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CORNHUSKER ECONOMICS

Co-Product Prices May Be Nearing Seasonal Low

The supply of corn milling co-products from ethanol production has increased rapidly over the last several years. Based on United States Department of Agriculture (USDA) projections of corn ground for ethanol production, approximately 38 million tons of distillers grains would have been produced in the 2009-10 marketing year, with 40 million tons projected for the 2010-11 marketing year. While supply has grown, so too has demand from both domestic and international users. Cattle feeders in particular have found wet distillers grains plus solubles (WDGS), modified wet distillers grains plus solubles (MWDGS) and dried distillers grains plus solubles (DDGS) to be excellent feedstuffs that can lower cost of gain through performance efficiencies and lower ingredient costs. United States swine and poultry producers have also increasingly adopted DDGS in rations in response to higher corn prices, while international shipments of DDGS have also grown.

While distillers grain production has generally been trending upward, there isn't a strong seasonal trend in the quantity produced. However, prices of distillers grains do have a pronounced seasonal tendency to be lowest in July, August and September, and higher during the winter and early spring months. This is driven primarily by demand for distillers grains, particularly from the cattle industry. Cattle on feed inventories historically are at their seasonal lows during the third quarter of the year, so less feedlot demand for distillers grains tends to depress prices. Similarly, beef cow herds and stocker cattle are on summer pasture and range and are not likely to be supplemented with distillers grains at this time of the year.

Although the seasonal low doesn't always occur in the third quarter (2008 was an exception), it appears that it may this year. DDGS prices in Nebraska have already declined about 18 percent from their mid-May high. Based on long-term seasonal trends, about a 20 percent price decline

Market Report	Yr Ago	4 Wks Ago	7/16/10
<u>Livestock and Products,</u>			
<u>Weekly Average</u>			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight.....	\$83.20	\$92.46	\$94.00
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb.	111.76	134.25	133.68
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb.	105.52	117.00	118.43
Choice Boxed Beef, 600-750 lb. Carcass.	137.39	156.70	154.04
Western Corn Belt Base Hog Price Carcass, Negotiated.	57.41	75.01	74.53
Feeder Pigs, National Direct 50 lbs, FOB.....	35.45	*	*
Pork Carcass Cutout, 185 lb. Carcass, 51-52% Lean.....	62.46	83.72	81.76
Slaughter Lambs, Ch. & Pr., Heavy, Wooled, South Dakota, Direct.....	*	135.50	135.25
National Carcass Lamb Cutout, FOB.	254.37	318.82	309.24
<u>Crops,</u>			
<u>Daily Spot Prices</u>			
Wheat, No. 1, H.W. Imperial, bu.....	4.66	3.22	4.34
Corn, No. 2, Yellow Omaha, bu.	3.02	3.35	3.61
Soybeans, No. 1, Yellow Omaha, bu.	10.19	9.60	10.09
Grain Sorghum, No. 2, Yellow Dorchester, cwt.....	5.04	5.30	5.98
Oats, No. 2, Heavy Minneapolis, MN, bu.	2.18	2.27	2.67
<u>Feed</u>			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton.	*	150.00	150.00
Alfalfa, Large Rounds, Good Platte Valley, ton.....	*	82.50	75.00
Grass Hay, Large Rounds, Premium Nebraska, ton.	*	*	72.50
Dried Distillers Grains, 10% Moisture, Nebraska Average.	85.00	94.50	87.50
Wet Distillers Grains, 65-70% Moisture, Nebraska Average.	35.50	35.00	31.50
*No Market			

during this time period is typical. This puts current DDGS prices at about \$94/ton and WDGS near \$30/ton. By historical standards, these are fairly low prices. Even more interesting to consider, though, is the price of the co-products relative to corn, as they are substitutes in livestock rations (to a degree). Figure 1 illustrates this ratio of the co-product to corn price expressed on a dry matter (DM) basis (to remove the effect of varying level of moisture in the co-products).

grains are cheaper relative to corn in 2010, but not necessarily why WDGS and MWDGS is so much cheaper than DDGS.

WDGS and MWDGS are primarily used in cattle rations in feedyards located near ethanol plants. Their high water content (approximately 65% and 50%, respectively), made long-distance transport cost prohibitive and logistically difficult, especially for international export.

Domestically, swine and poultry producers don't use these wet co-products because they don't flow through their feed systems. So, nearly all WDGS and MWDGS are fed to cattle. Cattle feeders, though, had a plentiful substitute this year to feed: high moisture corn (HMC). While Nebraska cattle feeders typically put up a lot of HMC each fall (to feed with dry rolled corn and co-products), the 2009 corn crop was late maturing and had high moisture content. Drying was difficult given weather conditions, propane costs, and propane availability (in some areas). Thus, in order for some corn growers to get their crop harvested, the corn

had to be harvested as HMC, making cattle feeders one of the few alternatives for buyers. Corn growers that stored wet corn in conventional storage had to move it in early spring before it could spoil, again making cattle feedyards one of the most logical buyers. Finally, in some areas vomitoxins were present in corn. While there are maximum acceptable limits of vomitoxins that can be fed to any livestock, the limits are higher for cattle, so cattle feeders were a better market for some of this corn. In all, cattle feeders who might have been feeding co-products at a rate of 30-40 percent of their ration (DM basis) in 2008 and 2009, reduced their inclusion levels (likely to around 15-25 percent of the ration) and fed more HMC. Even into 2010 when co-product prices decreased relative to corn, this has continued, because feeders generally like to clean the HMC out of their bunkers prior to harvest so they have capacity to store more wet corn.

