

# **A Cattle Cycle's Changing Buy/Sell Margin Influences Cattle Feeding Profits<sup>1</sup>**

by

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The cattle cycle is a very important force impacting cattle feeding profits. The alternative “booms and busts” in cattle feeding have long been a matter of great concern to cattle feeders. The old adage that “You make your money when you buy the feeders” is sound advise. Much of the year to year variation in feeder cattle prices is cattle numbers (beef supply) driven.

The cattle cycle is the single most important force determining beef supply and the resulting feeder cattle and slaughter cattle price cycles. Over the cattle cycle, as cattle numbers go up, beef prices go down. As cattle numbers go down, beef prices go up. It is almost that simple. Today, increasing beef demand and low feed grain prices are driving slaughter cattle and feeder cattle prices but decreasing cattle numbers are kicking in. The result is that we are again seeing a traditional beef price cycle.

If we can predict cattle cycles, then we should be able to predict beef price cycles. If we can predict beef price cycles, then we should be able to identify cattle feeding strategies that will allow you to profit from the cattle cycle.

As a cattle cycle progresses from the contraction phase into the turn-around phase and then

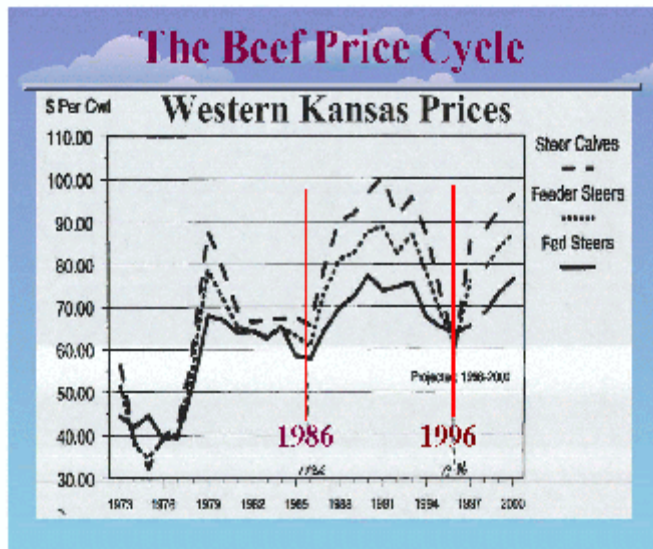
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<sup>1</sup>C:\Myfiles\AABPcattleFeedingCycle.wpd.

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into the expansion phase, buy/sell margins change and cattle feeding profit opportunities change. All of this suggests that the optimum cattle feeding strategy changes with the changing phases of the cattle cycle. Using a single cattle feeding production and marketing strategy, over a total cattle cycle, leads to substantial reduction in long-run profits. Yet, I hear cattlemen say “I made money feeding cattle last year, so I am going to feed cattle this year.” Using last year’s results to determine what to produce this year uses year-old price signals in determining this year’s business opportunities. Feedlot records indicate that over a complete cattle cycle feedlot profits average about \$10 per head.<sup>3</sup> Cattle feeder need to do better than that.

Changing buy/sell margins during a price cycle are illustrated with the Western Kansas between calf, feeder, and slaughter prices presented in Figure 1. I call your attention to the 1986 through 1996 time period. The top line is 500-600 pound feeder calf prices. The middle line is 700-800 feeder calf prices, and the bottom line is slaughter cattle prices.



**Figure 1:** Western Kansas calf, feeder, and slaughter prices over a cattle cycle.

I refer to the vertical distance between the price lines in Figure 1, at any given point in time, as

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<sup>3</sup>John Anderson and James Trapp, “Corn Price Effects On Cost Of Gain For Feedlot Cattle: Implications for Breakeven Budgetting,” *Journal Of Agricultural and Resource Economics*, Vol 25, No. 2, Dec 2000, pg 667.

the buy/sell margin – the price of feeders into the feedlot compared to the price of same cattle sold out of the feedlot. Clearly, the buy/sell margin changes dramatically as one walks through a complete beef price cycle. Since the buy/sell margins are somewhat predictable, we should be able to extrapolate from this 1986 to 1996 beef price cycle. I project that the U.S. beef industry is duplicating the previous price cycle again in the 1996 to 2006 time period (see Figure 3).

