



The Bold New Future of the Cattle Industry

Documented genetics and information are keys to success. By: Troy Marshall

The opportunities for cow/calf producers have never been greater, but the rules of the marketing game are changing dramatically. It is reasonably safe to say that the industry has changed more in the last 18 months than it has in the last 30 years, and the pace of change is just beginning to pick up momentum. Just try and find an industry expert that feels that the way we trade cattle will not be dramatically different in five years.

The good news is that the cattle cycle is going to hide a lot of problems in the near term. Just about everyone will make money in the next several years. During this period of high prices, a producer probably will not notice any repercussions for not doing everything right from a management, genetic or marketing standpoint. Yes, even those producers with subpar genetics will find a fairly willing market for their cattle. Already calf prices are at or near record levels and are expected to remain that way barring a disaster on the feedgrain or demand side. The higher market hasn't been driven by tighter supplies (which are expected to drive the market the

next several years) but by improved demand for beef and inexpensive corn. The effects of the recent cow liquidation should be felt soon in the marketplace in the form of smaller placements into the feedlot, and as expansion begins it will tighten feeder calf supplies even more. In fact, the higher prices we have been experiencing are pulling cattle forward into the feedyards at a rapid pace. All of these factors indicate that the market has not yet begun to feel the effects of tighter numbers, and won't change for a minimum of three years.

Producers must be cautious and not lulled to sleep during this time of \$1 or higher calf prices. The rules of the marketplace are being rewritten and will fundamentally alter the way cow/calf producers market their product in the future. The great news is that these changes will allow progressive producers to break away from the cyclical price swings in a commodity driven marketplace. To put these changes in context, one needs to take a look at some of the factors that are driving change.

Re-Shaping the Industry

1. Increasing Consolidation. Many may not look on consolidation as a positive change, but it is occurring at an incredible pace. On the retail front six chains dominate the business and the 'mom and pop' stores are disappearing. Four firms control the packing industry. On the feeding side approximately 5% of the feedlots market 85% of all fed cattle. The top 25 cattle feeding companies market 1/3 of all fed cattle and are expanding rapidly. If the current trends hold, these top 25 feeding companies will market 50% of the cattle by the end of the decade. USDA numbers show that cow/calf production is being concentrated as well. The seedstock industry may be leading the consolidation in the cow/calf business as the bigger seedstock producers are dramatically increasing the numbers of bulls they offer. Consolidation will mean that bigger producers will have more leverage in the marketplace and they will most likely have to align with other entities. As market power is concentrated, the ability of customers to place narrower and more defined market specifications will grow.

2. Value-Based Marketing. Selling cattle on some form of value-added basis is fast becoming the norm. Whether you retain ownership on your cattle past the pasture gate or not, you will be expected to know how your cattle perform both in the feedyard and on the rail. Alliances, branded products and niche markets are the new standard. These new marketing avenues will tie all segments of the industry together from the seedstock producer to the retailer. Value will not be solely determined by an animal's contribution to a particular segment of the production chain, but rather by the animal's overall value to the entire system.

3. A Global Marketplace. Events abroad will influence both the market and decisions made here. Australia, Brazil and Argentina will be major competitors for an exploding global population base. Currently, the population in China considered to be middle class is as large as the entire population of the US. As economies for developing nations improve around the world, beef demand will increase. It is not unrealistic to assume that in the near future over 25% of our production will be exported. This global marketplace will place unique demands on beef production from both a food safety and production practice standpoint.

4. Consumer Focus Not Fopping. The beef industry has learned who is the boss. And it is the consumer! A consumer votes every day with their pocket book and makes choices based on a wide variety of factors that help to determine value in their mind. Consumers are demanding more

convenience, case-ready, pre-cooked and microwaveable products. These products must also be healthy, safe and produced in a manner that makes them feel good about their purchase. Beef demand has stabilized and has actually shown a small improvement for the first time in what was a twenty-year decline. In order to maintain this demand growth, we will see an ever-increasing emphasis on food safety, nutrition, and management practices that ensure production practices are both animal and environment friendly. As more and more value is added to a product before it reaches the consumer, the farm to retail spread will increase. This means that if a producer is to benefit from the added value they will have to align themselves with the firms that are producing these products (and may have to take on the risk of retaining ownership further down the production chain).

