

## **Past Cow-Calf Production Trends – Can They Tell Us Our Future?**

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There have been large changes take place in Iowa cow-calf production in the past and it is safe to assume there will be more changes coming down the road for all of us to deal with. Big changes in the past have left major impacts on this industry and we can certainly learn from them if we keep an open mind and reflect on how current situations might leave a similar impact on us down the road. This writing will try to discuss these in a short succinct manner, but in no particular order.

### **Energy Costs and Associated Impacts**

The spike in oil prices this past year and the associated increase in the cost of resources used by cow-calf operations is well documented. Corn price hit unprecedented levels due to the demand from the fuel industry as well as the livestock feeding sectors and this left a huge impact on calf prices due to the high cost of finishing cattle. Also this impacted how cornbelt cattlemen needed to think when it came to energy supplementation to their herds. Co-Products from the ethanol industry had to be taken seriously because they were costing 10 to 40 percent less than corn on an energy basis and had three times more protein than corn.

Oil price increases have added to our cost to operate our farms, harvest forages and do the day-to-day chores. But also it has impacted our thoughts related to managing our pastures and hay production. We are saddled with some very hefty prices for nitrogen and phosphate fertilizer and that makes pasture and hay fertility decisions important to the bottomline. Keep in mind the cost to feed cows stored feeds is not cheap and if we shorten up our pasture fertility program then we will be faced with more days of stored feed use. As we look to pasture improvement decisions it is imperative that we think through the inclusion of pasture species that will fix nitrogen to assist in feeding the grass. To do this we have to get the rest of pasture improvement program right – soil pH, weed control, etc.

### **War to Improve Beef Quality**

Back in the late 1980s and early 1990s the beef industry launched its “War on Fat” which turned out to be an effort to do national beef quality audits on a scheduled basis. The purpose of this audit was to ascertain what problems existed with our end product and how those problems might be corrected. What resulted in the first audit and those after was that our beef products lacked consistency and uniformity in taste, tenderness, juiciness and portion size. Additionally, we had serious problems with our management skills when it came to injections for both vaccination programs and health treatment regimes. Beef Quality Assurance came on as the result of these audits. Additionally, a huge emphasis started and continues today in genetics for improved beef quality.

This fact and trend will not go away as we look to our future. If we cannot supply the consumer with an end product that they like, have no problems with and will continue to buy, then our days are limited. Genetics, feeding regimes, management programs and health protocols must focus on delivering a quality end product. Yes, we have to do it within our own production system, but we should never take our eyes off the ball, the consumer, that starts cash flow back through the entire system.

### **Adding Value to the Calf Crop**

Many things outside the control of the producer impact the business, however, we all control what type of calf is delivered either to the auction market, the private buyer or the feedlot that adds further value to our product. Vaccination and weaning routines prior to marketing, later termed “Preconditioning”, started in Iowa in the late 1960s with a great deal of energy from ISU state veterinarian Dr. John Herrick and former Ottumwa livestock specialist Clifford Iverson. Their legacy lives on. Today there is plenty of data and evidence to show that proper health management regimes pay off for both the cow-calf producer and the feedlot operator. Preconditioning done with BQA principles applied is the norm today, but the feedlot and processing industry is eager for more documentation to assist in selling the end product. Certificates that document the source of the cattle, their immunization history, their genetic background and potential, their age, and other management decisions will pay dividends to the cow-calf producer and need to be started without hesitation.

Other ways to add value to the calf crop are options with retaining ownership later into the calf’s life or all the way to harvest time. It only makes sense that producers seriously consider retained ownership if they are enhancing the genetics of their cattle for growth, efficiency and carcass quality. Besides taking advantage of investments in their genetics and health program, by retaining ownership one has a longer marketing window in which to lock in market prices and enhance potential profits.

### **Capital Intensive Business**

Cow-calf producers have a heavy burden to carry and that is the large amount of capital investment required to be in the business, especially from a land standpoint. But it does not stop there. Cows of genetic quality are not cheap and the support equipment to harvest and feed forages are a significant investment as well. Interesting is whenever there is profit in this business many people rush to enter it because of its aura and glamour of the “Cowboy Life”. There is little heed paid to the fact that return on investment is extremely low or in many cases subsidized by other economic ventures. This makes the economic life of the family farmer/cow-calf producer doubly hard to accomplish. It does not appear the cost to purchase, rent or own land will go down in the long run. Yes, maybe there will be some short term adjustments in land value, but over time the past trend points to higher values. It is a commodity that is not being reproduced, therefore, the limited supply of land and increased pressure for other uses will keep it in high demand.

Due to this high investment, cow-calf producers will need to focus in the future on how to get more bang for the buck. This means pasture improvement strategies along with intensified efforts to manage this resource will be musts for producers. When looking at production agriculture from a birds eye view, the Iowa cow-calf sector on average is doing a poor job of capitalizing on this land base. It would behoove everyone to look at what our world competition is doing with the land resource and start taking action to achieve more efficient production.

