



Feed Grain Market Outlook
Kurt M. Guidry, Associate Professor
Department of Agricultural Economics
LSU AgCenter



Fundamental Analysis

As we have seen in other feed grain and oilseed markets, the corn market has been in a downward trending pattern over the past couple of months. The story seen here is much like the soybean market where concerns over export demand and prospects for a record crop in 2004 have laid heavily on this market. What once was an extremely positive fundamental supply and demand picture is now starting to deteriorate slightly. Stocks for the 2003/04 marketing year will not be as tight as once thought and the large crop in 2004 will undoubtedly only add to stocks for the 2004/05 marketing year. In addition, while the USDA has remained positive about the potential for export demand, it has come to the point where this potential needs to materialize.

In its August Supply and Demand report, the USDA made some significant changes to both old and new crop values (See Tables 1 and 2). In old crop (2003/04 marketing year), the two significant changes made were an increase in domestic corn use by 10 million bushels and a decrease in expected exports by 25 million bushels. The end result was an increase to ending stocks by 18 million bushels, which now stand at 914 million bushels. Exports continue to be a real question in this market. With three weeks left to the 2003/04 marketing year, corn exports for the year totaled 1.76 billion bushels. Even with the USDA reducing its expectation for corn to 1.925 billion bushels, exports would have to average roughly 54 million bushels per week to reach this market. With exports coming in at just slightly over 12 million bushels last week, there is a real concern that the USDA figure won't be reached and therefore ending stocks will increase in next month's supply and demand report. This would add to the total supplies in the 2004/05 marketing year, which is already facing the potential for record production.

For new crop corn (2004/05 marketing year), the USDA increased production by 288 million bushels to 10.923 billion bushels. A nearly 4 bushel per acre increase in yield was the reason for the relatively large increase in expected production. Yield is now expected to be a record 148.9 bushels per acre. Partially offsetting the large increase in production were increases to domestic corn use. Feed and residual use was increased by 75 million bushels while food, seed, and industrial use was increased by 90 million bushels. Exports were held steady at what may be an optimistic 2.1 billion bushels. Ending stocks were increased by 141 million bushels from the previous month and now stand at 1.132 billion bushels. This would be a 218 million bushel increase in stocks in one year and could help limit any real price improvement.

For grain sorghum, the only changes made were to the new crop balance sheet. USDA also increased expected production by raising expected yield by 4.3 bushels per acre. The increase in production was nearly offset by a 25 million bushel increase in domestic use. Ending stocks were increased by 5 million bushels to 54 million bushels, 10 million bushels higher than last year.

As with the domestic corn and grain sorghum markets, the world coarse grain and corn markets also experienced increases in production and additional stocks for the 2004/05 marketing year (See Table 3). World corn production was increased by a whopping 14 million metric tons in the August report. Increases in production in the United States and China are expected to make up the majority of the increase. While it is understood what the potential record US crop could mean for prices, the large increase in expected China production could have similar effects. One of the United States' chief competitors in the world corn market over the past few years has been China. Large stocks developed in the early and mid 1990's allowed China to be very aggressive in the corn export market. One of the assumptions that the USDA is making when projecting US corn exports for the 2004/05 marketing year is that the draw down in China corn stocks over the last few years would limit China's ability to export corn. In fact, many in the market have and continue to believe that China may change from being a net exporter of corn to a net importer. If this were to happen, it could have substantially improved the prospects for demand for US corn. However, now with increases to China production, the question of just how limited China may be in exporting corn becomes somewhat of a concern.

Despite the large increase in world production and the resulting increase in ending stocks, the world corn market situation should still be viewed as positive. Figure 1 shows world corn stocks over the past 40 years. Even with stocks being increased to 85.67 million metric tons in the August report, you would have to go back to the mid 1970's to find a world corn ending stock as low as currently is being projected for the 2004/05 marketing year. While this relatively tight world stock situation will likely not provide much help to prices if the US crop is around 11 billion bushels, it does provide the point that any major production reductions in the world could have significant impacts.