5. Competition. The commodity beef business will continue to shrink and will be strictly the domain for low-cost producers. The pork and poultry industries will continue to keep price pressure on beef. Efficiencies of production will become even more important as the market begins to differentiate value based on quality. For those producers who elect to participate in the value-added side of things, competition will be a key component. The standards or bar will continue to rise. Producers will compete with other producers in a headlong race to incorporate the genetics that will allow them to consistently hit ever-narrowing targets while simultaneously increasing efficiencies of production. Those who are in the upper 25% of these categories will reap huge rewards, the middle 50% will probably continue to see marginal returns to their enterprise, and the bottom 25% will only survive by subsidizing their operation.

The value of the "right" genetics is going to increase dramatically. The beef industry will be operating in a highly competitive environment (domestically in a fight for consumer dollars with pork and poultry and internationally with other beef producing countries), and genetics will be the primary determinant of success. I don't think the following statement can be overemphasized – The beef industry will be operating in a total system environment where the demands on genetics will be greater than they have ever been in the past. Trevor Tuell, Tuelland Feedyards in CO, sums it up nicely, "We are margin operators, but we also have come to realize that nothing effects our profitability more than the performance of the cattle we feed, and that is genetics."

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In a systems approach, the genetic demands are significant. The females in a breeding program will have to match the individual operations resources from a standpoint of mature size and level of milk production. They will be expected to have the ability to breed early in their first year, calve unassisted, breed back on time year after year, and stay a productive member of the cowherd for at least ten years. The so called 'convenience' traits like udder quality and disposition will be increasingly important,

as producers will be spreading limited labor over increased numbers. The calves produced will be expected to gain efficiently, quickly and to reach a specified target endpoint. Everything from average daily gain, feed efficiency, yield grade, quality grade, red-meat yield and tenderness will be included in the equation. Management practices will certainly play a role in achieving these goals but the quality of genetics that a producer utilizes will be the most important determinant of their profitability.

Most importantly having documented genetics will become a pre-requisite to participating in a large number of alliances and branded programs. According to Kevin Good, Cattle-Fax market analyst, "The industry is seeing increased emphasis on genetic documentation in the rapidly growing value-added segment of the market." A good percentage of these programs have taken the first tiny steps in this direction by measuring breed composition in an effort to determine whether animals will qualify for the program or have the capabilities to hit specific targets.

Today, cattle are sold on the basis of hide color, to some degree on breed composition and on the buyer's ability to visually appraise cattle for such things as growth potential, muscle and condition. The industry sells cattle based on reputation.



'Reputation' cattle are strings of cattle that have performed well in the past, but the 'reputation' cattle of tomorrow will carry documented genetic information. A buyer's bid will be directly proportional to his ability to determine how efficiently those cattle will arrive at a specific endpoint and on his ability to determine what the ideal target will be. This will require documented past performance and documented genetics with complete management histories from a nutritional and health viewpoint. The

'reputation' cattle of the future will be source, management and genetic verified cattle. Information will be the key. The less you know about your cattle the less value they will have to a prospective buyer.

Often times when genetics are discussed, we tend to focus almost exclusively on EPD profiles and biological types of cattle and ultimately these are the things that will determine value on an individual basis. **Perhaps the most important thing to consider when talking about genetic documentation is the value in being able to provide a consistent and uniform product.** This, more than any single factor, influences the profitability of cattle as they move up the production chain to the consumer. Consistency and uniformity means that cattle ideally will possess similar bloodlines or genetics from an EPD profile, maturity pattern and biological type standpoint.