Lets walk ourselves through Figure 1's 1986-1996 beef price cycle in some detail. Reduced feeder cattle supplies in the late 1980s, brought on by beef cow liquidations in the mid-1980s, caused calf prices to turn upward in 1987. Low feeder cattle supplies, amplified by the 1988 and 1989 droughts in cow country, drove calf prices upward in the late 1980s and early 1990s. Note how the buy/sell margins in Figure 1 started to widening in 1987 and continued getting wider during the rest of the 1980s and early 1990s.

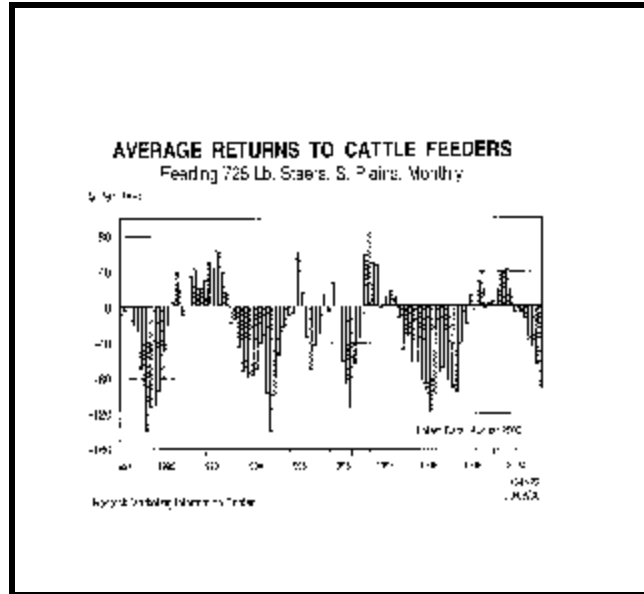
It was my observation that during 1989, optimism surfaced in the cattle industry resulting in more and more investors wanting to own beef breeding cattle. Increased investor demand, coupled with lower and lower cattle supplies, continued to push feeder cattle and feeder prices higher and higher causing buy/sell margins to get wider and wider.

As the USDA All-Cattle Inventory bottomed out in 1989, beef cow producers received the price signal to start diverting heifers from feeding to breeding. This diversion of heifers drove feeder prices even higher. Calf prices reached an annual high in 1991.

As cattle prices advanced higher in the early 1990s, the industry's optimism changed to emporia and now everybody wanted to own cattle! Note the choice of words that were typical of my phone calls at that time. I "have to" own some of those "profitable" beef cows! I heard that over and

over from new, potential investors.

My market price data for the Northern Plains shows record high calf prices in 1991. Prices were so high, in fact, that high priced feeders started to impact negatively on cattle feeding profits in 1991 (see Figure 2). Lower cattle feeding profits in 1991 started to pull calf and feeder priced down in 1992; then, huge feedlot death losses in the Central Plains occurred during the winter of 1992 reducing beef supplies. In addition to the supply reduction from snow storms, in the Central



**Figure 2:** U.S. Cattle Feeding Profits Through Time.

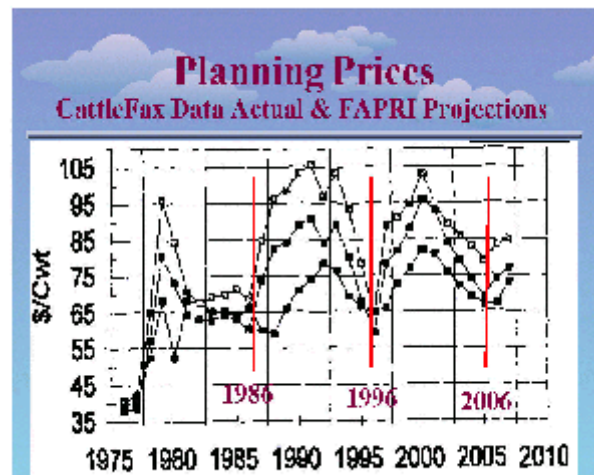
Plains, the Northern Plains and Canada had frosted food grains that had to be converted to feed grains. The frosted food grain had to be marketed through feeder cattle and the demand for feeder cattle went up. Monthly average steer calf prices peaked again in early 1993. But remember, since 1989 heifers were being retained for breeding and the U.S. was continuing to build the beef cow herd.

As beef supplies accelerated in 1993 and 1994, slaughter cattle prices took a dramatic downturn in 1994. Note, in Figure 1 how quick cattle feeders closed down buy/sell margins as cattle feeding profits dropped. During the spring of 1994, I witnessed the beef industry's emporia changing to pessimism. People started getting discouraged with beef cows. During the 1994 time period, people would say something like, "I am tired of beef cows. I think I will just sell the herd. I have been thinking about retiring anyway!"

