

August 2012 – Crop Market Update
Public Policy Department
Budget & Economic Analysis Team



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Next Market Update:

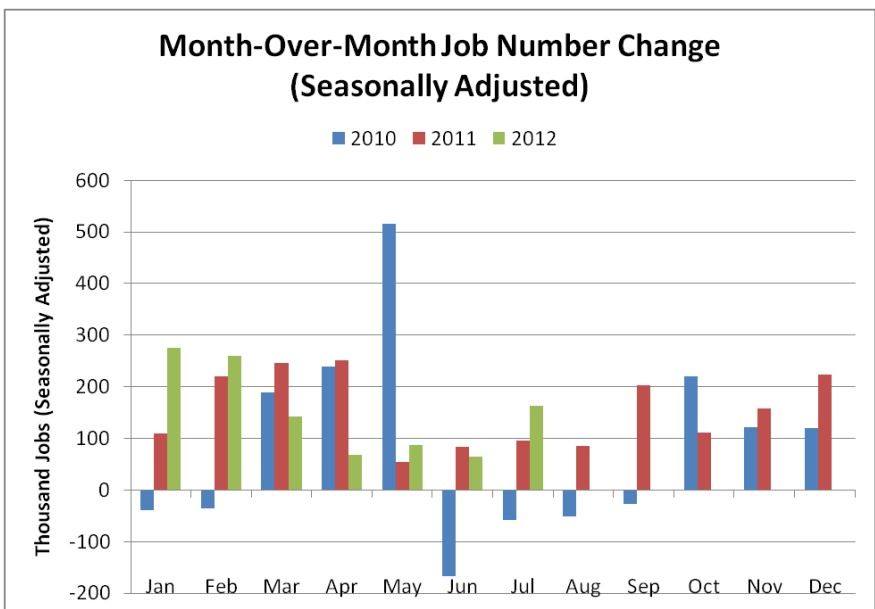
- Livestock Market Update: Week of August 20th

5th Annual AFBF Commodity Outlook Conference
Renaissance Harborplace Hotel – Baltimore, MD
October 10-12, 2012

See attached agenda & registration information

The General Economy

July's employment number notwithstanding, our jobs situation seems to be setting up very different patterns than in past recoveries. We have started each of the last three years with fairly robust hiring numbers in the early months of the year, only to turn south around May. While the July number this year showed a month-over-month increase of 163,000 positions, the April, May and June figures were well under 100,000 new slots. And we need nearly 200,000 new jobs a month to keep up with population growth.



The May 2010 number deserves special mention. Of the 516,000 jobs created that month, 411,000 were temporary hires for the Census, so even then, when you take that one-time event out of the system, the rest of the economy generated only 100,000 new positions that month, fully in keeping with the pattern of over 200,000 positions created early in the year followed by dismal growth thereafter.

Two areas of employment have pulled the overall numbers down for the last several months. First has been government employment. Government employment is not just the federal work force, but all state and local employees as well. This ranges from the Secretary of Agriculture to the town dog-catcher. This drag may not have been very much in any particular month – for example, in July it only fell by only 9,000 slots – but we have lost a million government jobs since that May 2010 figure.

The other category that remains is construction. Typically construction jobs will grow substantially as we move out of a recession, particularly one that was lead by the housing industry. But with a financially driven downturn such as this one and a need to work off debt, the construction sector is anemic at best. We have seen some slight increases this year relative to 2011 figures, but we are still below levels seen even as recently at 2010.

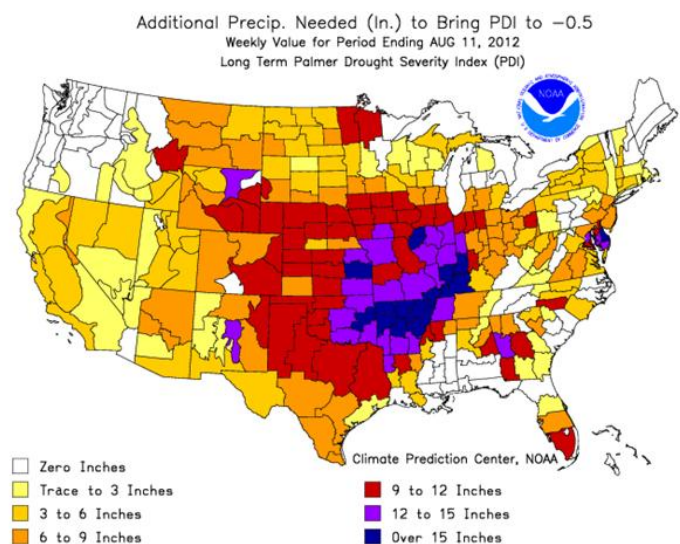
Recall that there are essentially two jobs reports. One is based on a survey of employers employers and the other another is based on a household survey. Differences between the two surveys can be quite large, to the point that they often seem to be talking about two completely different economies. This month certainly shows a considerable difference between the two. While the Establishment Survey suggested the 163,000 job increase figure, the Household survey indicated a drop in employment of 195,000 slots. It also indicated that 150,000 people left the work force which is the driver behind the unemployment figure being essentially unchanged.