Recognizing the seasonal tendency for a low in distillers grain prices to occur sometime in the third quarter of the year, and the fact that WDGS and MWDGS are trading relatively inexpensive compared to corn by historical standards, suggests that feeders should carefully

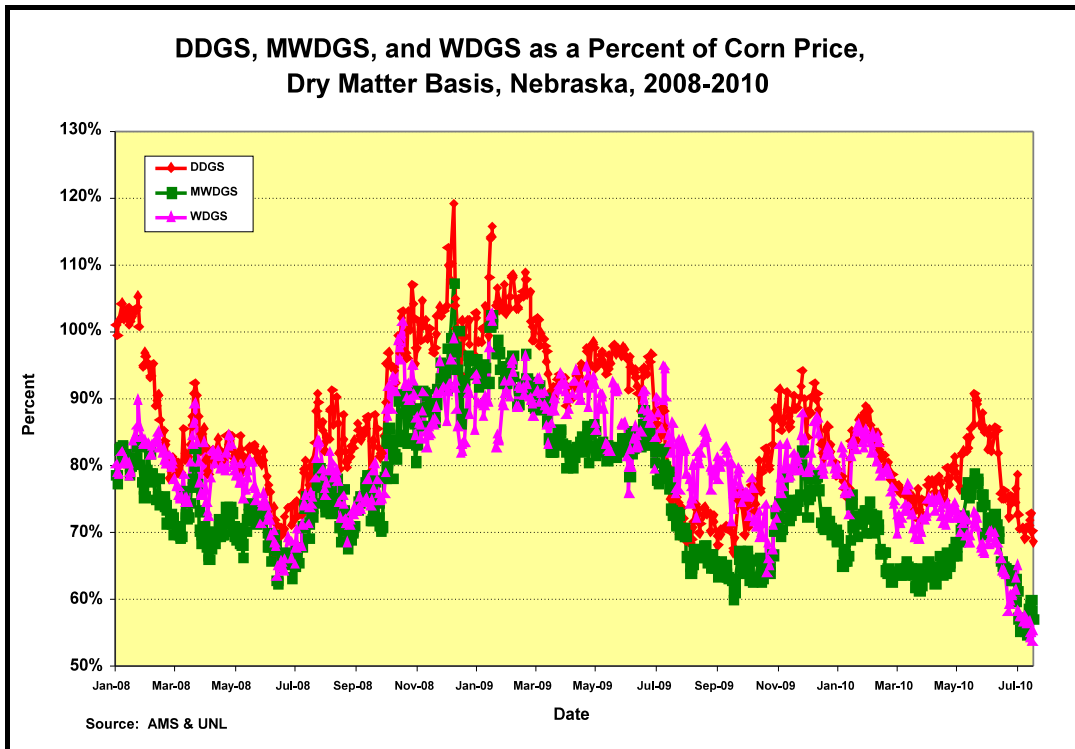


Figure 1.

During the first few weeks of July 2010, DDGS had traded at 65-70 percent of the price of corn (DM basis), similar to the levels seen in 2008 and 2009. WDGS and MWDGS were trading at only 55-60 percent of the price of corn in early July 2010, compared to 65-80 percent in the previous two years. Further examination of Figure 1 suggests that all three co-products have traded cheaper relative to corn so far in 2010 compared to previous years, but typically WDGS and MWDGS aren't discounted so much more than DDGS (remember, this is compared without water content). So, what's causing these market conditions in 2010?

First, livestock consuming units are lower. Cattle numbers are two percent lower than last year, and herds have been liquidated to historically small numbers. Hog inventories are also about three percent lower than last year. Even poultry numbers were declining up through the beginning of 2010. Second, distillers grain production increased in 2010, as several ethanol plants that were shut down or producing at low capacity since late 2008 came back online as margins improved. So lower livestock demand and higher supply can explain why distillers

evaluate whether to store wet co-products obtained at today's prices for feeding programs later this winter. UNL has done a significant amount of research on the feasibility of storing wet co-products in bunker silos and bags. Generally, other roughages have to be mixed with the co-product to make long-term storage logistically possible (detailed explanations of alternatives are available at <http://beef.unl.edu>). Of course, storage of wet co-products isn't without cost. Machinery and equipment, labor, interest, product shrink and the co-product and roughage ingredients are all costs that must be considered. UNL Extension has a spreadsheet called Co-Product STORE available to assist producers with estimating these costs (also available at <http://beef.unl.edu>). Based on current prices and a scenario of storing 250 tons of WDGS in a bunker silo until December, the stored co-product would have a total cost of about \$55/ton on an as-is basis (including shrink expenses). If WDGS is more than \$55/ton this winter, storage will have provided a good return. If WDGS is less than \$55, storage might not be worth the expense. Actual prices will be a function of the quantity and quality of the fall corn crop, natural gas prices, livestock demand and other factors. Further, every producer's storage costs will be different, as is the price they may be able to forward contract distillers grain for winter delivery. Thus, it is necessary to estimate the storage costs for each operation using the spreadsheet on the Beef Website. For some, storing co-products may not offer a cost savings. For others, they might find it cheaper to store WDGS now and sell corn grain rather than putting up HMC.

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