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HOG PRODUCTION: WHAT PRICE FOR CORN?

There's an old adage among farmers in the Midwest that when corn is cheap you have to "walk it to market." The concept of "walking corn to market" is not some new genetic modification, but rather the simple principle of adding value to corn on your farm by feeding it to livestock. And so, "walking to market" simple meant feeding your corn to livestock rather than selling it as cash grain. That principle worked well when corn was \$2 per bushel, but what about \$4 corn?

Let's compare a period when corn was \$2 a bushel to more recent corn prices. From the 1999 crop to the 2005 crop, U.S. farm prices for corn averaged \$2.06 per bushel. The value of the same corn fed to hogs was about \$3.78 per bushel. This calculation is based on the value of corn after deducting all hog production costs including full depreciation and family labor costs. It can be argued that the "profits" should be a return to the family management rather than corn, but this serves to make the point.

For the 2007 and 2008 crops, the average U.S. farm price of corn was \$4.13 per bushel. If fed to hogs, corn would have generated only \$2.63 per bushel. In this period, the financial losses from pork production reduced the value of corn sharply below its cash value. This seems to suggest the strategy of "walking corn to market" has been replaced by the philosophy of "just haul corn to the ethanol plant," but we have to look closer.

An escalation of corn prices from \$2 to \$4 could be described as an economic shock for the livestock industries. In the initial phases of the shock, feed prices move up rapidly, but livestock producers cannot pass those higher costs on to wholesale and retail prices for livestock products. This results in a period of severe financial loss and discouragement for livestock producers. Eventually, livestock supplies are reduced through cut backs in herds and the supply reduction ultimately results in higher livestock prices that can cover the higher costs of feed. The beef, pork, and poultry sectors have all been through this cycle and now have product prices high enough to cover \$4 corn.

Recently, corn prices have moved higher. How much can hog producers pay for corn given the current outlook for hog prices this year and next? Right now, profits are not

threatened with live hog prices at \$60 per hundredweight. In fact, hog producers could pay near \$6 per bushel for corn. The outlook remains optimistic through next summer, with prospects for live prices to be near \$53 this fall and winter, return to \$57 in the second quarter of 2011, and to \$54 in the third quarter. These hog prices would imply producers could pay a bit over \$5 per bushel for corn and still cover all costs.

What's the outlook for corn prices over the next 12 months? The midpoint of USDA's August 12 forecast of the U.S. average farm price was \$3.80, while the current futures market is suggesting an average closer to \$4.05 per bushel (with December 2010 corn futures at \$4.33).

Unfortunately, the catch comes in the fall of 2011. The lean hog futures market anticipates breeding herd expansion will begin this fall, resulting in expanding pork supplies in late-summer and fall of 2011. By fall of 2011, futures are suggesting live prices closer to \$48 and the breakeven price that pork producers can pay for corn drops to about \$3.75 per bushel.

These numbers help to point out several important features of the pork industry. First, after severe losses in 2008 and 2009, the herd has adjusted downward to accommodate corn prices of \$4 per bushel or somewhat higher. This is basically true for the beef and poultry industries as well. Secondly, the impacts of higher corn and feed prices on livestock and poultry are just now getting fully transmitted to retail prices. Third, the pork industry has to remain cautious about expansion as even the modest expansion currently anticipated by the fall of 2011 could push the price producers could pay for corn back below \$4 per bushel.

Finally, no one knows what the "new normal" will be for corn and other feed prices. U.S. and world corn production has achieved record high levels in both the 2009/10 and 2010/11 marketing years, yet consumption has been even larger and stocks have been drawn down. Will record production continue every year for the foreseeable future? Surely not.

While the livestock and poultry industries have adjusted to \$4 corn, they need to remain cautious about excess expansion as they continue to consider pricing strategies to manage, and potentially protect, margins. "Walking corn to town" may still be a favorable strategy overall, but there can be wide swings in margins which result from changing livestock and feed prices and from a world of other uncertainties.

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