

# Iowa Farm Outlook

Department of Economics  
Ames, Iowa

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## Swine Industry Continues to Expand, But at a Slower Pace

The June Hog and Pig Report reported swine inventories are now 1 percent larger than a year ago. Expectations were that there would be a slight expansion in breeding herd numbers and a small increase in market hog inventories. Due to the mild weather in the Midwest during the winter months, hogs were able to grow and finish out sooner than expected. This led to a marketed increase in hog slaughter during the spring and early summer and shorter hog supplies in June. From the inventory report, the number of heavy market hogs that would be ready for the market in June and July would be static with hog supplies of a year ago. The swine industry had been accustomed to a 1 to 2 percent increase year over year.

As of June 1 the national swine herd was at 65.8 million head. The national breeding herd increased slightly and is now close to 5.9 million head while market hog numbers increased by 0.8 percent to the threshold of 60 million head. Heavier market hogs inventory in the 180+ lbs. weight class were basically steady at 10.5 million head. The number of pigs weaned per litter since March has increased by about a percent compared to the second quarter of last year. The average litter size is nearly 10.1 pigs, with nearly every size of capacity farrowing operation reporting larger average litter sizes.

**Table 1. June Hog and Pig Report Summary**

	US			Iowa		
	2011	2012	% change	2011	2012	% change
	Million Head			Million Head		
<b>All Hogs</b>	65.32	65.83	0.8%	19.70	20.10	2.0%
<b>Breeding Herd</b>	5.80	5.86	1.0%	1.03	1.02	-1.0%
<b>Market Hogs</b>	59.52	59.97	0.8%	18.67	19.08	2.2%
Under 50	19.54	19.56	0.1%	4.95	5.00	1.0%
50 - 119	17.32	17.53	1.2%	6.10	6.21	1.8%
120 - 179	12.17	12.35	1.4%	4.50	4.63	2.9%
180 & over	10.48	10.53	0.5%	3.12	3.24	3.8%
<b>Sows Farrowing</b>						
Jun '12 - Aug	2.93	2.90	-0.9%	0.49	0.48	-2.0%
Sep '12 - Nov	2.93	2.89	-1.3%	0.49	0.48	-2.0%
<b>Pig Crop</b>						
Dec '11- Feb '12	27.87	28.68	2.9%	4.70	4.94	5.1%
Mar '12- May '12	29.25	29.44	0.6%	5.00	5.04	1.0%
<b>Pigs per Litter</b>						
Dec '11- Feb '12	9.80	9.97	1.7%	9.80	10.30	5.1%
Mar '12- May '12	10.03	10.09	0.6%	10.30	10.40	1.0%

The outlook for hog supplies in 2013 will be affected by producer intentions to farrow fewer sows in the second half of this year. Intentions are that sow farrowing will be down about a percent in the second half of 2012. The drier than usual conditions in the Midwest Corn Belt has led to a reduction in the expected corn yield this year. In turn, expectations for a smaller new crop corn supply have led to increased corn prices on the futures market contracts for the next year.