Overall we continue to have a very weak labor market, one that is not likely to generate a need for higher wage rates for some time to come. Companies continue to sit on large cash reserves, and have little incentive in this potential regulatory and tax environment to make any major new adds to their employee payrolls. Looks like we will be in this situation for at least the next few months.

Crop Outlook

The drought has deepened in severity since the last newsletter. The amount of precipitation needed to bring the soil moisture back to normal, as measured by the Palmer Drought Index, is well over 12 inches for much of the Corn Belt (see map). Some locations need more than 15 inches to break this drought. Some hope remains that rain will improve soybean yield, however, the corn crop's yield is pretty much determined and rain won't provide much help.

The weekly Crop Condition rating in each week's *Crop Progress* report has shown further deterioration of both the corn and the soybean crop. As of August 6, 50 percent of



the U.S. corn crop and 39 percent of the U.S. soybean crop was rated very poor or poor. All states have been affected by this drought; however, the greatest damage for corn is in Illinois (74% very poor and poor), Indiana (73%), Kansas (69%), Kentucky (77%) and Missouri (84%). The percent very poor and poor for soybeans are Illinois (57% very poor and poor), Indiana (53%), Kansas (67%), Kentucky (48%), and Missouri (74%). These states represent about one-third of the harvested corn and soybean acres.

The August 10 *Crop Production* report was the first survey of producers with field counts to provide the first measure of the 2012 crop yield potential and production. The July *WASDE* surprised the market with the 20 bushel per acre reduction in yield. The uncertainty prior to the August report was how much more would the yield be reduced in the August report. Pre-report projections averaged 126.2 bushels per acre with a range of 117.6 to 134.0 bushels per acre. The August projection of 123.4 bushels per acre was on the lower side of the estimated range. This estimate is 22.6 bushels less than the July estimate and 23.8 bushels less than the 2011 yield. The extent of the yield damage is prevalent across the U.S. with Illinois corn yielding 41 bushels less than 2011, Indiana 46 bushels less than 2011 and Kentucky 74 bushels less than 2011. Texas and North Carolina had better yields this year with increases of 57 and 30 bushels, respectively, over the 2011 yield. This is the lowest U.S. yield since 1995 and is setting a tone of even further reduction as harvest data are used later this fall.

Pre-report expectations were for 2012 production of 10.971 billion bushels. The August *Crop Production* report projects corn production to be 10.78 billion which is 1.578 billion bushels less than the 2011 crop even though harvested acres increased 3.38 million over 2011 (Table). The large reduction in production in the Eastern Corn Belt and in the Plains means that the corn deficit regions will have to draw corn farther into the Upper Midwest to meet their feed needs.

These additional transportation costs will increase the price end-users pay for corn and are part of the demand rationing process as end-users will curb demand at some price.

U.S. Corn 2012 Production and Change from 2011						
	Harvested Acres (1,000)		Yield (bu/acre)		Production (1,000 bu.)	
	2012	Change from 2011	2012	Change from 2011	2012	Change from 2011
	Colorado	970	-330	135	2	130,950
Illinois	12,600	200	116	-41	1,461,600	-485,200
Indiana	6,050	300	100	-46	605,000	-234,500
Iowa	13,600	-100	141	-31	1,917,600	-438,800
Kansas	4,200	0	93	-14	390,600	-58,800
Kentucky	1,490	190	65	-74	96,850	-83,850
Michigan	2,290	100	114	-39	261,060	-74,010
Minnesota	8,250	550	155	-1	1,278,750	77,550
Missouri	3,350	280	75	-39	251,250	-98,730
Nebraska	9,100	-500	147	-13	1,337,700	-198,300
North Carolina	780	-35	114	30	88,920	20,460
North Dakota	3,200	1,140	100	-5	320,000	103,700
Ohio	3,620	400	126	-32	456,120	-52,640
Pennsylvania	1,000	40	118	7	118,000	11,440
South Dakota	5,300	350	98	-34	519,400	-134,000
Tennessee	870	135	82	-49	71,340	-24,945
Texas	1,580	110	150	57	237,000	100,290
Wisconsin	3,450	130	132	-24	455,400	-62,520
US (18 States)	87,361	3,380	123	-24	10,780,347	-1,578,065

