# Farm Update:

The fall has been exceptionally mild with just enough rain and mild temperatures to keep the grass growing and the cows out in the fields. They came off the fields December 7th which is the latest they have ever been left out. Usually they are off the fields by the first week or two of November because of the rain and mud. Certainly saved me about a month's worth of hay bills. Now it is a matter of waiting for the first calf to be born which should be around the first of February.

# Prior Topic – Update:

In Volume 1 Issue 2, which is almost 4 years ago, I discussed the topic of Embryo Transfer and ET calves. I had reservations about the utilization of ET at that time for several reasons that mostly revolved around the hormones used to produce ET calves and the impact they had on donor cows. A lot has changed since then as IVF technology has moved to the forefront with a new method that I call "cow friendly" in which no hormones are used in any part of producing an IVF calf. This revolutionary approach has positive implications for the future as we all try to make life better for our cattle. The applicability of this methodology in the production of embryos from important rare bulls, when there may be only an amp or two of semen left, can contribute to an increase in genetic diversity in Shorthorns. I have used this technology within our herd so I can speak from personal experience. It works. We have several IVF embryos in our liquid nitrogen tank and have our first IVF calf due in early May—a bull calf sired by Pleasant Dawn Seal 2nd. I am excited about the possibility to resurrect some of the best Shorthorn genetics ever known in the breed by utilizing this new methodology.

# Bi-Monthly Topic: Turning the Cattle Business Upside Down

# Prologue:

I almost titled this article "Can the Cattle Business be Saved" but ultimately decided that was too pessimistic. As long time readers of my articles probably realize I am not a supporter of current trends in the beef business, dairy business, and definitely not the modern Shorthorn business. I believe they have all lost their way partly because they have confused progress and failure. They believe anything that increases sales is progress but the reality is they are failing to counter and to rapidly adjust to evolving consumer trends that, at their extreme, call for the elimination of animal agriculture. For the dairy and beef businesses, progress is defined by the "bigger is better" business model that encompasses every aspect of production with the hope that cheap food pricing will overcome any consumer reluctance to buy their product. Shorthorns have tried to base their business model on cattle shows instead of real world commercial cattle production. All three have failed to recognize that the market for their products is changing. The beef and dairy business need to come to terms with the headwinds of imitation products and with the standards that the public wants upheld environmentally and in animal care. With Shorthorns they have failed to provide animals that can compete on a commercial basis while still maintaining breed integrity. I intend to review all three businesses defining some of the problems they each have and then discussing some possible solutions. To be upfront I think if consumers continue to follow the cheap food model, forgetting about quality and animal conditions, then perhaps "imitation beef and dairy products" will become the norm as they scale up production and develop even more palatable products at reduced

prices. Real beef and dairy production may become an antiquated food/business model because so many people involved in the cattle business have put short term "bad" gain over long term "good" gain.

Dairy Business:

Having grown up on a dairy in the 50's and early 60's I have first hand knowledge of how it used to be. Dairying has always operated on tight financial margins, however the answer to this problem that has been put forth for the last 50 years has been to increase in size—more cows, more facilities, more equipment, more milk/cow, basically more of everything. With the decrease in profit margins (profit/cow) the argument has been to make up the loss by having more cows and everything else that goes into milk production. Animal scientists, dairy specialists, feed companies, semen companies, agricultural economists, and pharmaceutical companies, to name a few, have consistently put forward the mantra "bigger is better". To give them the benefit of the doubt, many probably believe in what they are "selling" but they are "crunching the wrong set of numbers".

#### **Beef Business:**

There are strong parallels in the "modern" methods of beef production with the dairy model especially with regard to the more of everything production/profit model. The beef business is still diverse in the sense there are a lot of small producers with less than 50 brood cows that are engaged in the production of steers as an adjunct to their regular job. This is changing though because there are fewer young people interested in beef production, the cost of production is increasing, and steer prices have tended to be stagnant. Lately there has been a significant increase in using the "Hoop System" to run a cow/calf operation. It is a confinement operation where beef cows are not on pastures but are confined like dairy cows year around. There has been an increase in the size of cow/calf operations as consolidation grows. All kinds of things have been tried to increase weight gain in steers through growth promotants, advanced nutrition, and single trait genetic selection such as double muscling.

#### Shorthorn Business:

It is safe to say that I am just disgusted with the direction the Shorthorn Industry has taken whether it be Beef or Dairy Shorthorns. The problems are different from the beef and dairy industries as a whole because Shorthorn breed associations have embraced two overriding themes of breed "progress"-crossbreeding and show cattle. Crossbreeding was put forward and embraced as the salvation of both Beef and Dairy Shorthorns. The thinking was that the Shorthorn breed needed an infusion of blood from other breeds to improve them and make them competitive in both beef and dairy scenarios. The Shorthorn breed associations seemed to forget that Shorthorns were used for the genesis of over 40 other breeds of cattle. Most Beef and Dairy Shorthorns are now composite animals with varying degrees of other cattle breeds incorporated into them. Talk about missed opportunities. There were 100% pure Dairy Shorthorn cows milking over 20,000#'s/year 80-90 years ago with none of the current nutritional and management aids There were 100% pure Shorthorn steers gaining over 3 lbs/ day during the same time frame without hormonal implants or fancy diets. Unfortunately Shorthorn breed associations did not seize on these qualities and move them forward. They allowed Angus and Holsteins to take over. A foot note: 100% pure has different meaning to different people especially in the breed up schemes often used in cattle breeds. When I talk of 100% pure I refer to Shorthorns that can trace all their ancestors to the Coates Shorthorn Herd Book of 1822 or what many would refer to as full blood 100% Shorthorns.