### **Optimum Cow Production Systems**

When feed and pasture costs were lower and the best prices were early in the calf marketing season it made logical sense to charge forward with maximum output from the cow herd without regard to the cost per hundred weight of production. This has lead in many cases to cows that may be too large for the resources at hand and to calving seasons that require greater labor, facilities and management than many can provide. As a result the system has inherent inefficiencies which lead to lowered production per unit of cost and cases where the tail of the cow is wagging the base resources of the operation rather than the cow fitting in with what the operation has to offer from a land, facility and labor standpoint. For the younger producers entering this business this is especially important. Yes, the lure of large equipment and fancy production systems is appealing, but one needs to see the entire forest rather than just a few big, bold, beautiful trees. A cow herd which will do its work with minimal labor input is desirable! A cow herd which will flourish on feed resources available in the good years and do survival production during the bad weather years is desirable! A cow herd which reproduces at a high rate and has calves with acceptable growth rate is desirable! And finally, a cow herd which produces an end product fitting and capable of bringing top prices in the marketplace utilized is desirable!

### **Cost Control and Success**

The fact of the commodity cow-calf business is that market price tends to meet the cost of production on a hundred weight basis. Producers with moxie and past success know this and have come to realize that to survive and thrive in this business one has to beat the competitors from a cost standpoint. It is no different than in corn and soybean production and certainly no different in other livestock businesses. Past producer economic data has shown that key to profitability has been cost control. Yes, marketing properly is important to gross revenues, but unit cost of production is imperative to success in the good market times as well as the bad times. This means that as managers we have to keep our minds active and be thinking about strategies which can lower our unit cost of production. For years this has been talked about and many have adopted varying strategies, most have come in the feed cost arena and they should. Feed cost represents up to 60 percent of the unit cost of production, so don't forget to look at all possibilities.

Currently the cornbelt is undergoing a historic change in how its feed grains are being utilized. As a result of this, several opportunities have presented themselves to the industry. Distillers grains and corn gluten feed have been priced very competitively against other feedstuffs and they can be utilized in sound nutrition programs.

Yes, it requires one to rethink their approach to feeding the cow herd and analyzing how to best fit purchases and sales into their total marketing plan, but there is potential to lower unit cost of production.

### **Genetics and Our Future**

Over the past thirty years it has been very interesting to watch the huge changes occur in beef cattle types and genetics. From smaller framed, lower growth rate types of cattle to extremely large framed, lean, high milk type cattle; we have seen them all. Pendulum swings have been highly discussed and cussed by many, but it appears that genetic decisions have settle down to a large degree. Yes, there are pundits suggesting that small type cattle are needed today for grass finishing and they may be right, but most of us are not in that type of marketing system, therefore, we must pay attention to the cattle type in highest demand. Keep in mind end product gross revenue drives a lot of the economic system and signals. For most of the beef segments to eek out a return on investment, there is a need for substantial margin during each ownership and that comes from pounds gained times market price minus expenses.

The beef industry in 50 short years has gone from selection by visual appraisal only to an industry that demands seedstock with genetic evaluation information. We have gone from no performance records to adjusted weights and ratios to Estimated Breeding Values to Expected Progeny Differences (EPD) to a few supplemental gene markers available today. This trend to more sophistication and more scientific evaluation will continue. Just in the past two years gene panels capable of looking at 50,000 single nucleotide pairs in one analysis have come about and researchers are quickly finding out how these associate to production parameters. What this means is that EPD will be modified to include information gained from DNA analysis! Does that mean measuring cattle for performance traits will end? ABSOLUTELY NOT!! There will continue to be the need for assessing cattle phenotypes because without trait measurements DNA associations cannot be made. The positive aspect is that traits most difficult to measure (like disease and health, product eating quality attributes, efficiency, etc.) will have DNA profiles available due to intense measurements on what is being called resource populations. These resource populations will encompass a broad base of cattle genetics currently available and the phenotypes measured will be done in an intense manner.

Finally in the genetics area a trend that got reversed, but needs to be revitalized is the role that crossbreeding can have in improved efficiency of beef production. There are two large advantages that this genetic tool gives us, hybrid vigor and breed complementarity. Research has proven and experience has shown that when properly implemented crossbreeding systems can add 25% to lifetime cow productivity and can combine together breed strengths to enhance end product.

### **Keep Good Records**

The old saying “You can’t manage what you don’t measure.” is still as true today as ever before. During the last decade with better prices and significantly more profitability in the cow-calf sector many producers have become complacent in recording costs and production in their herds. Producer interest in keeping economic beef cow records is at a 25 year low in Iowa! How does one ever expect to benchmark the operation and figure out where the strengths and weaknesses lie unless there are base records? The minimum records that should be kept are those pertaining to feed and pasture costs, cash operating costs, and herd performance factors which would include pregnancy rates, calving rates, calf crop weaning rate and pounds produced per female. Of course all of these performance factors should be tied back to the number of cows that went into breeding pasture the year before. Back in the 1990s SPA records in Iowa showed that producers involved in financial records on their cow herds improved profitability by over \$14,000 per year!

### **Summary**

As stated earlier change has occurred in the beef industry and most likely factors impacting herd profitability will continue to ebb and flow. Producers with active records which allow them to benchmark their herds from year to year will be in a stronger position to analyze moves that they consider in nutrition and pasture management, genetics, health management, investments, cost control, adding value to the calf crop and production management systems.