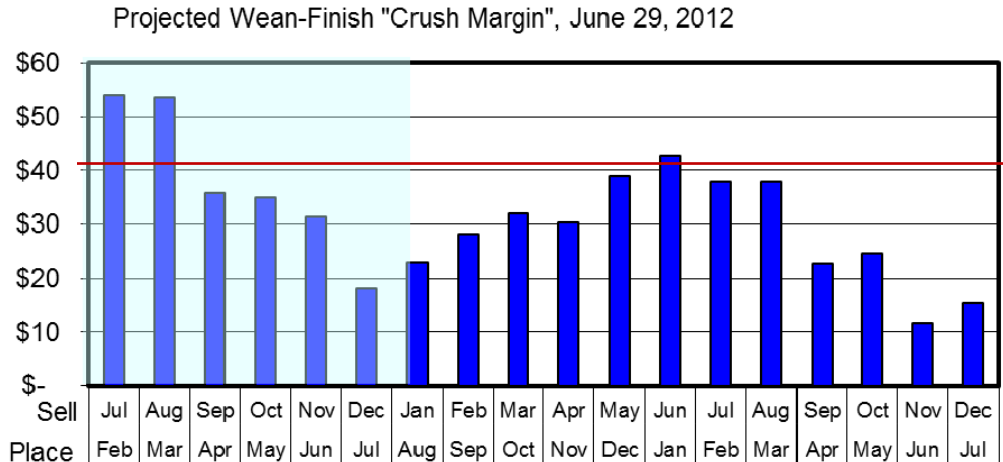
Within Iowa, sow numbers declined slightly, while market hog numbers have increased by more than 2 percent. Since the beginning of the year there has been renewed interest in expanding the state's finishing capacity, not exhibited since 2006-07 when returns to hog production were in the midst of a 44 month run of sustained profitability. Profitability has not been nearly as sustained in the past year, and the prospects of increased feed costs may dampen future plans for expansion until the outlook for the hog market becomes more certain. If fewer sows will be farrowing in the second half of this year, hog supplies in 2013 could be closer to steady than a significant expansion. Tighter hog supplies will be needed to push hog prices back above breakeven levels. Table 2 contains the ISU forecast for hog supplies and prices in the next year and the close of futures price on June 29 adjusted for an Iowa basis.

**Table 2. ISU Hog Supply and Price Forecasts**

	<b>Change in Pork Supply</b>	<b>ISU Model Forecast \$ per cwt.</b>	<b>LH Futures 6/29/12 adjusted for Iowa basis \$ per cwt.</b>
<b>3<sup>rd</sup> Quarter 2012</b>	+1.2%	90-93	89.95
<b>4<sup>th</sup> Quarter 2012</b>	+1.0%	81-84	78.37
<b>1<sup>st</sup> Quarter 2013</b>	+0.8%	82-85	80.03
<b>2<sup>nd</sup> Quarter 2013</b>	+0.5%	85-88	85.67

Figure 1 is a graph of the computed hog "crush" margin based on the futures market at the close of the futures market on Friday, June 29. If a \$40 gross margin is needed to cover overhead and other costs and breakeven, then the road ahead appears to be a little rough. After August, profitability may not return until June of next year if the current futures prices for hogs, corn and SBM prove to be a true prediction. While it is difficult to fully anticipate how a market will respond, this hog and pig reports may be seen as slightly bullish, as most of the hog inventories came in at the low end of the range analyst predicted.

**Figure 1. ISU Calculated "Crush" Gross Margins**



*Shane Ellis*

## Dairy Situation and Outlook

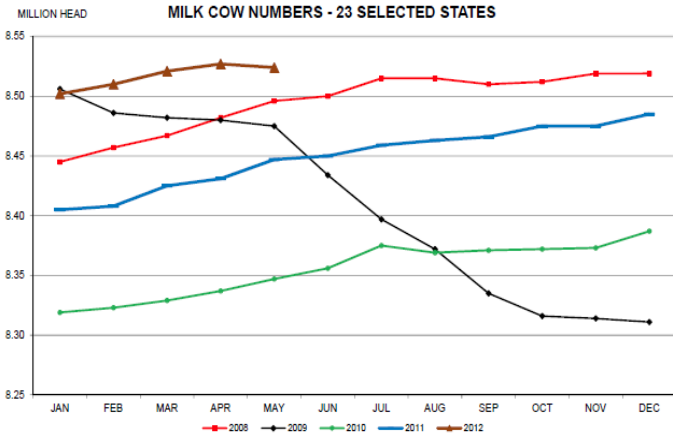
### May Milk Production Increased 2.1%, Lower than April's Increase

May 2012 23 major dairy states milk production increased 2.1%. Production per cow was up by 22 pounds from one year ago. Milk cow numbers were 77,000 more than May 2011 but 3,000 less than April 2012. April 2012 milk production was revised down 38 million pounds or 0.2%. With the revision, April 2012 milk increased by 3.5%.