U.S. Soybean 2012 Production and Change from 2011						
	Harvested Acres (1,000)		Yield (bu/acre)		Production (1,000 bu.)	
	2012	Change from 2011	2012	Change from 2011	2012	Change from 2011
	Arkansas	3,200	-70	39.0	1.0	124,800
Illinois	8,350	-510	37.0	-10.0	308,950	-107,470
Indiana	4,990	-300	37.0	-8.0	184,630	-53,420
Iowa	9,440	210	43.0	-7.5	405,920	-60,195
Kansas	3,350	-400	22.0	-5.0	73,700	-27,550
Kentucky	1,380	-100	29.0	-10.0	40,020	-17,700
Louisiana	1,110	130	40.0	5.0	44,400	10,100
Michigan	1,990	50	36.0	-8.0	71,640	-13,720
Minnesota	6,920	-100	38.0	-0.5	262,960	-7,310
Mississippi	2,100	300	39.0	0.0	81,900	11,700
Missouri	5,150	-50	30.0	-6.5	154,500	-35,300
Nebraska	5,000	170	43.0	-10.5	215,000	-43,405
North Carolina	1,630	270	32.0	2.0	52,160	11,360
North Dakota	4,550	600	28.0	-0.5	127,400	14,825
Ohio	4,580	40	42.0	-5.5	192,360	-23,290
South Dakota	4,450	380	31.0	-6.0	137,950	-12,640
Tennessee	1,290	40	26.0	-6.0	33,540	-6,460
Wisconsin	1,680	80	36.0	-10.0	60,480	-13,120
U.S.	74,635	999	36.10	-5.40	2,694,324	-361,709

The *Crop Production* report projected the 2012 soybean crop at 2.694 billion bushels which is 361 million less than the 2011 crop. The pre-report soybean production estimates ranged from 2.4 to 2.925 billion bushels with an average estimate of 2.786 billion bushels. If the yields are obtained, the 2012 soybean crop is currently projected to be the smallest since 2007.

Like corn, the U.S. soybean yield is projected to be below trend at a projected yield of 36.1 bushels per acre which is 5.4 bushels per acre less than the 2011 yield. The pre-report estimates projected a soybean yield of 37.2 bushels per acre with a range of 32 to 39 bushels per acre. The large decrease in yield is in Illinois (10 bushels), Indiana (8 bushels), Iowa (7.5 bushels), Missouri (6.5 bushels), Kentucky (10 bushels) and Nebraska (10.5 bushels) which is driving the national yield lower. This was a year where above trend yields would have been welcomed by the market to counteract the South American drought. Instead, the projected lower U.S. crop will keep soybean prices high and send production signals to South America to plant beyond the fence-row and into the ditches.

Corn

Total corn supply, the beginning stocks plus imports and production is projected to be 11.875 billion bushels which is 1.636 billion bushels less than in 2011. This is the smallest amount of supply since the 2003-04 marketing-year which had a total supply of 11.188 billion bushels. Demand is projected to be much lower in response to the reduced supply and higher prices. Feed demand was reduced 725 million bushels from the July estimate to 4.075 billion bushels. Corn for ethanol demand was reduced 400 million bushels to 4.5 billion and corn exports were reduced 300 million bushels to 1.3 billion bushels. Prices will increase further in response to further reductions in corn supply.

U.S. Corn Supply and Use					
	2009-10	2010-11	2011-12	2012-13	Change from
	Actual	Estimated	August Forecast	August Forecast	2011-12
Million Acres					
Planted Acres	86.4	88.2	91.9	96.4	+4.5
Harvested Acres	79.5	81.4	84.0	87.4	+3.4
% Abandoned	164.7	-7.7%	-8.6%	-9.3%	-0.7%
Bushels per Acre					
Yield	164.7	152.8	147.2	123.4	-23.8
Million Bushels					
Beginning Stocks	1,673	1,708	1,128	1,021	-107.0
Production	13,092	12,447	12,358	10,779	-1,579.0
Imports	<u>8</u>	<u>28</u>	<u>25</u>	<u>75</u>	<u>+50.0</u>
Total Supply	14,774	14,182	13,511	11,875	-1,636.0
Feed & Residual	5,140	4,792	4,550	4,075	-475.0
Food, Seed & Industrial	5,939	6,428	6,390	5,850	-540.0
Ethanol for Fuel	4,568	5,021	5,000	4,500	-500.0
Exports	<u>1,987</u>	<u>1,835</u>	<u>1,550</u>	<u>1,300</u>	<u>-250.0</u>
Total Use	13,066	13,054	12,490	11,225	-1,265.0
Ending Stocks	1,708	1,128	1,021	650	-371.0
Avg. Farm Price	\$3.55	\$5.18	\$6.25	\$8.20	+\$1.95
Stocks-Use	13.1%	8.6%	8.2%	5.8%	-2.4%
Days of Ending Stocks	48	32	30	21	-8.7

Ending stocks for 2012-13 marketing-year is projected to be 650 million bushels which is 371 million bushels less than the stocks level for 2011-12. If realized, this will be the lowest level of stocks since the 1995-96 marketing-year. The stocks-use ratio is projected to be 5.8 percent which is about a 21 day supply of corn available at the end of the 2012-13 marketing-year. The projected marketing-year farm price is projected to average \$8.20 per bushel.