Obviously, as is the case in most years, the size of the 2004 crop will be a significant factor in price movement. Up to this point, near ideal weather and the resulting excellent crop ratings have kept the ideas of a record crop fresh in everyone's mind. Crop ratings for the 2004 crop at this point are second only to the 1994 crop year (See Figure 2). Through the first 12 weeks of the growing season for corn, crop ratings have been in an upward trending pattern. Unlike in 2003 or in 1994, crop ratings for this 2004 crop have shown an uncanny ability to sustain at high levels. The 2003 crop actually started off the year with slightly higher ratings but dropped off substantially starting in the 8th week of the growing season. However, even with the sharp drop, the corn crop averaged 142.2 bushels in 2003. However, the first signs of a decline in the crop ratings were seen in the August 16th report which showed that the percent of the corn crop rated in good to excellent condition had fallen 3 percentage points. This has provided some support to prices as concerns over slight moisture shortages and cooler than normal temperatures have begun to surface.

Technical Analysis

Over the past two months the September 2004 corn futures contract has had little success in putting a stop to the strong downward trend (See Figure 3). During that time, the contract has fallen by more than \$1.00 per bushel. Struggling export sales and the potential for a record large crop in 2004 helped fuel this downturn with technical indicators adding to the fire. Speculative funds, which had a very large long position prior to June 2004, began to quickly liquidate those positions as shown by the fall in the open interest values. For the moment, however, the contract has seemed to have bottomed at the \$2.15. The market has touched this level of support several times since the end of July but has yet been able to push past this level. The inability of the market to move past this level of support and the subsequent upturn in prices are being viewed by some as being the beginning of a market reversal.

If this reversal continues to develop and if the market receives some additional positive fundamental news, we could see this market attempt to reach retracement levels. Figure 3 shows some retracement levels from the low of \$2.15 to the high of \$3.41 set in April 2004. These retracement levels would be logical targets for this market on a reversal of this trend. However, we must keep in mind that the September contract only has about a month left before it expires. Therefore, it is highly unlikely that we will see this contract approach the \$3.00 level. More realistic targets should this reversal continue to develop would be the 33% and 50% retracement levels.

Price Considerations

After closing higher on August 17th due to a slip in crop ratings, the September 2004 corn contract failed to build on this momentum. On August 18th, the contract fell \$0.03 per bushel and currently stands around the \$2.25 level. Looking at the short-term outlook, it is difficult to project much in the way of a significant price increase in this contract prior to its expiration. Crop tours throughout the United States have not revealed anything to suggest that the USDA has grossly overestimated yield for the 2004/05 crop. As a result, it is unlikely that the USDA will be forced to reduce its production projection in next month's supply and demand report. In addition, with the high potential for exports to fall short of USDA's current projection for the 2003/04 marketing year, it is highly likely that we see ending stocks increased in the next report.

A more long term view of this market tends to be slightly more positive for price improvement. The wild card in this scenario will be export demand. All indications are that domestic use will continue to be strong in the 2004/05 marketing year with ethanol production leading the way. If export demand can show considerable improvement in the later part of 2004 and the beginning of 2005, that could give this market enough of a boost to start prices higher. While the uncertainty regarding China's activity in the market will always exist, reports are surfacing that China will be forced into a net importer by the beginning of 2005. If realized, this too could help boost prices at the beginning of 2005.

Table 1. U.S. Corn Supply and Use (Domestic Measure)