### Milk Production: Selected Dairy States, May 2012

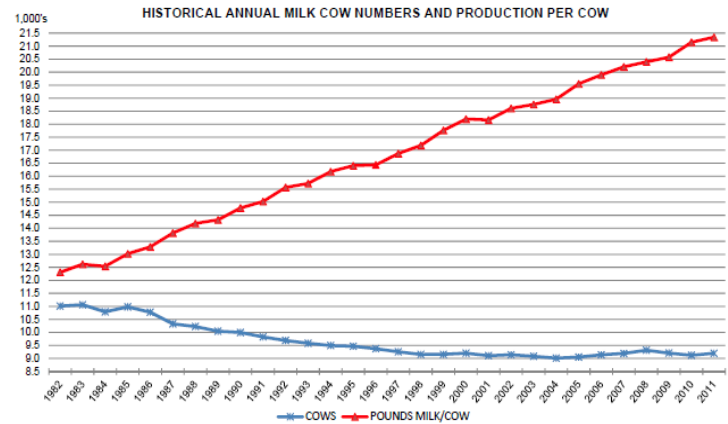
State	thousands			pounds			million pounds		
	2011 cow	2012 cow	% change	2011 milk	2012 milk	% change	2011	2012	% change
	numbers	numbers	cow numbers	per cow	per cow	milk/cow	total milk production	total milk production	total milk
Iowa	208	206	-0.96%	1860	1855	-0.27%	387	382	-1.23%
MN	468	465	-0.64%	1680	1690	0.60%	786	786	-0.05%
WI	1266	1271	0.39%	1805	1840	1.94%	2285	2339	2.34%
IL	98	100	2.04%	1700	1720	1.18%	167	172	3.24%
CA	1767	1783	0.91%	2080	2100	0.96%	3675	3744	1.88%
CO	126	132	4.76%	2040	2105	3.19%	257	278	8.10%
KS	122	124	1.64%	1855	1895	2.16%	226	235	3.83%
ID	578	578	0.00%	1980	2030	2.53%	1144	1173	2.53%
AZ	186	194	4.30%	2140	2155	0.70%	398	418	5.03%
NM	327	337	3.06%	2180	2145	-1.61%	713	723	1.40%
PA	543	536	-1.29%	1730	1715	-0.87%	939	919	-2.15%
NY	610	610	0.00%	1845	1890	2.44%	1125	1153	2.44%
TX	430	440	2.33%	1955	1925	-1.53%	841	847	0.76%
23-State	8447	8524	0.91%	1902	1924	1.16%	16069	16404	2.08%
US 1st quarter	9168	9254	0.94%				48459	50995	5.23%

Two states, Iowa and Pennsylvania produced less milk than one year ago; most of their declines were due to fewer cows. MO had the lowest milk per cow, 1390 pounds per cow for the month but maintained milk production from one year ago because milk per cow was higher than last year. UT had the largest milk increase, 8.3 % and CO the second largest increase, 8.2%. Both Utah and CO added cows, 4000 in UT and 6000 in CO. AZ had strong milk production increase due mostly to an additional 8000 cows.



DATA SOURCE: USDA, NASS; GRAPH: USDA, AMS, DMN

Source: Dairy Market News



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### Livestock Slaughtered Under Federal Inspection, By Class – United States

[Data may not add to totals due to rounding]

Class	May 2011	April 2012	May 2012	January to May		May 2011	April 2012	May 2012	January to May	
				2011	2012				2011	2012
				(1,000 head)	(1,000 head)				(1,000 head)	(1,000 head)
<b>Cattle</b>										
Steers .....	1,431	1,251	1,489	6,652	6,514	51.5	49.5	52.5	48.8	49.1
Heifers .....	782	765	786	4,113	3,938	28.2	30.3	27.7	30.2	29.7
All cows .....	516	469	514	2,631	2,586	18.6	18.6	18.1	19.3	19.5
Dairy cows .....	220	240	251	1,239	1,294	7.9	9.5	8.9	9.1	9.8
Other cows .....	296	230	263	1,392	1,292	10.6	9.1	9.3	10.2	9.7
Bulls .....	48	43	47	239	219	1.7	1.7	1.6	1.8	1.6
<b>Total .....</b>	<b>2,777</b>	<b>2,528</b>	<b>2,836</b>	<b>13,635</b>	<b>13,257</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Livestock Slaughter, USDA

