales.



A breeding animal's base value depends on its salvage value. A breeding animal's value above slaughter value is based on its ability to produce live calves. The overall quality of those calves can impact the value of a breeding animal's being marketed as a replacement. Cow-calf producers affect the marketability of their calves when selecting breeding stock.

Factors Affecting Feeder Calf Prices

- m Calf attributes
 - Frame size, muscling, breed composition, fill, horn status, health
- m Price of beef
- Price of fed cattle
- Cost of gain for the buyer
- Market competition
- m Cattle supply offered for sale



"Value-added" feeder calf production involves the cow-calf producer getting paid for something that would otherwise have been done by another operation later in the production process. Preconditioning calves is an example of this concept. Producers may manage calves in a 45 to 60 days post-weaning program to prepare them for stockering or finishing operations. Without producer involvement in this separate phase of production, a third party would provide the value-added services of grouping and "straightening out" calves.

To capture higher returns from value-added management practices, cow-calf producers must use marketing strategies that provide opportunities to capture the value of these practices. Significant price differences can result from differences in the physical characteristics of cattle, even in a market outlet for an essentially undifferentiated commodity instead of on the absolute level of discounts reported here. Anything that gives the buyer an indication of poor quality and/or poor management may draw a discount. When a buyer purchases a calf, that buyer assumes risk. This risk may be that the animal will not perform as expected in the feedlot and/or on the rail. Anything that makes buyers think a given animal is a higher-than-average risk can lead to a discount.

In addition to differences in cattle attributes, factors affecting feeder calf prices include beef prices, fed cattle prices, cost of gain for the buyer, market competition, and cattle supply offered for sale.

Market Classes and Grades

- Established to segregate cattle, carcasses, and products into uniform groups based on the preferences of buyers and sellers
- **➡** Designed to make the marketing process simpler and more easily communicated



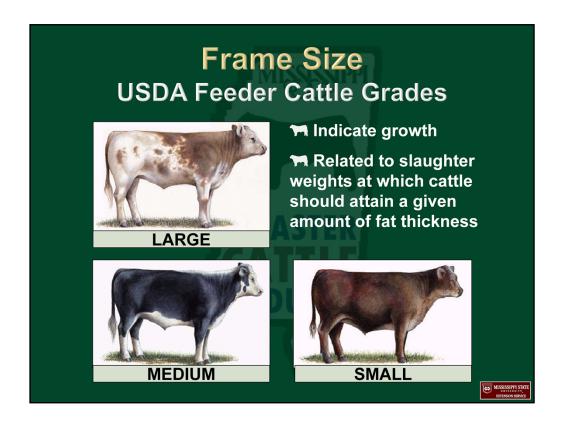
Cattle grading systems were originally developed to establish a common language between buyers and sellers and establish a uniform reporting system, making the marketing process simpler and more easily communicated. Market classes and grades segregate cattle, carcasses, and products into uniform groups based on the preferences of buyers and sellers. They are now also used to make contracts on the futures market and facilitate trading feeders without actually seeing the cattle. However, they are often overlooked as a method to advance genetic improvement in commercial cow herds. A basic understanding of how cattle grades are applied enables cattle producers to estimate relative calf crop value and make informed breeding and culling decisions.

Feeder Calf Grades

- Allow buyers and sellers to categorize feeder calves in 2 ways
- **➡** Frame size
 - measure of skeletal structure
 - depends on hip height and age
- Muscle thickness
 - related to muscle to bone ratio at a given degree of fat thickness



One of the most basic ways to establish value for feeder cattle is the USDA grading system for frame size and muscle thickness. The history of feeder cattle grading dates back to the Agricultural Marketing Act of 1964 that set the original standards and charged the United States Secretary of Agriculture with overseeing the application of them. The system was updated in 1964, 1979 and most recently in 2000. The overall concept is to predict the phenotypic characteristics that each calf will express at maturity (finished to the Choice Quality Grade). Grades are based on three factors: 1) frame size, 2) muscling and 3) thriftiness and Feeder calf grades allow buyers and sellers to categorize feeder calves in two ways: 1) frame size and 2) muscle thickness.

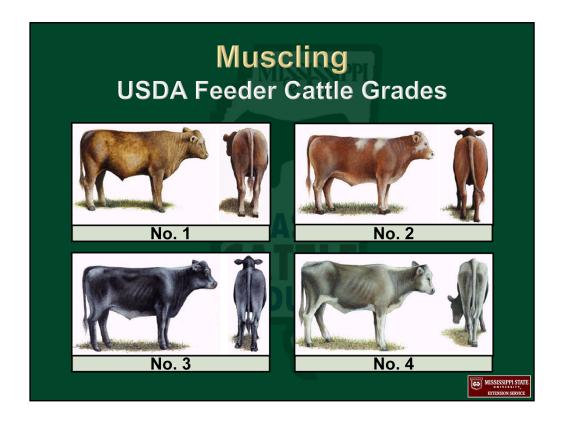


Frame size is a measure of skeletal structure and depends on hip height and age. It indicates growth and is related to slaughter weights at which cattle should attain a given amount of fat thickness. Frame size impacts the calf's growth curve or the time it takes that calf to finish (reach maturity) in a conventional feeding system. A large-framed steer will reach maturity later and could weigh 1400 pounds by the time it reaches 0.4 inches of back fat. Alternately, a small-framed steer might only weigh 950 pounds when it reaches 0.4 inches of back fat. While it might seem beneficial to feed a steer that matures early to reduce the total feed cost, finished live weight controls carcass weight. Therefore, a lighter steer will yield a less valuable carcass with less lean product. Sex also affects maturity. If frame size is equal, heifers generally mature quicker than steers.