Notice that use is projected to decline by 1.265 billion from the 2011-12 marketing-year with large reductions in feed, ethanol, and export demand. Price may have to rise significantly higher, perhaps above \$9 per bushel, to curb demand enough to make the 2012 crop last throughout the marketing-year.

Soybeans

Total soybean supply is projected at 2.857 billion bushels which is 429 million bushels less than the 2011 soybean supply. This is the smallest level of soybean supply since the 2003-04 marketing-year. This means that demand will need to be reduced for this marketing-year. Soybean crush is projected to be reduced by 95 million bushels to 1.515 billion. Soybean exports are projected to be reduced by 260 million bushels to 1.11 billion which is the smallest exports since the 2005-06 marketing-year.

Soybean ending stocks are projected to be 115 million bushels at the end of the 2012-13 marketing-year which is the lowest levels of stocks since 2003-04. The stocks-use ratio is projected to be 4.2 percent which is about 15 days of soybean stocks available at the end of the 2012-13 marketing-year. Because of the extremely tight stocks and strong demand, the projected marketing-year average farm price is projected to be \$16 per bushel.

U.S. Soybean Supply and Use					
	2009-10	2010-11	2011-12	2012-13	Change from
	Actual	Estimated	August Forecast	August Forecast	2011-12
Million Acres					
Planted Acres	77.5	77.4	75.0	76.1	+1.1
Harvested Acres	76.4	76.6	73.6	74.6	+1.0
% Abandoned	-1.4%	-1.0%	-1.9%	-2.0%	-0.1%
Bushels per Acre					
Yield	44.0	43.5	41.5	36.1	-5.4
Million Bushels					
Beginning Stocks	138	151	215	145	-70.0
Production	3,359	3,329	3,056	2,692	-364.0
Imports	<u>15</u>	<u>14</u>	<u>15</u>	<u>20</u>	<u>+5.0</u>
Total Supply	3,512	3,495	3,286	2,857	-429.0
Crushing	1,752	1,648	1,690	1,515	-175.0
Exports	1,501	1,501	1,350	1,110	-240.0
Seed & residual	<u>108</u>	<u>130</u>	<u>101</u>	<u>116</u>	<u>+15.0</u>
Total Use	3,361	3,280	3,141	2,742	-399.0
Ending Stocks	151	215	145	115	-30.0
Avg. Farm Price	\$9.59	\$11.30	\$12.45	\$16.00	+\$3.55
Stocks-Use	4.5%	6.6%	4.6%	4.2%	-0.4%
Days of Ending Stocks	16	24	17	15	-1.5

Wheat

The August report made slight adjustments to the old-crop balance sheet but the ending-stocks for 2011-12 did not change from the July report. The August WASDE increased 2012-13 wheat production 44 million bushels to 2.268 billion because the projected yield was increased 0.9 bushels per acre to 46.5 bushels. Imports increased 10 million bushels to 130 million giving a total supply of 3.141 billion bushels.

Wheat ending-stocks increased 34 million bushels to 698 million bushels. Although stocks increased, the projected marketing-year average price increased \$1.50 per bushel from the July estimate to a projected \$8.30 per bushel. The strong increase in corn price is supporting higher wheat prices.

U.S. Wheat Supply and Use					
	2009-10	2010-11	2011-12	2012-13	Change from
	Actual	Estimated	August Forecast	August Forecast	2011-12
Million Acres					
Planted Acres	59.2	53.6	54.4	56.0	+1.6
Harvested Acres	49.9	47.6	45.7	48.8	+3.1
% Abandoned	-15.7%	-11.2%	-16.0%	-12.9%	+3.1%
Bushels per Acre					
Yield	44.5	46.3	43.7	46.5	+2.8
Million Bushels					
Beginning Stocks	657	976	862	743	-119.0
Production	2,218	2,207	1,999	2,268	+269.0
Imports	<u>119</u>	<u>97</u>	<u>112</u>	<u>130</u>	<u>+18.0</u>
Total Supply	2,993	3,279	2,974	3,141	+167.0
Food	917	926	941	950	+9.0
Seed, Feed & Residual	219	203	240	293	+53.0
Exports	<u>881</u>	<u>1,289</u>	<u>1,050</u>	<u>1,200</u>	<u>+150.0</u>
Total Use	2,018	2,417	2,231	2,443	+212.0
Ending Stocks	976	862	743	698	-45.0
Avg. Farm Price	\$4.87	\$5.70	\$7.24	\$8.30	+\$1.06
Stocks-Use	48.4%	35.7%	33.3%	28.6%	-4.7%
Days of Ending Stocks	177	130	122	104	-17.3