USDA's "Livestock Slaughter" report said dairy producers sent 251,000 dairy cows to slaughter during May 2012, 11000 more than April 2012 and 31000 more than one year ago. During Jan-May period, US dairy producers culled 45000 more dairy cows than one year ago. Dairy cow numbers for the 23 states were 77000 higher than one year ago and we slaughtered an additional 31000 compared to one year ago. That means 108000 dairy heifers moved into the milking herd. As I mentioned previously, we have a large dairy heifer inventory.

## Demand or Disappearance

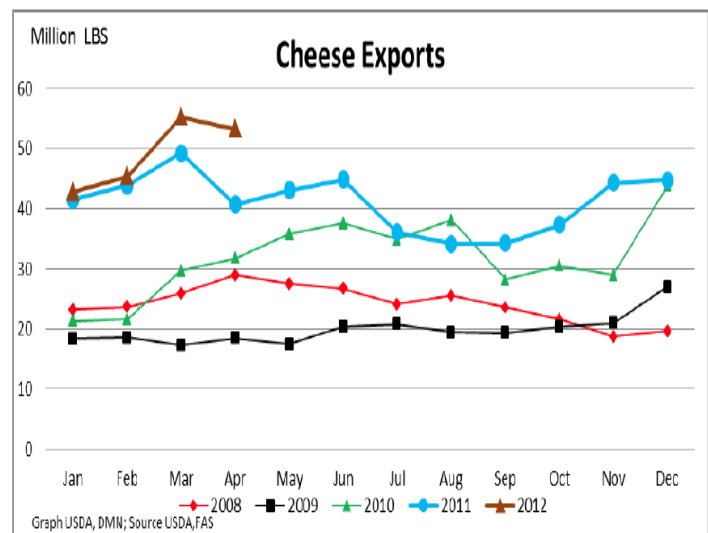
Fluid milk demand continues to be lower than one year ago. YTD fluid milk is -2.7%. Again Organic milk consumption rose, 8.2% through March. Organic whole milk rose by 10.7% YTD to 136 million pounds. Organic reduced fat milk sold was 164 million pounds.

Commercial disappearance of dairy products during the first three months of 2012 totals 49.3 billion pounds, 2.1% above the same period in 2011. Comparing disappearance levels with year earlier levels: butter is +0.7%; American cheese, +0.1%; other cheese, +2.5%; NDM, +25.0%; and fluid milk products, -2.9%.

**Dairy Product Manufacture: April 2012**

Product	thousands April 12		April 11	YTD
	pounds	% change	% change	% change
Butter	170,171	7.20%	-3.3	8.6
Cheese, total	902,564	2.10%	-4.7	3.8
Cheddar	274,149	3.60%	-2.4	4
Other American	97,798	3.20%	-3.7	
Swiss	27,719	30.00%	1	
Italian Style	381,482	-80.00%	-5.9	1.9
NDM	192,364	31.10%	2	42.7
Sour Cream	96,536	-5.20%	-13.3	3.1
Yogurt	361,561	-0.90%	-8.9	
Dry Whey, total	85,990	-6.60%	-2.5	0.3
Lactose	87,240	8.30%	-3	7.3
WPC	37,052	6.90%	-4.7	7.8
Frozen	1000 gal			
Ice cream, regular	69,487	-2.60%	-4.1	-2.5
Ice cream, lowfat	41,144	2.70%	4	0.7