There are three frame scores in the USDA system: Large, medium and small. It is determined by evaluating the length and height of the calf. Length is determined by visually estimating the distance from the fore flank to the rear flank. Height is determined by visually estimating the distance from the calf's chest to the ground and from the calf's hip to the ground. The "Large" grade is assigned to steers that will finish over 1250 pounds. "Medium" framed steers typically finish between 1100 and 1250 pounds. "Small" framed steers usually finish at less than 1100 pounds. Heifers normally finish 100 pounds lighter than steers, and each frame score is adjusted accordingly.



Frame size impacts feeder calf prices as evidenced by this summary of Mississippi auction market prices for feeder steers. Medium and small steers were significantly discounted versus medium and large steers for all weight classes.



The degree of muscling (muscle thickness) on a calf is related to muscle to bone ratio at a given degree of fatness. It is used as a rough indicator of Yield Grade at maturity. View the calf from the rear to most effectively evaluate muscle mass. Start from the ground and work up. A heavily muscled calf has a "base width" (a wide stance between the rear hooves). Next, look at the center portion of the quarter. For heavy-muscled calves, the center quarter is wider than the top of the hip or the base width. As muscle mass decreases, the natural distance between the rear hooves becomes narrower (sometimes even touching) and the center of the quarter becomes flat and less expressive. In general, when viewed from behind, heavy-muscled calves appear rectangular in shape, and light muscled calves are more triangular.

There are four muscle grades in the USDA system: #1, #2, #3, and #4. A "#1" muscle grade designates at least moderately heavy muscled calves that will be expected to have a more desirable (lower) Yield Grade when finished at a given degree of fatness. A "#2" muscle grade is assigned to calves with an average amount of muscle and possibly showing some indication of dairy breeding. A "#3" muscle grade indicates thin, light-muscled calves. Finally, a "#4" muscle grade is assigned to calves that are extremely light muscled.

For a calf to be assigned any of the 12 combinations of frame and muscle grades, they must be "thrifty." A thrifty animal, as described by the USDA grading standards, does not exhibit signs of mismanagement, disease, parasitism or lack of feed. If a calf is deemed unthrifty, it is assigned the "Inferior" grade but could qualify for frame and muscle grades at a later date if the problem is corrected. Double-muscled cattle (for example, Piedmontese, Belgian Blue, Parthenais) are also graded as inferior because, even though they exhibit superior muscling, they do not produce a carcass with enough marbling to grade Choice.



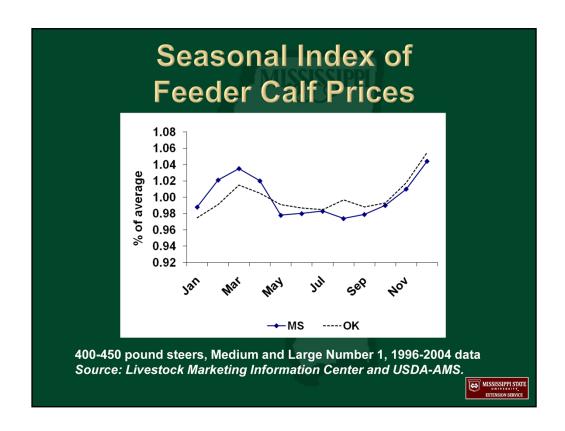
Muscling grade impacts feeder calf prices as evidenced by this summary of Mississippi auction market prices for feeder steers. Muscle score 3 steers were significantly discounted versus muscle score 1 and 2 steers for all weight classes.

Highly Marketable Feeder Calf

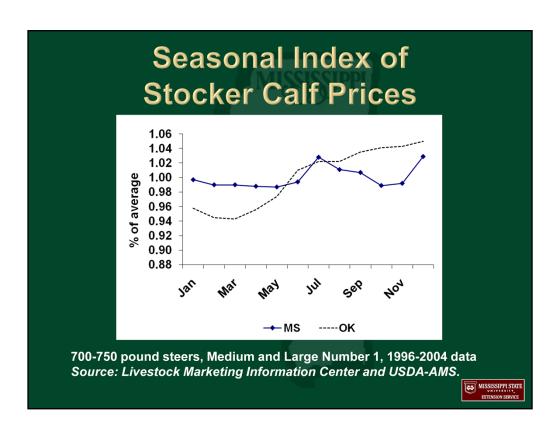
- **★** Medium or large frame
- Muscle score #1 or #2
- **w** Weaned and healthy
- Moderate flesh and fill
- Dehorned, castrated, vaccinated
- **→** Desirable breed composition
- Ready to eat and gain weight



Producers can add value to feeder calves by improving their marketability. Highly marketable feeder calves are generally medium or large frame, muscle score #1 or #2, weaned for 45 days, healthy, moderate in flesh and fill, dehorned or polled, castrated, appropriately vaccinated and boostered, and of desirable breed composition. Ultimately feeder calves should be ready to eat and gain weight as they move into stocker and finishing operations.



Cattle prices and input (feed, fertilizer, etc.) prices often follow seasonal trends. This graph illustrates seasonality of feeder calf prices in Mississippi and Oklahoma over time. Be aware of current market price levels and market trends as cattle prices can deviate from seasonal trends.



