

# **COW/CALF CORNER**

## **The Newsletter**

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## **Prices, Incentives and Margins in the Beef Industry**

Derrell S. Peel, Oklahoma State University Extension Livestock Marketing Specialist

It is a fact that cattle and beef prices tend to go up and down together. It is also a fact that cattle and beef prices do not usually go up and down by the same amount and at the same time. It is this second fact that creates so much of the short term dynamics in cattle and beef markets. Clearly, the supply pressure resulting from limited feeder cattle supplies continues to grow and has the expected impact of pushing feeder cattle prices up farther and faster than fed cattle prices, which in turn push up boxed beef prices, which then put pressure on retail prices. However, experience shows and economic theory predicts that prices adjust less and more slowly as one approaches the retail level. This always means that margins for the various sectors in the industry get squeezed for a period of time when cattle prices are rising.

The current cattle and beef market is quite unique. Cattle numbers and corresponding beef supply is creating unprecedented pressure for higher cattle and beef prices. This pressure will accelerate over the 2-3 years as anticipated herd rebuilding draws feeder supplies to even lower levels. At the same time, beef demand, which was significantly impacted negatively during the recession, is recovering but very slowly and remains sensitive to macroeconomic conditions, energy prices and other external factors. This is a recipe for very dramatic margin squeezes for some sectors of the industry. A look at each sector illustrates the general incentives and situation in 2012.

Calf prices increased roughly 21 percent last year over 2010 levels. Calf prices in early 2012 are roughly 26 percent higher than one year ago. Despite higher cow-calf cost of production, current calf prices suggest levels of cow-calf returns that are likely to stimulate heifer retention. Drought and regional forage conditions may play a big role in how much heifer retention happens in 2012 but the incentive is clearly in place.

Stocker producers saw feeder prices increase at levels similar to calf prices...about 22 percent in 2011 compared to 2010. Stocker value of gain has risen to reflect increased feedlot cost of gain and translate into increased incentives for forage based cattle production. So far in 2012 feeder prices are up slightly less than calf prices, reflecting feedlot demand for feeder cattle that is tempered somewhat by poor feedlot margins. In general, feeder prices relative to calf prices continue to offer incentives for forage based stocker programs.

Fed cattle prices increased roughly 20 percent last year over 2010 suggesting that fed prices increased almost in step with feeder and calf prices. However, feedlots also experienced a roughly 35 percent increase in feedlot cost of gain and with the combination of higher feeder prices and feed costs, feedlots experienced poor margins that will extend through much of 2012. Excess feeding capacity ensures that feedlots will continue to battle for increasingly limited feeder supplies, placing lightweight animals that require more days and more feed, and

thus perpetuate poor margins. Feed costs could provide some relief if current corn production estimates are realized this year but it will not help until late in the year. Meantime, feedlots will continue to pay more than they can afford for animals that are not what they would really like to feed and will increasingly have difficulty maintaining capacity as placements fall.

Boxed beef prices in 2011 increased 16 percent on an annual average basis compared to 2010. The squeeze on packer margins is obvious when that value is compared to the 20 percent increase in fed cattle prices. By-product values were slightly weaker in 2011 as well also contributing to decreased packer margins. So far in 2012, boxed beef prices have increased roughly 10 percent compared to a 16 percent year over year increase in fed cattle meaning that the squeeze continues. Given projected feedlot breakeven values, it would take a more than 20 percent increase in boxed beef prices in 2012 to cover both feedlot and packer breakevens. This seems unlikely and these two sectors are likely to continue jockeying to limit poor margins.

Retail beef prices increased annually about 10 percent in 2011. Compared to the 16 percent increase in boxed beef prices, retail margins dropped to the lowest level in several years. Given the boxed beef price increases described above, it would take something like a 25 percent increase in retail beef prices to cover feedlot and packer breakevens and allow for a typical retail margin. Current projections for decreased per capita beef supplies suggest that an 8-10 percent retail price increase is more feasible. However, continued economic growth that improves consumer incomes could provide additional support for higher retail prices. Reduced broiler production and decreased total meat supplies, along with strong exports may help as well. Nevertheless, margins will likely continue to be squeezed for feedlots, packers and retailers as surging cattle prices push against demand limits. The heat from this pressure cooker will likely get hotter before it gets better.