The market is waiting for news from the Black Sea region of their wheat production and a statement indicating if they will limit exports this year due to the small crop. This will be an opportunity for more exports if the Black Sea countries (Russia, Ukraine, and Kazakhstan) limit their exports,

Cotton

The August WASDE increased harvested acres by 400 thousand to 10.81 million acres but reduced yield by 1 pound per acre to 784 pounds per acre. The net result was an increase in production by 650 thousand bales to 17.65 million bales.

This increase in production increases ending-stocks to 5.5 million bales which is the largest since the 2008-09 marketing-year. The stocks-use ratio increases to 35.5 percent and there are 130 days of inventory available at the end of the 2012-13 marketing-year. Global cotton stocks are also increasing which will keep downward pressure on price until the mountain of stocks disappears. The U.S. marketing-year average price is projected to average \$0.70 per pound.

U.S. Cotton Supply and Use					
	2009-10	2010-11	2011-12	2012-13	Change from
	Actual	Estimated	August Forecast	August Forecast	2011-12
Million Acres					
Planted Acres	9.15	10.97	14.74	12.64	-2.1
Harvested Acres	7.53	10.70	9.46	10.81	+1.4
% Abandoned	-18%	-2%	-36%	-14.5%	+21.3%
Pounds per Acre					
Yield	777.0	812.0	790.0	784.0	-6.0
Million Bales					
Beginning Stocks	6.34	2.95	2.60	3.30	+0.70
Production	12.19	18.10	15.57	17.65	+2.08
Imports	<u>0.00</u>	<u>0.01</u>	<u>0.02</u>	<u>0.01</u>	<u>-0.01</u>
Total Supply	18.53	21.06	18.19	20.96	+2.77
Domestic Use	3.46	3.90	3.30	3.40	+0.10
Exports	<u>12.04</u>	<u>14.38</u>	<u>11.71</u>	<u>12.10</u>	<u>+0.39</u>
Total Use	15.50	18.28	15.01	15.50	+0.49
Unaccounted	0.08	0.18	-0.12	-0.04	+0.08
Ending Stocks	2.95	2.60	3.30	5.50	+2.20
Avg. Farm Price	\$0.629	\$0.815	\$0.895	\$0.700	-\$0.20
Stocks-Use	19.0%	14.2%	22.0%	35.5%	+13.5%
Days of Ending Stocks	69	52	80	130	+49

How much more demand rationing may occur?

The adage that “small crops get smaller” comes to mind when you consider the 2012 corn and soybean crop. The following tables provide a very simple sensitivity analysis of the potential reduction in demand needed to keep the corn and soybean markets above their minimum stocks-use levels of 5 percent and 4.5 percent, respectively. Prices are not estimated in this analysis but their increase may be significant, especially for large reductions in use.

The harvested acres for corn are assumed to be 87.4, 84.8 and 82.9 million acres which represent abandonment for the August 2012 WASDE, the 2002 crop and the 1988 crop, respectively. Harvested yield ranges from 126 bushels to 118 bushels per acre. A higher yield is expected to occur from greater levels of abandonment. At current abandonment levels, a 120 bushel yield would drive the stocks-use to 3.2 percent, thus requiring use to be reduced by 193 million bushels to maintain a 5 percent stocks-use ratio. Alternatively, at current yield but 1988 abandonment level, use would have to be reduced by 438 million bushels (or significantly more corn would have to be imported).

Planted Acres	Harvested Acres ¹	U.S. Average Corn Yield (bushels/acre)				
		126	123.4	122	120	118
----(Million Acres)----		------(Million Bushels)-----				
96.4	87.4	11,012	10,785	10,663	10,488	10,313
96.4	84.8	10,689	10,468	10,350	10,180	10,010
96.4	82.9	10,446	10,230	10,114	9,949	9,783

1. Abandonment assumed to be -9.34% (August WASDE), -12% (2002) and -14% (1988), respectively.

Planted Acres	Harvested Acres	2012-13 Corn Ending Stocks-Use Ratio				
		126	123.4	122	120	118
----(Million Acres)----		------(Stocks-Use)-----				
96.4	87.4	7.9%	5.8%	4.8%	3.2%	1.6%
96.4	84.8	5.0%	3.0%	2.0%	0.5%	-1.1%
96.4	82.9	2.8%	0.9%	-0.1%	-1.6%	-3.1%