This graph illustrates seasonality of stocker calf prices in Mississippi and Oklahoma over time. Note the difference in typical seasonal high and low prices as compared with feeder calf prices in the previous graph.

Price Risk Management

¬ Futures Market Options

- a feeder cattle option is a legally binding contract which gives the option buyer the right, but not the obligation, to buy or sell a feeder cattle futures contract under specific conditions in exchange for the payment of a premium
- call option right to buy a futures contract at a specified price during the option life
- put option right to sell a futures contract at a specified price during the option life



A feeder cattle option is a legally binding contract which gives the option buyer the right, but not the obligation, to buy or sell a feeder cattle futures contract under specific conditions in exchange for the payment of a premium. A call option is the right to buy a futures contract at a specified price during the option life. A put option is the right to sell a futures contract at a specified price during the option life. Each option provides the opportunity to take advantage of futures price moves without actually having a futures position.

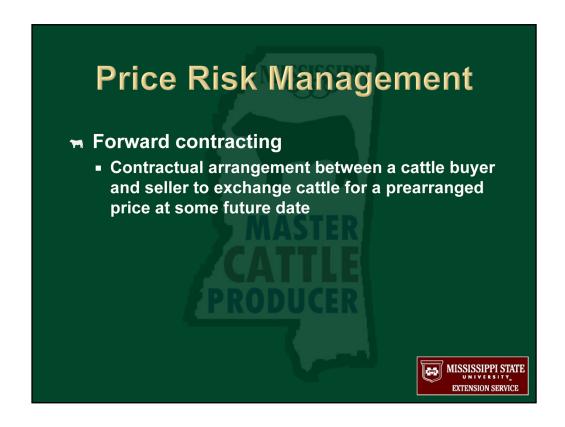
Price Risk Management

- **➡** Futures Market Hedging
 - a hedge is a means of managing price risk by taking a position in the futures market opposite that held in the cash market
 - Example futures market
 - Chicago Mercantile Exchange

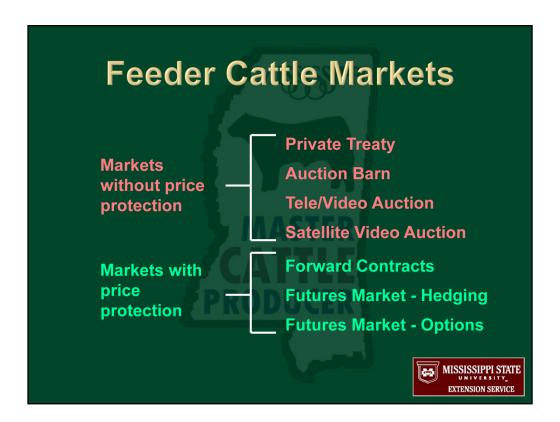


The Chicago Mercantile Exchange is an example of a futures market. Forward contracts become standardized futures contracts under the exchanges. Livestock futures allow producers to lock in prices, improve business planning, and facilitate financing. A futures contract states the commodity, quantity, quality, delivery point, and cash settlement. These contract specifications change over time as industry standards change.

A long futures position is where a product is in inventory and a futures contract is purchased. A short futures position is where an unsatisfied need for a product exists and a futures contract is sold. A hedge is a means of managing price risk by taking a position in the futures market opposite that held in the cash market. One who owns a commodity and plans to sell it later is long cash. A short hedge balances a long cash position with a short futures position and protects against price decrease. One who needs and plans to purchase a commodity later is short cash. A long hedge balances a short cash position with a long futures position and protects against price increase. By buying back a contract before the delivery date, the obligation to deliver on a sold contract or to take delivery on a purchased contract is removed or offset.



Forward contracting is a form of risk management. It is a contractual arrangement between a cattle buyer and seller to exchange cattle for a prearranged price at some future date. Forward contracting allows both the buyer and seller some flexibility in defining acceptable terms. Standardization of forward contracts saves time in negotiations.



Several alternatives exist for producers to manage risk (protect price) when marketing feeder calves. Markets with price protection include forward contracts, futures market hedging, and futures market options. Private treaty and auction sales typically do not offer price protection.

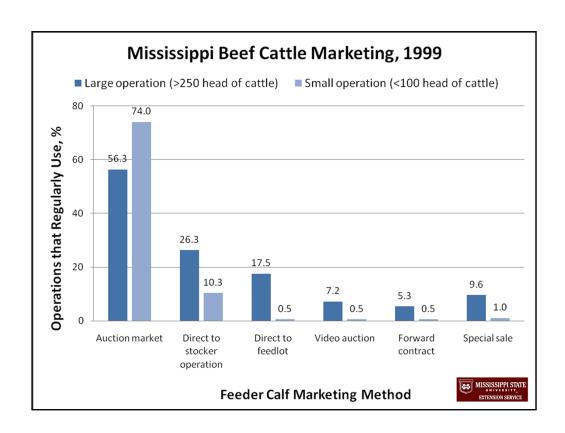
Beef Cattle Marketing Channels

- M Auction markets
- m Private treaty (direct sales)
- m Graded and pooled sales (alliances)
- **➡** Board sales (tele-auctions)
- **▼** Video auctions (satellite, Internet)
- m Consignment sales
- m Production sales
- **™** Open house sales



Beef cattle producers have a wide variety of options for where and how to market feeder calves. Feeder calf marketing alternatives include auction markets, private treaty sales (direct sales), graded and pooled sales (marketing alliances), board sales (tele-auctions), and video auctions (satellite and Internet). Seedstock suppliers can also choose from a variety of marketing methods including some of the same methods used to market feeder calves and some additional options such as production, consignment, and open house sales. Some markets sell both seedstock and commercial cattle in a given sale offering. For example, commercial heifers might be included in a seedstock production sale.