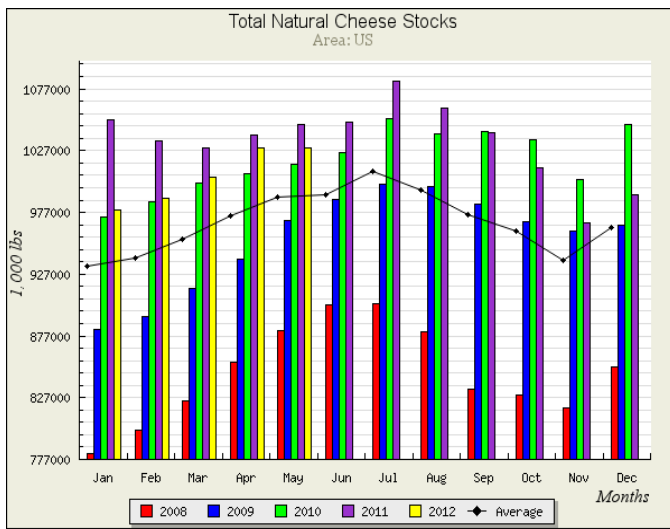
Source: Dairy Products



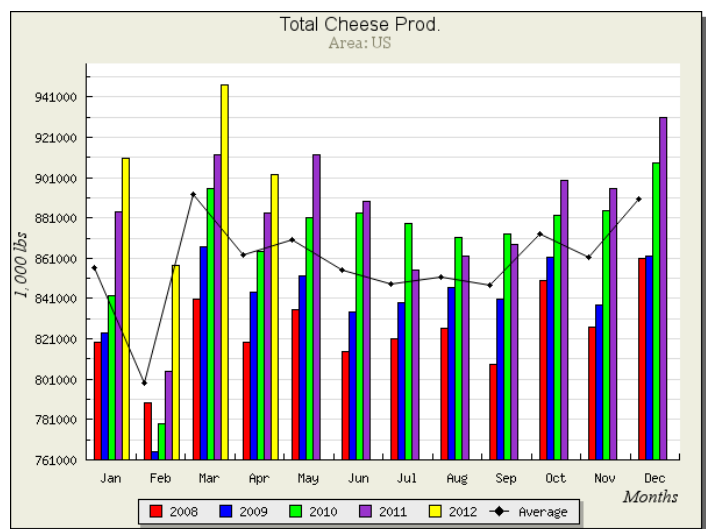
Source: Dairy Market News

Dec 11-Feb 12 Natural cheese stocks remained below 1 billion pounds but we have been over 1 billion since March 12. May cheese stocks declined slightly mostly due to a drop in cheese production from March to April. Cheddar cheese production for April was up 3.6% total American cheese was up 3.5%, total cheese up 2.1% and nonfat dry milk was up 31.1%.

2012 US Dairy Exports are a bright spot in the dairy industry. Volumes and values are both up. Feb-April 12 was up 17% for the period to \$60 million. Volume of dry ingredients was 414,559 tons, up 5% from last year. YTD total cheese is 12% higher. And YTD total dairy product sales are 21% higher. The largest single market is Mexico. YTD Mexico has purchased \$413 million worth of dairy imports from the US, +28% from last year. The second largest destination for US dairy exports, SE Asia, purchases are at \$335 million for the year, a 7% increase.