** Beginning Stocks and Imports of 1,021 and 75 million bushels, respectively.

Planted Acres	Harvested Acres	Change in Total Use to Maintain 5% Stocks/Use				
		126	123.4	122	120	118
----(Million Acres)----		------(Million Bushels)-----				
96.4	87.4	307	90	(26)	(193)	(359)
96.4	84.8	(1)	(211)	(325)	(486)	(648)
96.4	82.9	(233)	(438)	(549)	(706)	(864)

**Assumes August 2012 WASDE Total Use of 11,225 million bushels.

Planted Acres	Harvested Acres ¹	U.S. Average Soybean Yield (bushels/acre)				
		38	37	36.1	35	34
----(Million Acres)----		------(Million Bushels)-----				
76.1	74.6	2,835	2,760	2,693	2,611	2,536
76.1	74.2	2,820	2,745	2,679	2,597	2,523
76.1	73.5	2,792	2,718	2,652	2,571	2,498

1. Assumes abandonment of -1.97% (August WASDE), -2.5% (1988) and -3.46% (1986), respectively.

Planted Acres	Harvested Acres	2012-13 Ending Soybean Stocks-Use Ratio				
		38	37	36.1	35	34
----(Million Acres)----		------(Stocks-Use)-----				
76.1	74.6	9.4%	6.7%	4.2%	1.2%	-1.5%
76.1	74.2	8.8%	6.1%	3.7%	0.7%	-2.0%
76.1	73.5	7.8%	5.2%	2.7%	-0.2%	-2.9%

** Beginning Stocks and Imports of 145 and 20 million bushels, respectively.

Planted Acres	Harvested Acres	Change in Total Use to Maintain 4.5% Stocks/Use				
		38	37	36.1	35	34
----(Million Acres)----		------(Million Bushels)-----				
76.1	74.6	129	57	(7)	(86)	(157)
76.1	74.2	114	43	(21)	(99)	(170)
76.1	73.5	87	17	(46)	(124)	(194)

**Assumes August 2012 WASDE Total Use of 2,742 million bushels.

A similar exercise was conducted for soybeans. Harvested acres were assumed to be 74.6, 74.2 and 73.5 million acres representing the August 2012 WASDE, 1988 crop, and 1986 crop abandonment, respectively. Harvested yield ranges from 38 to 34 bushels representing the potential for a slight improvement from late season rains or further deterioration.

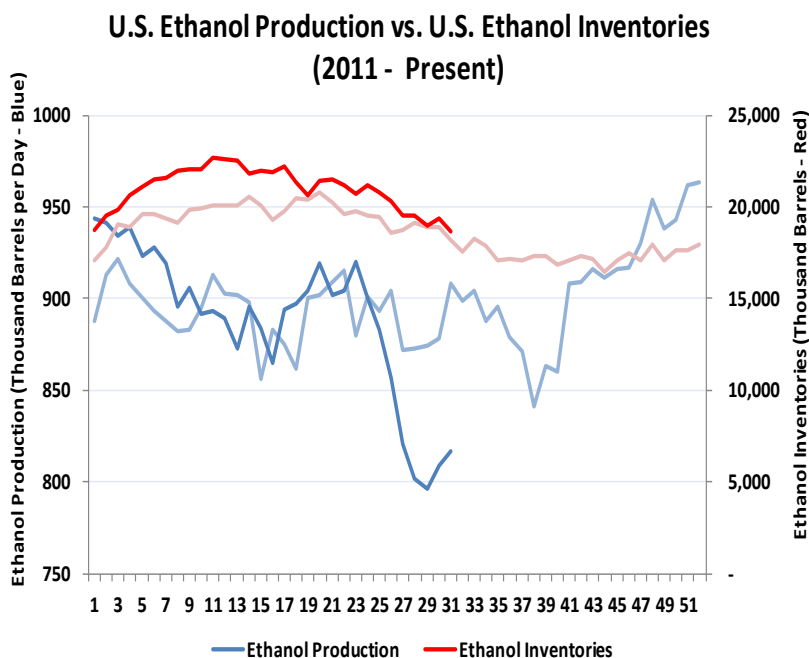
If yields increase from 36.1 bushels, the stocks-use ratios increase but this analysis doesn't allow for any increase in stocks to be absorbed by greater use. That gives a false sense of security as any increase in corn or soybean production will get absorbed by the market like rain falling on thirsty, droughty soil.