Item	2002/03 Mkting Year	2003/04 Mkting Year Aug. Estimate	2003/04 Mkting Year (Aug. - July)	2004/05 Mkting Year July Estimate	2004/05 Mkting Year Aug. Estimate	2004/05 Mkting Year (Aug. - July)
	----- Million Acres -----		Change	----- Million Acres -----		Change
Area						
Planted	78.9	78.7	0.00	81.0	81.0	0.00
Harvested	69.3	71.1	0.00	73.4	73.4	0.00
	----- Bushels -----			----- Bushels -----		
Yield per harvested acre	129.3	142.2	0.00	145.0	148.9	3.90
	----- Million Bushels -----			----- Million Bushels -----		
Beginning stocks	1,596	1,087	0.00	896	914	18.00
Production	8,967	10,114	0.00	10,635	10,923	288.00
Imports	14	13	3.00	15	15	0.00
Supply, total	10,578	11,214	3.00	11,546	11,852	306.00
Feed and residual	5,558	5,800	0.00	5,775	5,850	75.00
Food, seed, & industrial	2,340	2,575	10.00	2,680	2,770	90.00
Domestic, total	7,898	8,375	10.00	8,455	8,620	165.00
Exports	1,592	1,925	-25.00	2,100	2,100	0.00
Use, total	9,491	10,300	-15.00	10,555	10,720	165.00
Ending Stocks	1,087	914	18.00	991	1,132	141.00
Stocks To Use	11.45%	8.87%		9.39%	10.56%	
Avg. Farm Price (\$/bu)	\$2.32	\$2.40		\$2.30 - \$2.70	\$2.05 - \$2.45	

Source: USDA, World Agricultural Supply and Demand Estimates, August 12, 2004.

Table 2. U.S. Grain Sorghum Supply and Use (Domestic Measure)

Item	2002/03 Mkting Year	2003/04 Mkting Year Aug. Estimate	2003/04 Mkting Year (Aug. - July)	2004/05 Mkting Year July Estimate	2004/05 Mkting Year Aug. Estimate	2004/05 Mkting Year (Aug. - July)
	----- Million Acres -----		Change	----- Million Acres -----		Change
Area						
Planted	9.6	9.4	0.00	8.4	8.4	0.00
Harvested	7.1	7.8	0.00	6.9	6.9	0.00
	----- Bushels -----			----- Bushels -----		
Yield per harvested acre	50.6	52.7	0.00	62.9	67.2	4.30
	----- Million Bushels -----			----- Million Bushels -----		
Beginning stocks	61	43	0.00	44	44	0.00
Production	361	411	0.00	435	465	30.00
Imports	0	0	0.00	0	0	0.00
Supply, total	422	454	0.00	479	509	30.00
Feed and residual	170	190	0.00	180	180	0.00
Food, seed, & industrial	24	20	0.00	25	50	25.00
Domestic, total	194	210	0.00	205	230	25.00
Exports	184	200	0.00	225	225	0.00
Use, total	379	410	0.00	430	455	25.00
Ending Stocks	43	44	0.00	49	54	5.00
Stocks To Use	11.35%	10.73%		11.40%	11.87%	
Avg. Farm Price (\$/bu)	\$2.32	\$2.38		\$2.25 - \$2.65	\$2.00 - \$2.40	

Source: USDA, World Agricultural Supply and Demand Estimates, August 12, 2004.

Table 3. World Corn Supply and Use (Million Metric Tons)