Source: Understanding Dairy Markets, U of WI

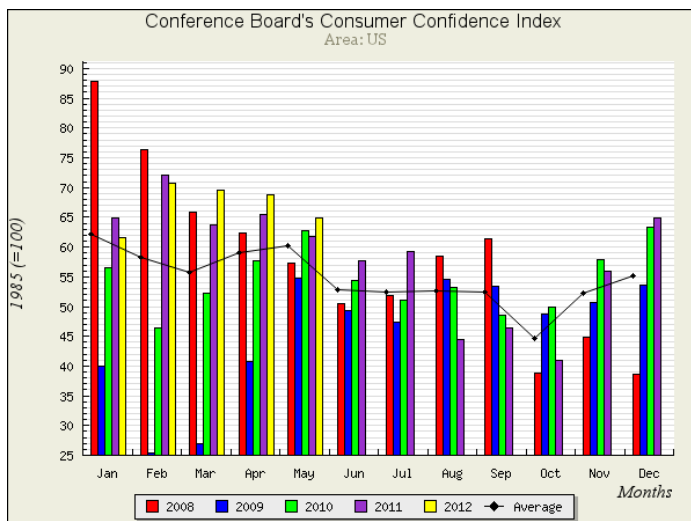


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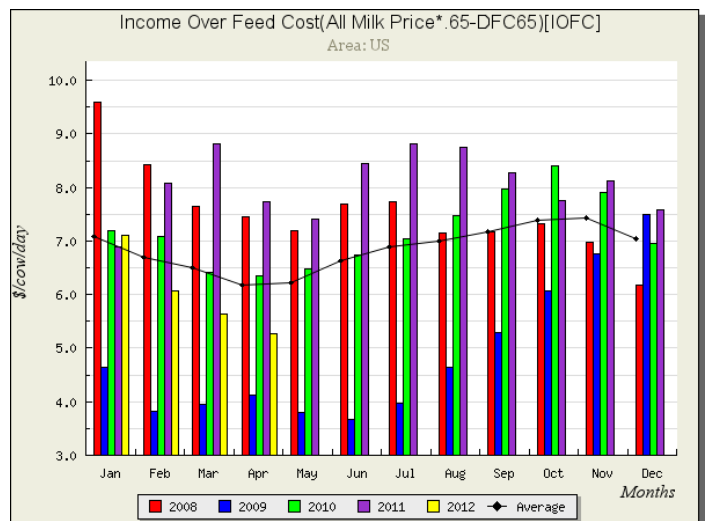
### Analysis

The April 2012 Income Over Feed Cost (IOFC) calculation for milk production is now at the lowest level since September 2009. It has declined since the beginning of the year. The last few day's weather concerns have taken over the corn and soybean markets and pushed the corn price up to \$1.50 per bushel higher. Corn condition reports continue to decline and no additional rainfall is predicted for the near-term to alleviate the situation. This does not bode well for US dairy producers. Fortunately Class III milk prices have been rising since early May.

The Consumer Confidence Index has been declining since this past February to just below 65. On the other hand the Restaurant Industry Index has been above 100 since Oct 11 and is at 102.2 now. The expectations are also above 100. When these indices are above 100 restaurant performance and expected conditions is that expansion will occur. That would lead one to conclude that economic conditions are improving. However jobs data provides a less optimistic view.