# Changing The Dairy Business:

One of my recent Shorthorn Bulletin articles discussed the coming revolution in substitute milk products. Consumers continue to "buy into" milk alternatives as consumers become more concerned about the welfare of dairy cows. Increasing support by venture capitalists for companies such as 'Perfect Day' show there is growing belief that milk substitutes may be the future. Ongoing debates about the confinement of cows, removal of calves at birth, short life spans, and high energy diets to pump up milk production provide "fodder" for Animal Rights groups and the anti-dairy crowd. The negative implications of such diseases as Johne's and Bovine Leukemia should not be dismissed and may lead to further human health concerns.

Given all the negatives what can be done? I see two divergent paths. One will lead to the demise of the dairy business because of costs, regulation, animal rights, health concerns, and ultimately artificial products that will mimic the positive health aspects of milk. The other will require a change in the business model of dairies and will only work if consumers are willing to pay more for quality milk from healthy cows living in a better environment. The impact of animal welfare should not be underestimated when trying to envision the "dairy of the future". There is growing awareness that things need to change and certainly some companies/dairies are embracing new business models including pasture based dairying, A2 milk, more comfortable housing facilities, and more structurally sound cows that are not just a rumen and a udder. With robotics taking over the dairy industry because of labor concerns, the path for for large dairies may be positive short term but long term the "writing is on the wall" because I do not believe they will be able to adequately address the concerns of animal welfare groups, environmentalists, and government regulators. If the dairy business is to survive it will have to evolve into a more consumer centric model with all of their concerns addressed. This will entail promoting quality over low priced quantity.

# Changing The Beef Business:

The Beef Industry is faced with many of the same issues as the Dairy Industry but also an even greater challenge from "imitation" meat products and cultured meat products. For too long the National Cattlemen's Beef Association has ignored the potential threat of the aforementioned products. NCBA has been more interested in self promotion and having overpriced self congratulatory meetings while watching the cattle business sink in the West both figuratively and realistically. Recently a prominent beef producer wrote that the NCBA is really about beef producers with over 500 cows as they are the only ones that can afford to attend NCBA meetings. NCBA has finally put "Fake Meat" at the top of their threat list when it should have been there 10 years ago. I think changing the public perception of cattle raising is essential. Again, like with the Dairy Industry, the Beef Industry will not have a future unless it addresses consumer concerns. I believe that the new mantra may be "it is what the consumer wants, not what you have to sell". Being a used car salesman will not work in today's internet/social media world. The whole feedlot model needs to change because the public has become aware of its societal costs whether they be environmental, health, or animal welfare. There is no question there is a movement to the grass fed production model that will only continue to grow. I think all types of growth promotants must be eliminated. If the general public ever becomes aware of how much promotants are being used under the guise of increased production they would be enraged. Lately the concept of double muscling has become intertwined with beef production especially in certain countries. I think this is an animal welfare issue that needs to be eliminated because it can result in severe genetic problems affecting both the calf and the cow. Utilization of the double muscling gene just gives another opportunity for Animal Rights organizations to pounce on the Beef Industry. Long term there is likely to be a market for quality beef produced under the right conditions with the right genetics but it will be a diminished market. The "meat replacement train" is rolling down the tracks and it is only a matter of time before the Beef Industry realizes that meat's dominant position in diets worldwide is slowly being replaced.

Changing The Shorthorn Business:

The continuing utilization/promotion of crossbreeding in both Beef and Dairy Shorthorns is totally counter-productive because it destroys the identity of both. If all Shorthorns are just a composite what distinct qualities do either Beef or Dairy Shorthorns have to offer to the commercial cattlemen or dairymen? The advantages of heterosis and incorporating meritorious breed traits are totally lost if Shorthorns become just another black crossbreed. As with most cattle breeds, judges, animals scientists, breed associations, unscrupulous breeders, and various other "experts" have effectively taken the greatest breed of cattle, Shorthorns, and made them a "has been".

With the advent of the Heritage Shorthorn Society a new avenue has opened up for Shorthorn breeders who want to break free of the show/composite trends and return to what made Shorthorns great and why they have often been called the "Universal Improver". Fortunately the Shorthorn breed has a great reservoir of pure genetics that is the envy of other dairy and beef breeds. As an example, both Angus and Holstein breeds are left with basically nothing to correct some of their structural and genetic problems because there is minimal old semen or pure cattle left to build on.

I sincerely believe enterprising venturous people can build a new business model solely based on selective usage of older Heritage Shorthorn genetics. The opportunities are endless with hard work, mental dexterity, excellent health standards, and proper selection of breeding stock. Much of this is detailed on the Heritage Shorthorn Society website (www.heritageshorthorn.org). To be trite, "thinking outside the box" is what is necessary to be successful. Historically Shorthorns were a major part of the beef industry. They were the genesis for over 40 different breeds and were the dominant cattle breed in the world for over 100 years. I am not a "Pollyanna" who believes that the Shorthorn breed can return to its worldwide dominance, but that does not lessen the tremendous opportunities that await anyone who truly loves the Shorthorn breed.

Summary:

I realize that my thoughts on the Beef, Dairy, and Shorthorn Industries will not be positively received by many cattle breeders but it needs to be said, since being "politically correct" won't result in positive changes. The Beef and Dairy Industries need to recognize that their dominance on grocery shelves is slowly but surely dwindling, and they need to take positive steps to lessen their environmental impact, improve animal welfare, and embrace new health standards and marketing techniques. Only by taking this approach will they have any chance of standing up to the tsunami of changes headed their way.

# Shorthorn Bulletin Topic for Volume 5 Issue 2: Do Old Shorthorn Genetics Have A Future?

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