Region	Supply			Use			Ending Stocks	Stocks To Use
	Beginning Stocks	Production	Imports	Domestic		Exports		
				Crush	Total			
2003/04 (August 2004 Estimate)								
WORLD	122.16	616.91	76.86	446.93	646.54	75.09	92.53	12.82%
Change*	-0.09	0.50	-0.05	0.35	0.03	-0.52	0.38	
TOTAL FORIEGN	94.65	360.01	76.53	299.60	433.80	26.19	69.33	15.07%
Change*	0.00	0.50	-0.13	0.35	-0.23	0.11	-0.08	
MAJOR EXPORTS								
Argentina	0.63	12.50	0.01	2.60	4.10	8.50	0.54	4.29%
Change*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
South Africa	2.44	8.30	0.60	4.10	8.70	1.00	1.64	16.91%
Change*	0.00	0.50	-0.10	0.00	0.00	0.00	0.40	
MAJOR IMPORTERS								
Egypt	0.20	6.15	4.00	8.40	10.20	0.00	0.15	1.47%
Change*	-0.01	0.00	-0.20	-0.20	-0.20	0.00	-0.01	
EU-25	4.83	39.00	5.50	35.00	45.80	0.40	3.12	6.75%
Change*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Japan	1.46	0.00	16.80	12.40	16.90	0.00	1.36	8.05%
Change*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Mexico	3.24	21.00	6.10	11.00	26.20	0.02	4.12	15.71%
Change*	-0.01	0.00	-0.20	0.00	0.00	0.00	-0.21	
SE Asia	1.04	15.32	3.45	12.44	17.79	0.76	1.26	6.79%
Change*	0.00	0.00	0.00	0.00	0.00	0.01	-0.01	
South Korea	1.25	0.07	9.50	7.40	9.67	0.00	1.15	11.89%
Change*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SELECTED OTHERS								
Brazil	3.87	41.50	0.55	35.00	38.80	4.00	3.12	7.29%
Change*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Canada	1.11	9.60	1.80	9.00	11.50	0.30	0.71	6.02%
Change*	0.00	0.00	-0.20	0.00	0.00	0.00	-0.20	
China	64.97	115.83	0.10	98.00	128.60	8.00	44.30	32.43%
Change*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other Europe	2.5	14.27	0.83	13.98	16.46	0.28	0.86	9.08%
Change*	0.01	0.00	0.00	0.00	0.00	0.08	-0.07	
FSU -12	1.53	11.54	0.63	9.54	11.03	1.53	1.14	9.08%
Change*	0.02	0.00	0.13	0.07	0.07	0.00	0.08	
2004/05 (August 2004 Projection)								
WORLD	92.53	662.87	75.30	458.06	669.73	79.06	85.67	11.44%
Change*	0.38	14.04	0.13	1.60	4.60	0.80	9.81	
TOTAL FORIEGN	69.33	385.41	74.92	309.46	450.78	25.72	56.93	11.95%
Change*	-0.08	6.72	0.13	-0.31	0.42	0.80	6.24	
MAJOR EXPORTS								
Argentina	0.54	15.50	0.01	2.70	4.20	11.00	0.85	5.59%
Change*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
South Africa	1.64	9.30	0.50	4.10	8.70	1.00	1.74	17.94%
Change*	0.40	0.00	0.00	0.00	0.00	0.00	0.40	
MAJOR IMPORTERS								
Egypt	0.15	6.20	4.50	8.80	10.70	0.00	0.15	1.40%
Change*	-0.01	0.00	0.00	0.00	0.00	0.00	-0.01	
EU-25	3.12	51.28	2.50	40.10	51.50	0.50	4.90	9.42%
Change*	0.00	0.28	0.00	0.00	0.00	0.00	0.28	
Japan	1.36	0.00	16.80	12.30	16.80	0.00	1.36	8.10%
Change*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Mexico	4.12	20.30	6.30	11.20	26.50	0.01	4.21	15.88%
Change*	-0.21	0.00	0.00	0.00	0.00	0.00	-0.21	
SE Asia	1.26	15.64	3.71	13.20	18.69	0.60	1.32	6.84%
Change*	-0.01	0.00	0.00	-0.20	-0.20	0.20	-0.01	
South Korea	1.15	0.07	9.10	6.80	9.12	0.00	1.20	13.16%
Change*	0.00	0.00	-0.20	-0.20	-0.20	0.00	0.00	
SELECTED OTHERS								
Brazil	3.12	43.00	0.40	36.20	40.00	4.00	2.52	5.73%
Change*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Canada	0.71	8.70	2.50	8.30	11.00	0.30	0.61	5.40%
Change*	-0.20	0.00	0.00	-0.20	-0.20	0.00	0.00	
China	44.30	120.00	0.20	100.00	131.60	4.00	28.90	21.31%
Change*	0.00	5.00	0.00	0.00	0.00	0.00	5.00	
Other Europe	0.86	20.62	0.48	15.33	17.81	1.50	2.65	13.72%
Change*	-0.07	1.80	-0.05	0.25	0.25	0.60	0.73	
FSU -12	1.14	11.17	0.76	9.28	10.67	1.53	0.88	7.21%
Change*	0.08	0.00	0.15	0.12	0.12	0.00	0.11	

Source: USDA, World Agricultural Supply and Demand Estimates, August 12, 2004.