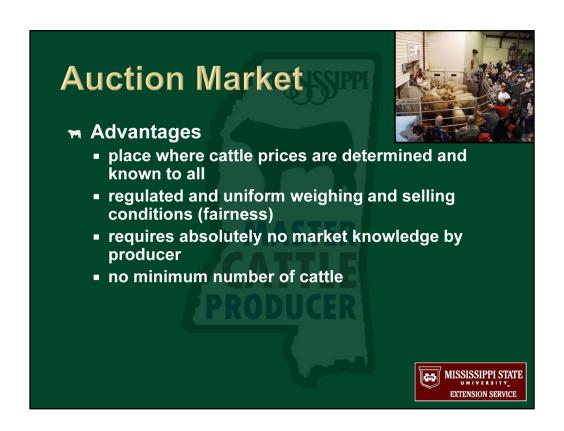
Understand the pros and cons for each marketing alternative for the specific operation. Evaluate different marketing alternatives considering ranch marketing goals and resources. Marketing is an ongoing effort, not an occasional event. Determine how various marketing methods might contribute to a year-round marketing program. Utilize a combination of marketing alternatives when appropriate.



Auction markets were the predominant marketing method Mississippi beef cattle operations selected in a 1999 survey. Large operations were more likely to utilize other marketing alternatives for feeder calves. Each marketing method provides advantages and disadvantages to the seller when compared with other marketing alternatives. Evaluate the advantages and disadvantages of each alternative to make an informed market selection decision. As production and market conditions change, reconsider the best marketing alternative for feeder calves.



Auction markets are common throughout the Southeastern U.S. These "sale barns" provide sellers with competitive bidding and prompt cash payment. Auction markets are open to all sellers and buyers, and many species and types of livestock can be marketed. Bidding is open to the public.



These markets are places where cattle prices are determined and known to all. They are regulated with uniform weighing and selling conditions bringing a level of fairness to the marketing process. Use of auction markets requires absolutely no market knowledge by the producer. There is no minimum number of cattle needed to sell at an auction market. While general market trends may be known, specific prices are uncertain upon delivery of cattle at the market for sale.

Auction Market



- **™** Disadvantages
 - seller has little control over prices
 - encourages multi-handling, speculative type trading
 - high overhead cost
 - excessive stress and shrinkage of livestock may occur
 - lack of volume and uniformity of animals at many markets
 - hard to establish reputation for selling quality cattle
 - grade and price information difficult to interpret



Producers selling through auction markets have very little control over prices. This market structure encourages multiple handling of cattle and speculative type trading. Overhead cost can be high, and excessive stress and shrinkage of livestock may occur. There can be a lack of volume and uniformity of animals depending on the specific market. It can be difficult to establish reputation for selling quality cattle if producer identities are unknown to, or infrequently seen by, buyers. Grade and price information can be difficult to interpret due to low volume of specific animal weights and types or unique local market conditions.



Auction markets are often local, providing some convenience to sellers, but distance to markets can be a limitation in some areas. Commingling of livestock at auction markets makes disease spread more likely than with "farm fresh" cattle that are not exposed to cattle outside the ranch. In some cases, the number of buyers may be small, reducing bidding competitiveness.



Private treaty sales are direct sales from cattle suppliers to customers. Overhead costs are generally lowest with private treaty sales compared with other marketing methods. Spending money on advertising is still warranted in many cases though. Private treaty sales encourage and reward marketing innovation. With private treaty sales, the seller controls the marketing process.

Developing customer relationships that elevate the reputation of the operation and result in new and repeat buyers is a primary focus of private treaty sales efforts. Offering quality cattle is important in achieving this. Private treaty purchases can develop into lasting marketing relationships when the seller provides a desirable product and associated customer service to result in a repeat buyer. Some breeders also try to entice volume buyers. Volume discounts, customer service, and a large cattle offering providing more selection opportunities can attract volume sales.



Cattle purchased private treaty are often farm-fresh with less disease exposure than commingled cattle. Producers can manage animals to buyer specifications or provide additional requested services. Marketing agent commission, transportation to market site, and associated cattle shrink are eliminated with this marketing method. Private treaty sales typically cost less than other marketing methods.



A primary drawback of private treaty sales is the time investment needed to be successful. Private treaty purchases allow buyers to interact with sellers individually. The buyer can visit the seller's ranch and view the operation while asking the seller questions about individual head of cattle and the ranch management program. Seedstock operations, in particular, need to have someone available and willing to visit with prospective customers throughout the year and often on short notice.

Sellers must be accessible to prospective buyers. Willingness to answer and return phone calls, respond to e-mail messages, and host visitors at the ranch is needed. Work with customers to determine their needs and match cattle that best fit their programs. Visits to customer operations can be useful in assisting customers in finding the appropriate cattle. Some customers also request production and marketing advice from seedstock suppliers.

Private treaty sales require excellent knowledge of the cattle offering and current cattle markets. Know current market conditions, the overall quality of the cattle being offered, and the recent sale history of similar genetics in the region. The seller must be able to price cattle to visitors and then close the deal on sales. There is more room for haggling with a private treaty purchase than with many other marketing alternatives. This is both an opportunity and a risk for the buyer and seller.