To put the importance of genetic consistency and uniformity in perspective, imagine that you are a cattle buyer evaluating two sets of cattle. The first has the genetic potential to make 10% more choice cattle and 10% more yield grade 1 and 2 cattle than the second. These genetic differences should equate to dollars! However, this first set of cattle has a 120-day calving season and the calves represent genetics from sires with a wide variety of maturity patterns, as a result the 'ideal'

target endpoints for these calves might range from 1100 to 1350 pounds. The truth is that the genetic potential may be there, but to achieve these advantages in quality and yield grade you will have to sort these cattle numerous ways, with many marketing dates. The second set of cattle might not have the same genetic potential for carcass traits as the first, but they are from a set of cows that are out of primarily four sire lines with very similar genetic contribution. This herd has a 60-day calving window with 80% of the calves being born in the first 21 days of the breeding season. When hung on the rail the carcass weights will be within a 100 lb. window with no 'out' cattle. Which pen would you rather own?

Many producers utilize A.I. to reduce calving problems, to produce super functional and well-adapted females, to utilize breed-leading genetics that defy important genetic antagonisms or simply to get highly proven bulls that excel in a wide variety of traits. Of course these are all solid reasons and the importance of utilizing the 'elite' end of the genetic pool will be even more important as we move forward. Nevertheless, increasing the uniformity and consistency of a calf crop through A.I. may be its biggest advantage. Especially, when the A.I. program is followed up with bulls out of highly proven A.I. sires. Documented genetics of this sort will bring value to a system.

Source and management verification is already a prerequisite for many branded programs and will probably be considered the industry standard within the next ten years. Genetic verification is coming, and for those producers who want to maximize profits and marketing opportunities it will be merely ante that allows you sit at the table.

It's Dollars and Sense.

It is the most exciting time in the history of the cattle business for progressive beef producers. Differences in value will be rewarded or discounted in the new marketing environment, and producers will be given the tools to make significant improvement in the quality of cattle they are producing. No single factor in a total systems approach has the potential to affect profitability more than genetics. Value differences within a pen of cattle sold on a value-based pricing grid often exceed \$300 on a per head basis. Plus, with simple arithmetic it is easy to figure the advantages an additional 20 lbs. of weaning or yearling weight can mean to an operation, not to mention even slight improvements in feed efficiency and average daily gain. It becomes a little tougher to assign hard and fast economic numbers when considering the effects of improved calving ease, shorter

calving seasons, improved uniformity and the value of superior replacements. But even the most conservative of estimates would suggest that superior genetics have the potential to add \$200/cow exposed in a fully integrated system.

Genetic documentation and the use of genetic information in determining value will gradually increase in its complexity and in the degree to which it contributes to differences in the value of animals. At first, genetic information will probably be used merely to determine breed composition and eligibility requirements for specific programs or to target cattle for the right market. Eventually, genetic verification will do more than help producers fine-tune their programs, it will provide the basis to make many management decisions from implant strategies to nutritional programs. Ultimately, genetic certification will be combined with management information to learn more about different genetic lines than we ever thought possible. First, as an industry we must know what certain genetics will do and secondly we have to be able to



correlate the genetic differences we know exist to real-world performance measures. Thirdly, we must take this information to manage existing genetics the most effective way possible and finally communicate this information back to individual producers and their unique set of resources to help them continually improve their cattle.

"With grids, formulas, case-ready, pre-cooked, branded and value enhanced products becoming commonplace, the market is more dynamic than ever. As a result, it is more important to take a holistic approach when making management and breeding decisions. It is all about increasing an individual ranch's overall value proposition, by focusing on the economically relevant traits for their specific operation and target market. Genetic information is a key to being able to produce value with sensible inputs," says Kent Andersen, North American Limousin Foundation.

The time to prepare for these changes is today! 🐮