It was typically older ranchers, close to retirement and with smaller herds, were who elected to liquidate their total herds in 1995 and 1996. During the summer of 1996, North Dakota's salebarns had whole-herd liquidation after whole-herd liquidation. By now, heifers were being diverted from breeding to feeding amplifying the supply of feeder cattle and driving the price of feeder cattle downward. The nation's cattle numbers reached a decade-high in the January 1, 1996 All-Cattle Inventory driving feeder cattle prices to the decade-low during that same year.

At the same time, drought during the summer of 1996 in the Southern Plains triggered a large liquidation of the nation's beef cow herd. This 1996 drought-liquidation in the Southern Plains drove cull cow prices down even further and triggered a serious cashflow problem for beef cow producers in the Central and Northern Plains to the point that so these producers also had to also start liquidating additional beef cows to generate cashflow. The 1986 to 1996 beef price cycle was now complete.

What a difference a year makes. By October 1997, Western North Dakota feeder calf prices averaged \$20 per hundredweight higher than in October 1996. In spite of the production shocks to the system described above, the beef price cycle was completed in 1996 and the next beef price cycle (1997 - 2006) was started in 1997.



**Figure 3:** Projected Calf, Feeder, and Slaughter Prices Through 2008.

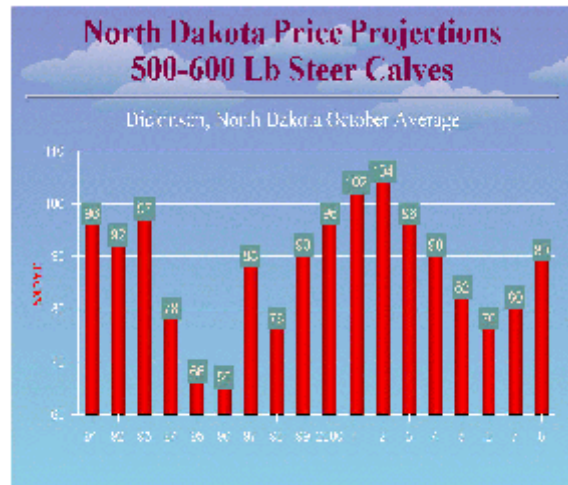
**What Can We Expect In The Current Turn Around Phase Of The Cattle Cycle?**

The next beef price cycle – projected to run from 1996 through 2006 -- seems to be on target (see Figure 3) . The liquidation phase of the current cattle cycle is on schedule and the cattle cycle is now advancing through the turn around phase.

Figure 4 projects North Dakota’s steer calf prices through years 2008. Calf prices at weaning are projected to strengthen over the next two to three years. After that, we should experience another “U-shaped” price curve from 2003 through 2008.

There are four unique characteristics of the cattle cycle’s turn around phase that need to be pointed out. First, as the number of available yearling feeders decreases, feedlots will move to more calf-feeding. In fact, we already saw an increase in calf-feeding during the Fall of 1999 and again in September and October 2000. Second,

increased calf feeding will put added upward price pressure on calf prices. Third, strong feeder calf prices will cause beef cow producers to divert heifers from feeding to breeding resulting in a substantial drop in available feeder cattle numbers. I project this to happen with year 2000 calves. When this happens, we will see an



**Figure 4:** Historical And Projected North Dakota Calf Prices (1991 through 2008).

even smaller feeder cattle supply, leading to an even more aggressive bidding by feedlots for the reduced supply of feeder cattle. Fourth, feedlots will experience increased in idle capacity driving up feedlots’ cost of production and lowering feedlot profits. Some feedlots will even shut down due to the lack of feeder cattle.

I project that the feedlot closings will heavily be farmer feeders in the U.S. Cornbelt. At least, they were the ones that closed down during the 1986 to 1996 cycle.

In the expansion phase, cattle numbers will again build up and the increased feeder supply will drive calf and feeder prices lower. Lower beef prices, in turn, will cause beef cow producers to divert heifers away from breeding into feeding increasing feeder supply and causing calf prices to go even lower. Cattle numbers should peak around year 2006 causing feeder prices and slaughter cattle prices to bottom out in that same year. The net results of these final actions will be the completion of the current beef price cycle.

Astute cattle feeders should adjust their cattle feeding businesses to their predicted annual buy/sell margins and projected costs of gain as they go through the cattle cycle.