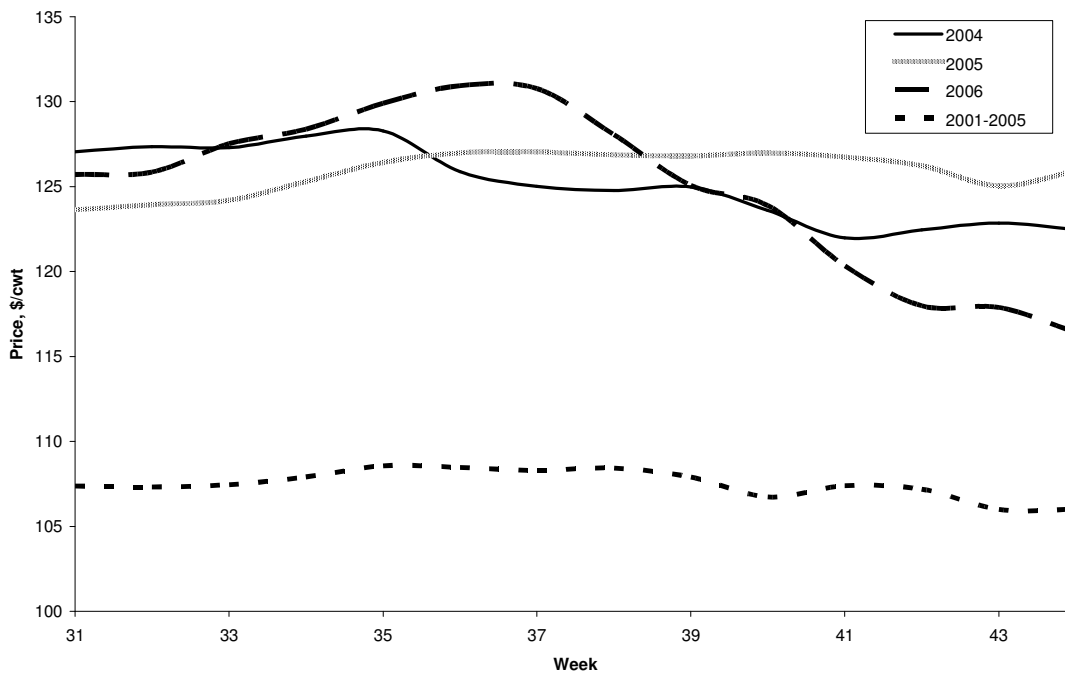


High Corn Prices Raises Concerns

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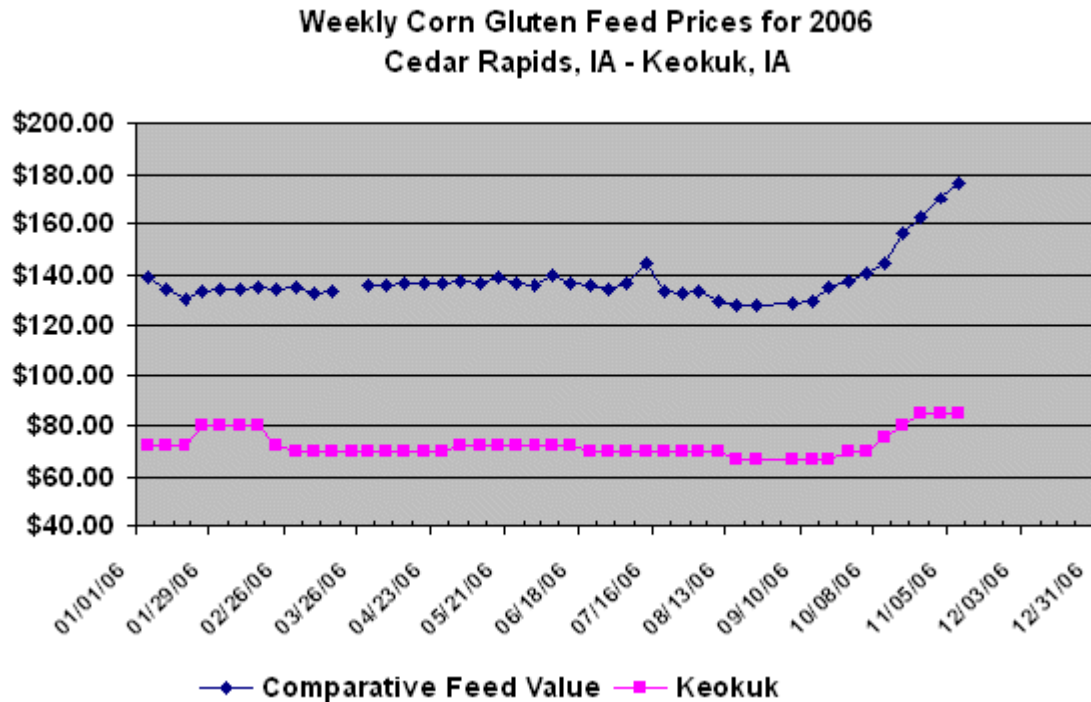
The unforeseen high corn market this fall has raised concerns of many livestock producers. Feeder cattle prices have softened as the corn prices have pushed upwards and those that marketed early in the fall have reaped the benefit of being the early bird that got the worm. Cattle-Fax reported that for every \$0.50/bu increase in corn price, a \$12.50/cwt reduction is seen for 550 lb feeder calves. This is a loss of approximately \$70 per head. As costs of production for feedlots increase with no indication of a strong increase in fed cattle prices, the purchase price of replacement feeders falls. Figure 1 graphically depicts the recent change in feeder calf price for 2004, 2005, 2006 and the recent 5-year average. The dashed line for 2006 clearly illustrates the greater price decline this year as compared to 2004, 2005 and the five year average. One should note that from a fall peak near week 36 of 2006 at \$131/cwt, feeder prices dropped to \$116/cwt in last 60 days. Prices typically soften as the fall runs begin, but the larger decrease in price is a reaction to increased corn price. The dollar increase in corn price could increase the feed cost of gain by nearly 25% for a diet that contains 2/3 corn on a dry matter basis. This increase in cost of production is currently a major driver for softening feeder cattle prices.