Selling conditions vary widely, and buyer competition may be little or none. Sales are generally unregulated and unsupervised, and the producer assumes risk of payment collection. Sellers must also remit the \$1.00 per head beef checkoff for every bovine animal sold. In Mississippi, the Mississippi Beef Council handles beef checkoff collections.



Graded or pooled sales allow producers to put large, economical lots of livestock together. The associated cost savings for buyers can be passed along to sellers. Large numbers of livestock are needed to attract additional buying competition. While most Mississippi beef cattle producers surveyed in 1999 did not pool cattle for sale, the overwhelming majority agreed that larger, more uniform lots of cattle command higher prices and that pooling reduces transportation costs. Graded sales may develop into reputation sales after years of successful marketing efforts.

Graded or Pooled Sales ■ Disadvantages ■ Grading, sorting, weighing, and penning before sale are time-consuming and expensive ■ Many marketing facilities are not designed for efficient processing for this system ■ Individual producers can lose identity ■ Hard to get large number of producers to agree on terms of sale

Individual producers can lose their identity amongst other consignors in graded or pooled sales, particularly if promotion of individual operations is minimal. In some instances, it is hard to get large numbers of producers to agree on the terms of a graded sale. A committee of marketing agents and producers is sometimes needed to define the sale rules. Potential consignors then have the option of whether or not to participate in the particular sale.

It is necessary to grade, sort, weigh, and pen cattle before sale. These tasks are time-consuming and expensive. Many marketing facilities are not designed for efficient processing for this system.



The Mississippi Homeplace Producers and Cattlemen's Exchange feeder calf sales are examples of board sales. Board sales are tele-auctions where cattle are displayed to potential buyers "on a board" as still images or in video. Cattle are not physically present at these sales. Bids are taken at the bidding site and via telephone. A large volume of cattle at one sale can attract buyers, increase bidding competition, and provide a competitive marketing advantage. An advantage of a board sale is that it accommodates a large number of feeder calves that might not all be ready to ship on a certain day. Flexibility is given to arrange for future delivery. Some calves are shipped soon after a sale, while others are shipped at agreed dates depending on target weights.

Direct buyer to seller transportation reduces stress, shrinkage, and death loss. Reducing shrink prior to recording a pay-weight can drastically affect returns. Calves can shrink up to 10 percent of their weight overnight and as much as 6 percent over a six-hour period prior to selling. A set percent "pencil shrink" is agreed to for each sale. This can help capture returns per head that would be lost in many other marketing scenarios.

Reduced cattle handling and commingling prior to shipping are advantages to board sales. With these sales, a reputation may be established that could foster repeat buyers or increased willingness to pay higher prices for calves from producers whose cattle have performed well in the past. Individual lots of cattle are easily identified with their respective consignors. Lot descriptions sometimes include information on the ranches and families they represent.



Board sales require partial or, in most cases, full truckload lots. These lots can be assembled from multiple consignors, eliminating the need for each consignor to provide truckload lots. A board sale requires prior producer commitment. Producers give up marketing flexibility by committing to participate in a sale. Producers who back out of a sale can negatively impact other consignors and the overall sale. Therefore, some board sales retain nomination fees from consignors who back out of a sale and may restrict future participation when commitments are broken.

Health management and preconditioning are concerns with these types of sales. Depending on the particular sale, specific preconditioning and vaccination protocols may or may not be required. Calves managed similarly are usually grouped in the same load. For example, consigners who vaccinate with the same products and precondition their calves for a similar amount of time may be grouped together and represented as such in a sale.

Capturing quality image or video clips enhances the sale offering. Poor quality pictures detract from the sale offering. Effective board sales require accurate and dependable descriptions of livestock, because many prospective buyers bid on cattle without first inspecting them.

Video/Satellite/ Internet



- **★** "Electronic Marketing"
- Advantages
 - Largest number of potential buyers of all market methods
 - Provides entry to small markets
 - Potential for reduced buyer cost passed along to seller
 - Direct buyer to seller transportation
 - Delivery schedules very flexible



Internet and satellite sales feature video of cattle lots over designated websites or satellite channels. Professional sale services are usually required to put on one of these sales. Video presentations are developed by sale management in advance of the sales. High quality video clips and careful editing are essential for achieving a desirable production presentation over internet or satellite. Production and consignment sales can be presented via internet or satellite sale service. Bidding normally occurs online for internet sales and by phone for satellite sales.

Internet and satellite sales are good forms of seedstock advertisement. Many interested persons watch these types of sales even if not interested in purchasing cattle at the particular sale. These individuals may develop good impressions of operations represented in internet or satellite sales and then purchase cattle from these ranches later.

Internet and satellite auctions offer prospective buyers the convenience of not having to attend a sale in person and instead bidding from a remote location. This eliminates or reduces buyer travel expense and time off from work. Weather conditions are not likely to impact buyer participation. These sales facilitate direct buyer to seller transportation of cattle and flexible delivery schedules.

Video/Satellite/ Internet → Disadvantages - Marketing cost is generally higher than teleauction - On-farm truckload of uniform cattle needed - Buyer hesitation with sight unseen cattle - Possible technical difficulties

Downsides to internet and satellite auctions include a lack of comfort among potential cattle buyers with bidding in these types of sales and possibilities for technical difficulties. Marketing costs can be higher per unit sold that other methods. Generally, full tractor-trailer loads of cattle are required to attract commercial cattle buyers.