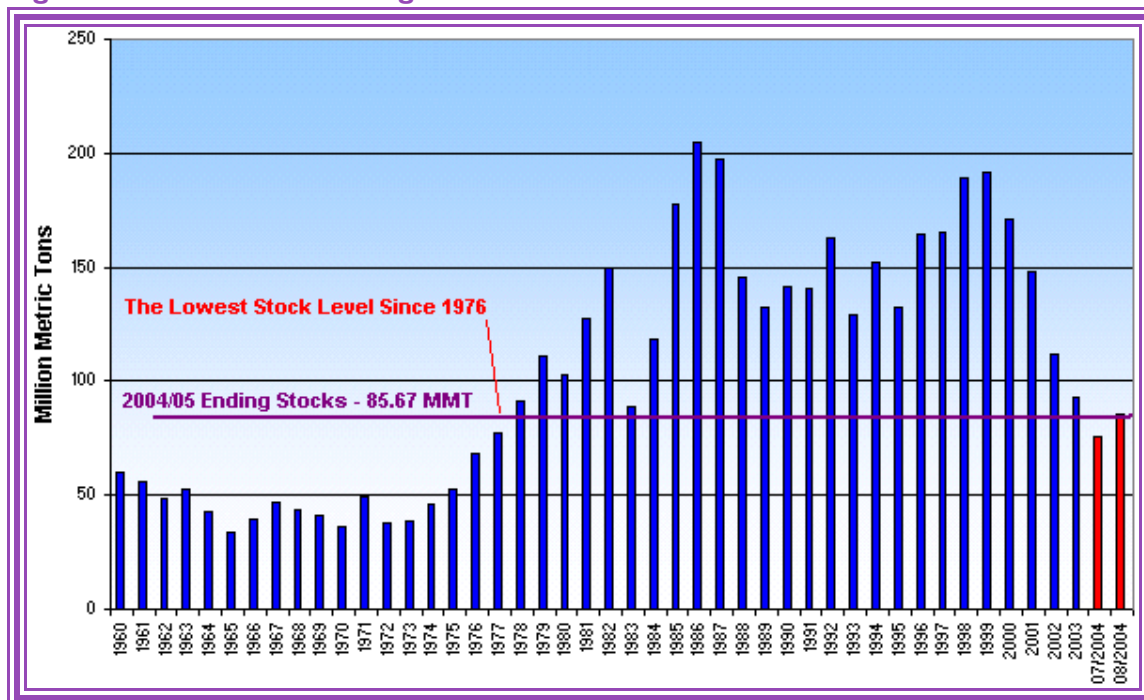
* Change refers to change in estimate in marketing year estimates from the July 2004 to the August 2004 report.

Table 4. Corn Futures Contract Prices - August 18, 2004

Contract Month	Open	High	Low	Last	Change
September 2004	2274	2282	2246	2254*	-30
December 2004	2380	2392	2352	2362*	-34
March 2005	2462	2472	2436	2442*	-30
May 2005	2510	2520	2494	2500*	-24
July 2005	2562	2566	2534	2544*	-32
September 2005	2596	2600	2570	2574*	-26
December 2005	2616	2626	2600	2600*	-32