Figure 1. Market prices for 550 lb feeder calves reported by Cattle-Fax.



Those feeding cattle may be considering alternative feedstuffs for feeding out cattle. If the decision has been made to feed cattle, then searches to reduce diet costs are

warranted. Keep in mind that dollars per ton is not the best method for approaching this task rather cost per unit of nutrient is the appropriate comparison. For instance, if we consider corn as the main energy source in feedlot rations and are looking for an energy substitute, we need to consider the price per calorie or megacalorie (Mcal). Additionally, it is important to remember that as the price of corn increases so too will the price of corn-based co-products. The figure below illustrates the price trends for corn gluten feed for 2006. Notice the recent increase in price the last few weeks as corn has increased (bottom line).



Source: <http://agebb.missouri.edu/dairy/byprod/cgf1-06.htm>

Here's an example of how to work through this. If we compare the current price of corn at \$3.00/bu and corn gluten feed at \$120/ton (\$100/ton at the plant + \$20/ton transportation/handling added), there appears to be a small difference in price favoring corn. One should look at the price per unit of energy to look at corn gluten feed as a replacement for corn. The recent Beef NRC lists corn containing 1.47 Mcal of metabolizable energy (ME) per pound while corn gluten feed is listed as having 1.31 Mcal of ME/lb. The calculated cost for corn is 3.6 cents/Mcal ME while corn gluten feed is 4.6 cents/Mcal ME. In this scenario in which corn gluten feed was being considered solely as an energy source corn at \$3.00/bu was still a cheaper source. The other difference between these feedstuffs is that corn gluten feed contains 23-25% crude protein which would lower the amount of other protein sources needed reducing costs. Solving for multiple nutrients can be tiresome if done by hand. One tool that some may find useful for comparing values of varying feedstuffs is FEEDVAL that was developed by UWEX dairy specialists. University of Missouri specialists have adapted this spreadsheet to beef cattle by using the net energy for gain values rather than net energy

for lactation. This FEEDVAL III spreadsheet can be downloaded at the following website <http://agebb.missouri.edu/commag/beef/feedermarketing/spreadsheets.htm> . I would recommend using a value of \$0.00 for the price of dicalcium phosphate as most operations are not needing to import additional phosphorus. This actually discounts feeds for their phosphorus content. As an example, this small change results in the value of dried distillers grains being lower than if one uses the current market price for dicalcium phosphate. Again, keep in mind that shrink losses and transportation costs are not reflected in these prices. Therefore if you estimate it to cost \$10/ton for transportation, then the price you pay should be less this amount. There are a variety of co-products that can be fed to cattle. It is important to know what the nutrient content of these products are and what limitations exist for inclusion rates. The USDA Agricultural Marketing Service reports feedstuff prices weekly along with a report on distillers grains which can be viewed at <http://www.ams.usda.gov/lsmnpubs/Feedstuff.htm> . It is advised to consult a nutritionist before making drastic changes to your feeding program.

Cattle feeders are also encouraged to implement sound management as profit margins tighten. Use of an approved technology for the feedlot such as feed additives and implants should not be overlooked unless a premium is being received. The published research with ionophores suggests that a 10-15% improvement in efficiency may be observed. Recent research with ractopamine hydrochloride also illustrated an improvement in feed efficiency during the last 28-42 days of the finishing period. Implants can result in greater intakes, performance and efficiency with returns often greatly exceeding the investment. With greater feed costs, bunk management that eliminates or reduces feed waste is also important. Slightly restricting intake has been shown to improve efficiency. Research has shown that implementing a programmed rate of gain management with high concentrate diets in which intake is slightly restricted can improve efficiency and reduce feed inputs. However, restricting intake of diets that are high in corn silage or corn gluten feed does not appear to be advantageous. If you are considering alternatives and are feeding a corn-based diet, programmed rate of gain strategies may reduce feed inputs. Caution is warranted that severe restriction is not imposed as days on feed could be increased as well as lighter out weights and a reduction in quality grade may be seen.

Managing your financial risk is important regardless of the price of corn. Using tools to assist you in managing this risk will pay dividends. Knowing the cost of production or cost per pound of gain is an important tool. Using the standard \$0.25/hd/d for yardage in many instances is underestimating your actual costs of production. If one knows these figures, it is easy to determine the breakeven price needed for finished cattle as well as what the purchase price for feeders if a sell price can be locked in via a contract. The Iowa Beef Center has a spreadsheet that allows one to determine a ceiling price for feeder calves if the user knows several of the production costs. This sheet can be downloaded from <http://www.iowabeefcenter.org/content/ibcproducts.htm> .

As corn prices remain volatile the next few months, consider alternative feedstuffs where appropriate to reduce feed costs. Increase your awareness of co-products and how they can be used in cattle rations and what limitations may exist. Contact your local county extension agricultural agent and nutritionist for questions regarding using alternative feedstuffs.