Consignment Sales



- **™** Example
 - Mississippi BCIA Bull and Heifer Sales
- **★** Advantages
 - Several potential customers come together
 - Sale costs divided among consignors
 - Could increase private treaty sales
 - Helps establish value of private treaty cattle
 - Opportunity to expand market area
 - Sale arranged by professionals



Consignment sales involve multiple cattle owners consigning cattle to each sale. Many breeders who do not have the herd numbers, facilities, or interest in putting on a production sale will participate in consignment sales instead. Sale costs are divided among consignors. Professional sale management typically handles sale logistics. Screening of cattle is common prior to acceptance of consignments to a sale. The Mississippi Beef Cattle Improvement Association bull and heifer sales are examples of consignment sales. Breed association field representatives and reputable sale managers are good contacts for learning more about specific consignment sales.

Consignment sales are usually arranged by professionals. While many sale managers do a good job for clients, do not assume that all sale management acts professionally and effectively. Wide variations exist in sale management abilities, willingness to accommodate client and customer requests, communication efforts, marketing effectiveness, and follow through. Similarly, sale management fees vary significantly. Inquire with previous clients about their experiences with specific sale management. Visit with sale management about their fees and procedures before consigning cattle to a sale.

The potential to reach new customers and further advertise seedstock is an advantage to consignment sale participation. Selecting quality cattle for these sales can help a breeder develop a good reputation. These sales provide breeders with opportunities to expand their market area and can increase private treaty sales. Producers may want to participate in local, regional, and even national consignment sales before hosting a production sale. Consignment sales promote breeders, individual cattle, and breeds. These sales can provide price benchmarks and help establish values for private treaty cattle.

Consignment Sales



- m Disadvantages
 - Cattle compared to other breeders' cattle
 - Sale management may not be professional
 - Cattle must be well displayed to be competitive
 - Consignor may not select the right cattle or plan far enough in advance



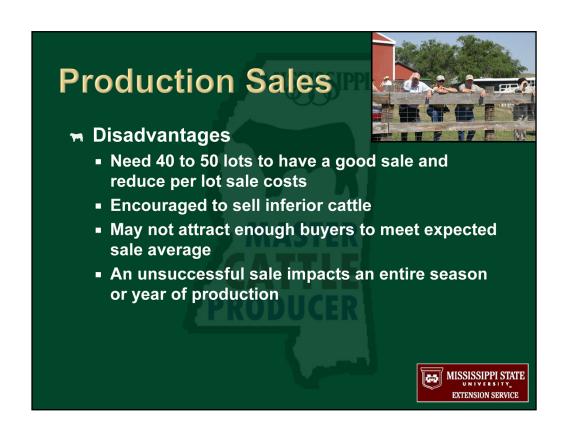
Consignment sales allow buyers to compare cattle from multiple operations at once. Because each consignor's cattle are compared to other breeders' cattle, cattle must be of sufficient quality and well displayed to be competitive. Depending on the sale, quality and consistency can vary. Learn about what types of cattle have sold well in a particular consignment sale in the past. This helps in selecting the right cattle for the sale.

Be aware of consignment deadlines and check-in times to the sale site. Keep the sale manager's phone number handy in case of a delay in hauling cattle to the sale site. Pay consignment or nomination fees on time, and submit required paperwork including nomination forms or registration certificates as requested. Many sales require evidence of passed breeding soundness evaluations, pregnancy determinations by licensed veterinarians, vaccination records, or test results or herd certification for diseases such as Brucellosis. Plan far enough in advance to schedule necessary veterinary work and to properly condition cattle for a sale.



Production sales offer the production of one or more ranches for purchase. These types of sales may be located at the ranch or another livestock marketing facility. They are often held on a regularly scheduled annual date. The Mississippi Agricultural and Forestry Experiment Station Livestock Production Sale is an example of production sale. Both seedstock and commercial cattle are usually marketed at this annual sale.

As with private treaty sales, encouraging farm visits from and making advance contacts with the prospective customers to a production sale are a good use of time. Both private treaty sales and production sales allow buyers to see the total ranch program. Consider not selling cattle private treaty prior to a production sale. This could reduce the quality and quantity of the sale offering if cattle are picked over in advance of a sale. Instead, work to ensure that current private treaty customers feel comfortable with purchasing cattle in an auction setting.



For a production sale to be successful, an adequate number of cattle lots is needed to attract buyers and reduce per lot sales cost. Target a minimum of 40 to 50 lots per sale. When trying to achieve an acceptable number of lots do not include inferior cattle to increase the sale offering. These cattle may detract from the sale offering, negatively impact breeder reputation, and command less than desirable prices.

Production sales offer both breeder control and breeder risk. The breeder typically controls all sale arrangements. Professional sale management may be retained, but the breeder should approve important aspects of the sale, including the catalog. A well-run sale results from effective breeder and sale management planning and cooperation. Cattle do not compete with those of other breeders unless invited to participate in the sales. However, breeders marketing through production sales risk not attracting enough buyers to meet the expected sale price average. All or most of ranch marketing occurs at one event. Weather can impact buyer turnout. If a sale is unsuccessful, an entire season or year of production is affected.

Ready to Host a Production Sale

- > Years of successful merchandising
 - private treaty sales
 - consignment sales
 - regional and national shows
- **➡** Industry reputation for quality cattle
- Loyal following of satisfied customers
- m Adequate number of sale lots



Readiness to host a cattle production sale typically requires a significant history of successful merchandising including private treaty sales, consignment sales, and possibly visibility at regional and national livestock shows. A cattle operation needs to develop an industry recognized reputation for quality cattle to host an effective production sale. A loyal following of satisfied customers provides a strong customer base for establishing a successful production sale. For both cost-effective marketing and to attract adequate potential buyers, an adequate number and/or quality of sale lots must be offered. Smaller operations can invite other operations to participate in their production sales as guest or friend consignors to increase the size of the sale offering.