## **This Could Be the Year for Grass Tetany**

Dave Sparks DVM, Oklahoma State University Area Extension Food Animal Quality and Health Specialist

Grass tetany is a serious, and often fatal, metabolic disease caused by low blood levels of magnesium. It is also known as grass staggers or wheat pasture poisoning. It most commonly affects older cows early in lactation, but it may also occur in any cattle. It occurs most commonly when cattle are grazing lush, immature grass and it often affects the best cows in the

herd. It is typically a late winter or early spring problem coinciding with the rapid growth of cool season grasses. Across much of Oklahoma this winter anyone would have a hard time classifying pastures as “lush” but don’t let the first look fool you. In many pastures the old growth from last summer is gone and cattle are eating almost exclusively new green growth. Recent temperature and moisture conditions are conducive to rapid growth of the cool season grasses and I have already heard of several herds experiencing dead or down cows with low blood magnesium levels. High levels of nitrogen fertilization reduce magnesium availability, especially in soils that are high in potassium or aluminum. While in veterinary practice in N.W. Arkansas we always expected to see multiple grass tetany cases when the fescue started rapid growth after application of poultry litter. In Western Oklahoma it is common in cows grazing wheat pasture when moderate temperatures are combined with high levels of nitrogen application.

Signs of grass tetany begin with an uncoordinated gait and end up with recumbence, convulsions and death. The course can progress rapidly and animals are often found dead without any prior signs being observed. Evidence of thrashing will usually surround the dead animal. Intravenous calcium may cause a response in a few cases but more often has no effect.

Luckily, prevention is more effective than treatment. Graze less susceptible cattle, such as calves, yearlings, or dry cows on pastures where problems are likely to occur. Dolomite or high Mg limestone can increase the availability of magnesium while raising the pH of the soil. On high risk pastures the use of a mineral with high magnesium content increases the blood magnesium levels and alleviates the potential for problems. Since there is very little capacity for storage and rapid mobilization of magnesium, supplemental magnesium must be consumed on a daily basis. If the supplement is allowed to run out the cattle are suddenly again at risk.

In these times of high cattle prices coupled with high input costs, every calf counts. By the time you realize you have a grass tetany problem it is probably too late to do much except dispose of the carcasses and figure out what you are going to tell the banker. In this case an ounce of prevention truly does equal a pound of cure.

## **Plan Ahead for Heat Synchronization Methods for Replacement Heifers**

Producers that plan to use artificial insemination as part or all of this upcoming spring breeding season should start their preparations immediately. A popular synchronization protocol for heifers involves the feeding of an additive, and the feed must be ordered and delivered at the proper time. Melengestrol acetate (MGA<sup>®</sup>; Pfizer Animal Health) is a feed additive commonly used in heifer feedlot rations to block the cycling activity of heifers. Melengestrol acetate is a synthetic progestin that has "progesterone-like" activity. When fed for a short period of time and then removed from the diet, the sudden absence of progestin tends to allow a large percentage of cattle to exhibit heat together. Compared to normal heats, fertility at this first heat after MGA<sup>®</sup> removal has been reduced. Subsequent heats have returned to normal fertility.

Armed with this knowledge, researchers have outlined an estrous synchronization protocol using MGA<sup>®</sup> and a prostaglandin injection. This program calls for the feeding of melengestrol acetate at the rate of 0.5 milligram per head per day for 14 days. After 14 days, MGA<sup>®</sup> is removed from the feed. Most of the heifers will then exhibit heat over the next 8 days. Nineteen days after the MGA<sup>®</sup> feeding has stopped, each female is injected with prostaglandin to interrupt the next cycle. Injectable prostaglandin products are available from licensed veterinarians. One to six days later, females are bred following detected standing heat. (See time line below). Research at several experiment stations has indicated that this method has induced some non-cycling replacement heifers to begin cycling, thereby increasing the percentage of those cattle bred early in the insemination season.

		Inject	Heat detect
Start MGA <sup>®</sup>	End MGA <sup>®</sup>	Prostaglandin	and breed
<u>Day 0</u>	<u>Day 14</u>	<u>Day 33</u>	<u>for six</u>
<u>days</u>			

An important consideration is that the MGA<sup>®</sup> /prostaglandin synchronization program must be started 35 days before the start of the breeding season. This means that prior planning must be done to assure that the feed containing MGA<sup>®</sup> is prepared and ready to feed five weeks before the date of the first breeding. This synchronization method is designed to work best with replacement heifers. Other successful synchronization protocols are available for heifers and mature cows. Some protocols are suggested with short time heat detection and others are recommended for timed AI with little or no heat detection. The Beef Reproduction Task Force has available the recommended [2012 synchronization protocols](#) at The Applied Reproductive Strategies in Beef Cattle web site under “Resources”: The URL is <http://beefrepro.unl.edu/resources.html> .

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