The bottom line is that the corn and soybean markets will remain tight, even if the *World Agricultural Outlook Board* finds more bushels in upcoming reports. This will keep prices high to curb demand and encourage production in South America this fall and North America next spring. Soon the focus will be on South America as the corn and soybean planting season begins. A bountiful South American corn and soybean crop will help ease the pressure for exports from the US and help relieve concern over tight stocks.

Energy Update: “What the August WASDE Means for Corn and Ethanol”

Ethanol Production Rebounding; Continues to be below Last Year Levels

Weekly ethanol production continued its free-fall over most of the past month, but managed to rebound during the latter part of July heading in to August. U.S. ethanol production during the week of August 3 rose by 3 percent over its two week, 2-1/2 year low of 796,000 barrels per day. However, current levels are continuing to fall further past reported levels last year. Currently, weekly ethanol production is at 817,000 barrels per day, or approximately 12.5 billion gallons of ethanol equivalent on an annualized basis. However, year-to-date ethanol production levels are approximately 888,000 barrels per day (13.6 billion gallons annualized) to post slightly above the Renewable Fuels Standard mandate set for conventional based biofuels for 2012 (13.2 billion gallons). The expectation for 2012 is that the ethanol mandate will be met. Even if ethanol production is below the 2012 obligated level of 13.2 billion gallons, it is important to reiterate the fundamentals of the RFS. The RFS is fundamentally a requirement to turn in a pre-determined number of credits [or Renewable Identification Numbers (RINs)] to EPA to demonstrate compliance on an annual basis. With the 20 percent RIN banking provision for blenders to meet their obligation, it is figured that between 2.4 to 2.6 billion RINs¹ can be used this year if production were not to meet the 2012 mandate for conventional biofuel at 13.2 billion gallons. The issue becomes 2013 as we will discuss later in the newsletter.



¹ Paulson, N. and S. Meyer, “An Update on RIN Stocks and Implications for Meeting the RFS2 Mandates with Corn Ethanol.” FarmDocDaily. University of Illinois.

Over the past month, ethanol inventories continue their downward trend. However, weekly inventory levels continue to be slightly [and I mean slightly] above year ago levels. Currently, ethanol inventories are approximately 18.65 million barrels (solid red line), equating to over 780 million gallons of ethanol in storage. Current inventories are only 2.7 percent higher year-over-year as high corn prices are dictating the downward trend for overall ethanol storage. Since mid-March when ethanol inventories were posted at a record high of 22.713 million barrels, ethanol inventories have decreased approximately 18 percent. With inventories declining, this should provide some relief to ethanol producer margins once corn prices begin to stabilize and subside, which could be a scenario to watch for over the next month or so.

August WASDE: Putting the Corn Crop In To Perspective

Due to the drought, the August USDA WASDE report gave rather bleak news to the 2012 corn crop. However, the outcome was not unexpected. As expected, the August report showed a big reduction in the average yield and in the overall size of this year's corn crop. With the big reduction in the corn crop, USDA decreased its projection of corn use for ethanol for the 2012/13 marketing year along with projections of significant rationing for all end users of corn. USDA moved its estimated corn for ethanol use in 2012/13 down 400 million bushels to 4.5 billion bushels (8.2 percent decrease from July) and feed and residual use down 725 million bushels to 4.075 billion bushels (15.1 percent decrease from July), reflecting the overall impact of the rapid decline in crop conditions experienced and reported during the summer in the Corn Belt states.

The August WASDE report estimated the average yield for corn at 123.4 bushels per acre, down nearly 23 bushels from the July estimate and the crop's lowest yield since 1995. Harvested acres are projected at 87.4 million, and with the projected 123.4 average corn yield, a crop of just less than 10.8 billion bushels is expected. Production fell more than 2 billion bushels from USDA's July estimate and would be the smallest crop since 2006.

However, to date, it is still expected to produce the eighth-largest corn crop despite the on-going drought and perhaps the worst widespread drought since the 1950s.

All eyes from within the corn balance sheet focused on the feed use and ethanol numbers. As mentioned above, both end use numbers fell considerably as ethanol fell 400 million bushels and feed and residual use fell 725 million bushels. For ethanol, 4.5 billion bushels is equivalent to 12.6 billion gallons of ethanol production for the 2012/2013 marketing year (corn marketing year = September 1, 2012 to August 31, 2013). It has been estimated that maximizing the use of RINs would suggest that a minimum of about