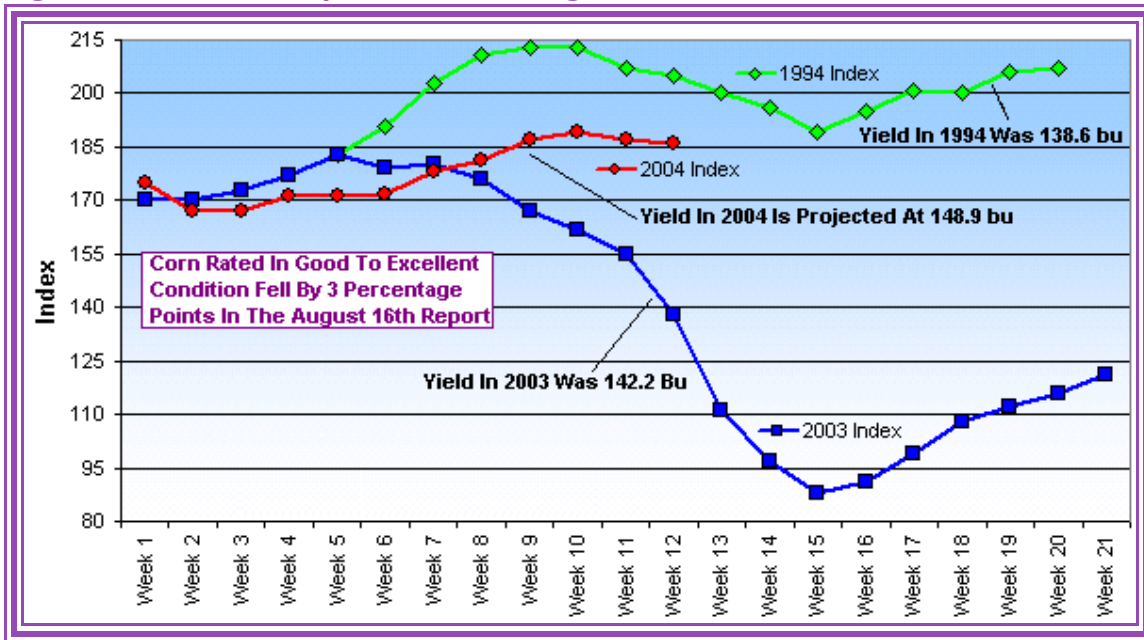
Source: DTN AgDayta

Figure I. World Corn Ending Stocks



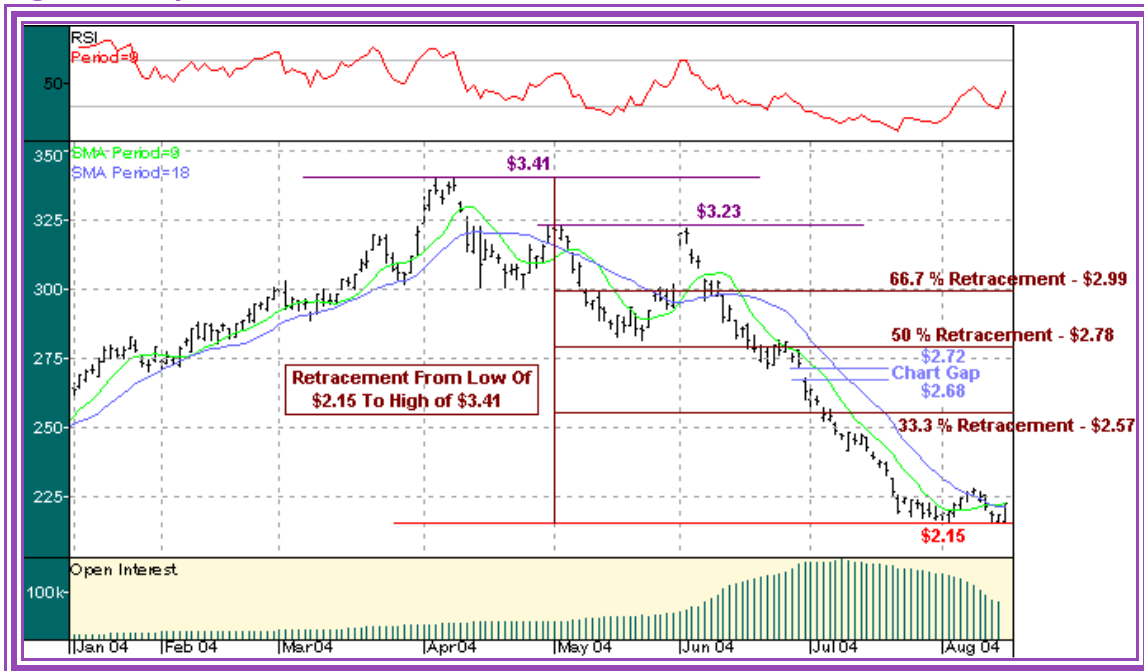
Source: DTN AgDayta

Figure 2. US Corn Crop Condition Ratings



Source: DTN AgDayta

Figure 3. September Corn Futures Contract



Source: DTN AgDayta