Open House Sales

- Advantages
 ■
 Advantages
 ■
 - Buyers see total program
 - Breeder controls sale arrangements
 - Cattle not competing with those of other breeders
 - can set minimum prices and sell only cattle that receive bids at or above minimum prices
 - can retain ownership of some cattle for sale at a later date while selling other cattle if desired prices are offered
- **Disadvantage**
 - Marketing middle and bottom end cattle may be difficult

A seedstock operator who decides to host an open house places cattle on display on designated dates and invites potential buyers to visit during this time. This marketing method allows a large volume of cattle to be sold at once but requires less time showing cattle to potential customers compared with private treaty sales. Sellers can set minimum prices on cattle and sell only cattle that receive bids at or above minimum prices. This protects the sellers from situations where bidding competition is lower than expected or desired. The seller can retain ownership of some cattle for sale at a later date, if needed, while selling other cattle if desired prices are offered.

Effective advertising and a good operation reputation contribute to the success of open house sales. Prepare cattle to be well presented for this event. Make sure the site of the open house is also well presented to create a good impression on prospective customers.

Cattle at an open house may be displayed by price range. Customers may also be provided with a list of prices for individual cattle lots. Bidding on cattle may be allowed until a set time in a silent auction format, or cattle may be offered at set prices on a first-come, first-served basis. Marketing middle and bottom end cattle is often the most difficult part of open house sales.

Beef Cattle Marketing Alliances

- m "Strategic alliances"
- **➡** Goal = increased returns
- **™** Producer groups
 - pool market offerings
 - secure marketing agreements with buyers
- **™** Types
 - producer (area, region)
 - breed association sponsored
 - commercial (companies)
 - natural



Beef cattle marketing alliances can be formed by groups of producers. These marketing groups work together to increase returns by pooling market offerings. For example, cow-calf producers may pool weaned calves into truckload lots to increase the marketability and potentially price per unit of the calves. Marketing alliances also work to secure marketing agreements with buyers such as beef packers. There are many different types of marketing alliances. Producers in an area or region may work together on marketing cattle. Beef breed associations and companies offer marketing alliance programs. Many "all-natural" programs are also available.

Goals for Feedlot Cattle

- m Short days on feed
- m Good feed conversion
- **➡** Very low cattle mortality (death loss) rates
- **➡** Low cattle morbidity (sickness) rates
- Meet carcass specifications for Quality Grade
- **™** Yield Grades 1 or 2
- > No outweights (too heavy or too light)



For cattle finishing to be a profitable enterprise for cattle owners, certain conditions must be met. In general short days on feed, good feed conversion, very low cattle mortality, and low cattle morbidity improve cattle feeding profitability. In addition, cattle that meet carcass specifications for Quality Grade and are Yield Grades 1 or 2 within the targeted weight range are often more valuable at harvest.

Marketing Fed Cattle

- **➡** Live purchased by the packer when the cattle are in the feedlot
- Dressed weight purchased by the packer based on dressed or hot carcass weight
- ➡ Formula/grid/value-based pricing by individual carcass Yield and Quality Grades



Fed cattle are cattle at the completion of a finishing phase that are marketed for harvest. Feedlots will market fat cattle for cattle owners. Several different alternatives exist for pricing and marketing fed cattle. These options include live weight pricing, dressed weight pricing, and grid pricing. Marketing fed cattle on a live weight basis involves negotiating a price between the packer and feedlot. Packer buyers visit a feedlot to view cattle on the "show list". The feedlot manager sets a selling price. The cattle owner can then agree or disagree with the selling price. The packer usually starts with a base Choice carcass value and adds or subtracts premiums or discounts from the expected carcass quality when processed. Then, the adjusted carcass price is multiplied by the expected dressing percentage to obtain a live animal price. Live cattle pricing is done at the pen level. The price is established on the average weight and perceived quality rather than applying a value to each animal.

In dressed weight pricing (often referred to as "in the beef"), the value of the animal is based on the hot carcass weight at harvest. Therefore, the buyer does not have to estimate the dressing percentage. The other aspects of dressed weight pricing are similar to live pricing. The buyer's estimate begins with a base Choice carcass price and is adjusted for expected Quality and Yield grades, weight premiums and discounts, slaughter costs and by-product value.

In value-based marketing, animals are priced individually and carcass attributes are known before pricing. Prices convey information about what buyers value. Grid pricing is a form of value-based marketing that began in the mid-1990s. It is the only major pricing method that truly rewards improving carcass quality. The components of this method are fundamentally the same as live cattle pricing and dressed weight pricing. The difference is that the price is adjusted to Quality Grade and Yield Grade at harvest. In value-based marketing, fed cattle are sold to packers in transactions such as "grade-and-yield" or "on a grid" that require all carcasses in such groups be officially Yield Graded and Quality Graded. Some packers also use their own in-house grades and premium/discount programs independent of USDA grades. Refer to Mississippi State University Extension Service Publication 2556, "Marketing Fed Cattle", for a detailed discussion of this topic.