CORN	2010/11	2011/12	2012/13 Proj.	2012/13
			Jul	Aug
			<i>Million Acres</i>	
Area Planted	88.2	91.9	96.4 *	96.4
Area Harvested	81.4	84	88.9 *	87.4
			<i>Bushels</i>	
Yield per Harvested Acre	152.8	147.2	146.0 *	123.4
			<i>Million Bushels</i>	
Beginning Stocks	1708	1128	903	1021
Production	12447	12358	12970	10779
Imports	28	25	30	75
Supply, Total	14182	13511	13903	11875
Feed and Residual	4793	4550	4800	4075
Food, Seed & Industrial 2/	6428	6390	6320	5850
Ethanol & by-products 3/	5021	5000	4900	4500
Domestic, Total	11221	10940	11120	9925
Exports	1834	1550	1600	1300
Use, Total	13055	12490	12720	11225
Ending Stocks	1128	1021	1183	650
CCC Inventory	0	0		
Free Stocks	1128	1021		
Outstanding Loans	48	40		
Avg. Farm Price (\$/bu) 4/	5.18	6.20 - 6.30	5.40 - 6.40	7.50 - 8.90

3.92 billion bushels of corn would be required to meet the RFS mandate.² It remains to be seen how many carry over RINs will be used to meet the mandate for 2012 and what could be used for 2013. RIN credits are likely to play a big role in this upcoming marketing year and with the occurrence of demand rationing from this short corn crop, the challenge is how we are going to get to the fall of 2013 to meet sufficient demand levels.

From ethanol production, dried distiller's grains (DDGs) are created and can be used as livestock feed. As DDGs are a by-product derived from ethanol and not from corn, feed production for livestock generated by the ethanol industry would be approximately 1.4 billion bushels of corn. If one was to include DDGs in the corn balance sheet (and I am not suggesting they do) total feed and residual use would be just less than 5.5 billion bushels of corn equivalent.

Taking a closer look at the WASDE from a global standpoint is a very important consideration in analyzing the current corn crop. Total global grain output decreased approximately 3 percent, supply decreased just over 2 percent and ending stocks were reduced by 4.3 percent. However, these reductions continue to post near record highs and indicate that total global grain output would be the second largest crop on record behind the 2011/2012 marketing year. Even with the reduction from global grain output and supply, the U.S. ethanol industry is expected to use approximately 4 percent of the total world supply of grains (and 5 percent of global grain output).

This has been a roller coaster year, and the ride is not over yet. It also probably shows just how volatile the agricultural sector has become. Go back far enough and the government operated grain reserve programs. Those had the advantage of holding prices down when droughts hit. Think back to the 1988 drought where yields were hit almost as bad as this year. Yet consumption of corn that year fell by only 500 million bushels from the previous year while corn prices only inched up to average \$2.55 per bushel because we still carried over 1.9 billion bushels. (Feed use fell by 855 million bushels between the 1987/88 and the 88/89 marketing year).

Today even our drought reduced crop is expected to come in at more than 10 billion bushels. This is a far cry from the over 14 billion we hoped to produce, but it still represents more than double the size of the crop we produced in 1988. However, our stock situation for the last several years has not been large enough to endure this kind of weather and thus we find ourselves in the situation where we are either going to talk about prices near an unsustainable floor (recall many prognosticators were suggesting substantial price cuts with a normal yield early this year) or at unsustainable highs that we are observing today. This is really the first time the 'market' has had to work through a real drought situation without government stockpiles to fall back on. Hopefully some lessons are being learned.

Ethanol Margins Rebounding, But Can They Maintain?

Ethanol margins have been supported by increasing ethanol prices over the past month. In turn, ethanol prices have been supported over the past several months due to the sharp drop in ethanol production and inventories due to corn prices over \$7.50 per bushel. As indicated in the top portion of the newsletter, since the beginning of June when corn prices shot up, ethanol production has declined approximately 10 percent and ethanol inventories by 12 percent. Reports continue to surface that ethanol plants are continuing to maintain idled status. This trend may change [and I stress the word may] due to the substantial decrease over the past several months of low production and low inventory levels from ethanol producers.

² Good, D. and S. Irwin, "Good on Grain: Corn Crop Rationing – Are We There Yet?" FarmDocDaily, University of Illinois.

Ethanol margins for Iowa and Illinois continued to struggle the first part of last month, but managed to rebound during the latter portion. Weekly producer margins over variable costs, including USDA basis levels, for Iowa were below their shut-down point at the beginning of July, but managed to rebound to \$0.08 per gallon during the first part of August. Likewise, ethanol margins for Illinois followed trend at the beginning of July however, margins for Illinois began the month of August at approximately \$0.13 per gallon. Most importantly, it's important to note that calculating ethanol margins needs to be viewed and analyzed carefully as different combinations of all marketing strategies from all ethanol producers is impossible to come to analyze. I do see the trend possibly moving upward with ethanol margins given the fact that ethanol production and ethanol inventories have made drastic downward movements over the past several months due to expensive corn prices.