Value-Based Carcass Pricing

- **➡** Starts with a base price
- ★ Adjustments made for Yield and Quality Grades
- Adjustments made for heavy carcasses, light carcasses, dark cutters, bullocks/stags, dairy types



Value-based carcass pricing starts with a base price. Adjustments are made to the carcass price as premiums and discounts for USDA Yield Grade and Quality Grade. Additional adjustments are made for heavy and light carcasses, dark cutters, bullocks/stags, and dairy types.

	Yield Grade			
1	2	3	4	5
8.00	7.00	6.00	-9.00	-14.00
3.00	2.00	1.00	NA	NA
2.00	1.00	Base	-15.00	-20.00
-7.00	-8.00	-9.00	-24.00	-29.00
-16.00	-17.00	-18.00	-33.00	-38.00
			OTHER	
Base			Dark cutter	-28.00
-4.00			Hardbone	-22.00
40.00	100.00 1	10.00		
	3.00 2.00 -7.00 -16.00 Base -4.00	3.00 2.00 2.00 1.00 -7.00 -8.00 -16.00 -17.00 Base	3.00 2.00 1.00 2.00 1.00 Base -7.00 -8.00 -9.00 -16.00 -17.00 -18.00 Base -4.00	3.00 2.00 1.00 NA 2.00 1.00 Base -15.00 -7.00 -8.00 -9.00 -24.00 -16.00 -17.00 -18.00 -33.00 OTHER Base Dark cutter -4.00 Hardbone

This is an example of value-based carcass pricing. This carcass is a Yield Grade 3, Choice carcass, so no price adjustments are made for Yield or Quality Grade. It weighed over 999 pounds, so it received a discount of \$10.00 per cwt (hundredweight). It was also a dark cutter and drew an additional \$28.00 per cwt discount. From the base price of \$100.00 per cwt subtract the discounts (\$10.00 per cwt + \$28.00 per cwt) and add any premiums (none in this example) to arrive at carcass price of \$62.00 cwt, a very low and likely unprofitable price for the seller.



Special sales often feature feeder and stocker cattle that are age, source, and/or process verified. Significant premiums can be realized for these cattle, often making the investment in documenting and reporting this information profitable. As with any other marketing tool, returns are variable and premiums for verification depend on many other market factors.

For age verification, maintain either individual or group calf birth records. Some age verification program requirements allow documentation of the age of the oldest animal in the group to serve as age documentation for the entire group. For source verification, maintain records of cattle location and ownership from birth through harvest. For process verification, maintain records of how a calf is managed from birth until harvest.

Process verification records include records of animal health product and growth-promoting implant administration, weaning dates, management practices, feeds and feed additives used, and supporting product receipts. Some animal health product companies specify process verification protocols using their products. Some verification programs use producer affidavits as part of their documentation. To capture added value from verification programs, cattle buyers must be willing to offer higher prices for feeder and stocker cattle with this form of traceability or cattle ownership must be retained through harvest, at which time beef packers pay per head premiums for this information.

Direct Marketing Beef

- "Freezer beef"
- M Niche market
- m Diversifies a cattle operation
- Evaluate cost of gain and value of gain
- Be aware of retail sale regulations



Keeping a few feeder calves on the ranch for production of freezer beef for home consumption or to sell to neighbors is very common. Niche markets for custom finished or locally produced beef have been in place throughout the history of commercial beef production in the United States. When the market for feeder calves turns down and the cost of beef in the grocery store goes up, beef cattle producers often place more emphasis on custom finishing steers and locally marketing beef. This diversifies the beef cattle operation.

On-farm finishing of beef cattle limits cash flow from those animals in the short term. Consider cost of gain and value of gain in determining whether ranch-based cattle finishing and direct beef marketing is profitable. Selling beef direct to consumers enables beef cattle producers to set prices that cover costs and provide profits if adequate beef demand exists at these price levels. Many consumers are willing to pay premiums for freezer beef from cattle producers who develop relationships with them and share information about cattle management practices. Seasonal price fluctuations are typically seen in fed cattle markets. Selling freezer beef can even out selling prices if beef is marketed directly to consumers for a consistent price regardless of season.

Any meat product intended for retail sales must be harvested in a U.S. Department of Agriculture inspected facility. Inspected custom processors are not as common as they once were and might be too far from the ranch making freight a limiting factor. To overcome this challenge, market the live animal to the consumer and offer to haul it to a custom processor that will package the beef to the buyer's specifications. For more information on this topic, refer to Mississippi State University Extension Service Publication 2563, "Direct Marketing Beef".

Economics and Marketing Resources

- m Mississippi Cattle Market Notes
 - msucares.com/livestock/beef/cattle market.html
- m Mississippi Agricultural Statistics Service
 - www.nass.usda.gov/ms
- **➡ National Daily Cattle and Beef Summary**
 - www.ams.usda.gov/mnreports/lsddcbs.pdf
- ➡ Chicago Mercantile Exchange
 - www.cme.com
- MSU-ES economics/marketing publications
 - msucares.com/livestock/beef/beefpubs.html



The Mississippi State University Extension Service provides weekly cattle market updates including fed cattle and beef price information through Mississippi Cattle Market Notes.

Mississippi Cattle Market Notes

http://msucares.com/livestock/beef/cattlemarket.html

The U.S. Department of Agriculture Agricultural Marketing Service provides daily market information including fed cattle and beef price information in the National Daily Cattle and Beef Summary report.

National Daily Cattle and Beef Summary

http://www.ams.usda.gov/mnreports/lsddcbs.pdf

Mississippi State University Extension Service **economics and marketing publications** are available online at

http://msucares.com/livestock/beef/beefpubs.html. This includes the publications referenced in this training module.