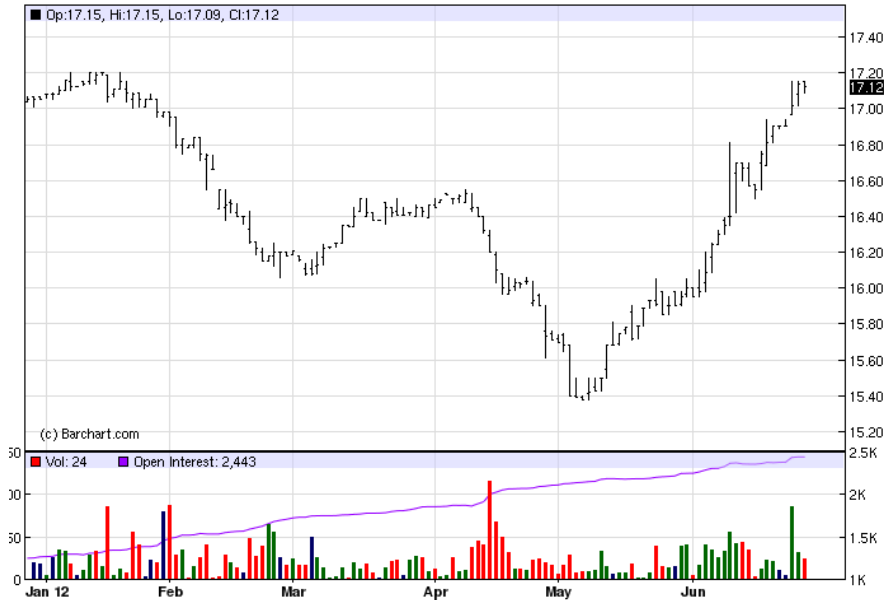


Source: Understanding Dairy Markets, U of WI



Source: Understanding Dairy Markets, U of WI

DLZ12 - Class III Milk - Daily OHLC Chart



Source: Barchart.com Dec 2012 Class III Milk Futures

*Robert Tigner*

## It's Still a Weather Market

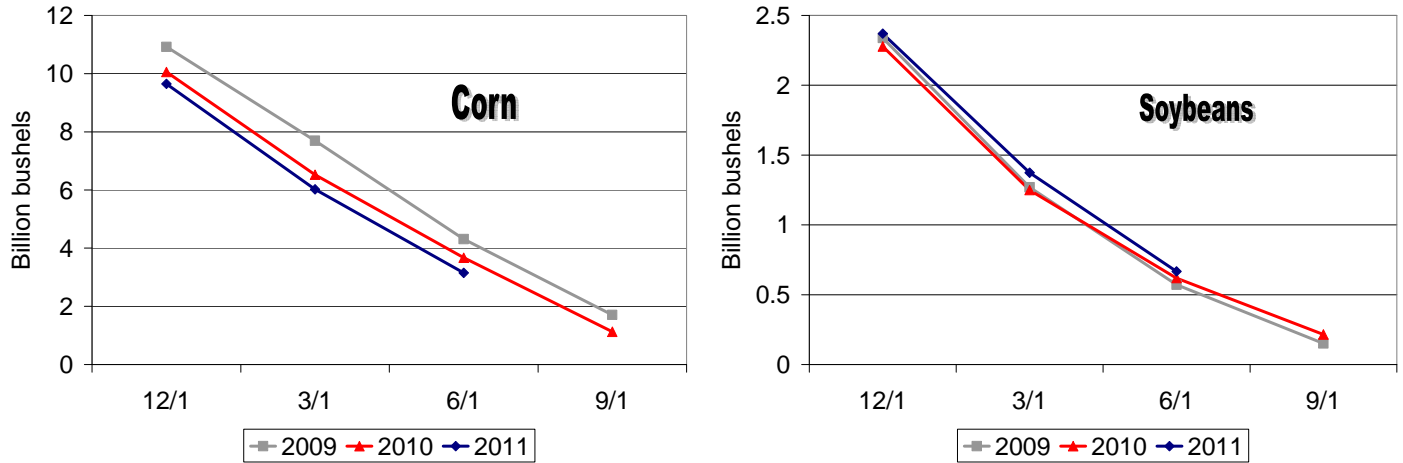
USDA released two crop reports on Friday, the Grain Stocks report and the Acreage report. Usually these are big reports that can have tremendous impacts on the market. However, the market response to the latest USDA reports was muted at best. Weather has dominated the market scene over the past two weeks and continues to do so after these reports. Between the heat and dry conditions, both the corn and soybean crops have been stressed. And that stress has shown up in the Crop Conditions reports. At the beginning of June, 72 percent of the corn crop and 65 percent of the soybean crop were rated good to excellent. By the end of June, those ratings had dropped to 56 percent for corn and 53 percent for soybeans. And in general the forecast remains warm and dry.

### Grain Stocks

The stocks report showed corn stocks down 14 percent from last year as quarterly disappearance was roughly stable with last year. As of June 1, we still had 3.15 billion bushels in storage. The key for the last quarter of the marketing year will be ethanol. We have already had a few ethanol plants shut down, with a few more slowing down production. While the quarterly disappearance of corn has roughly kept pace with last year's disappearance, the break in ethanol production could allow stocks to build up a little more than anticipated earlier.

Soybean stocks are 8 percent higher than last year even though disappearance picked up over the last quarter. As of June 1, 667 million bushels of soybeans were in storage. The slower export pace early in the 2011/12 marketing year is still weighing down on soybean stocks. But that export pace has been increasing over the last few months and advance export sales on the 2012 crop are running ahead of 2011. In the end, both crops will still finish the marketing year with very tight stocks. And the weather conditions are making those stocks more valuable by the day.

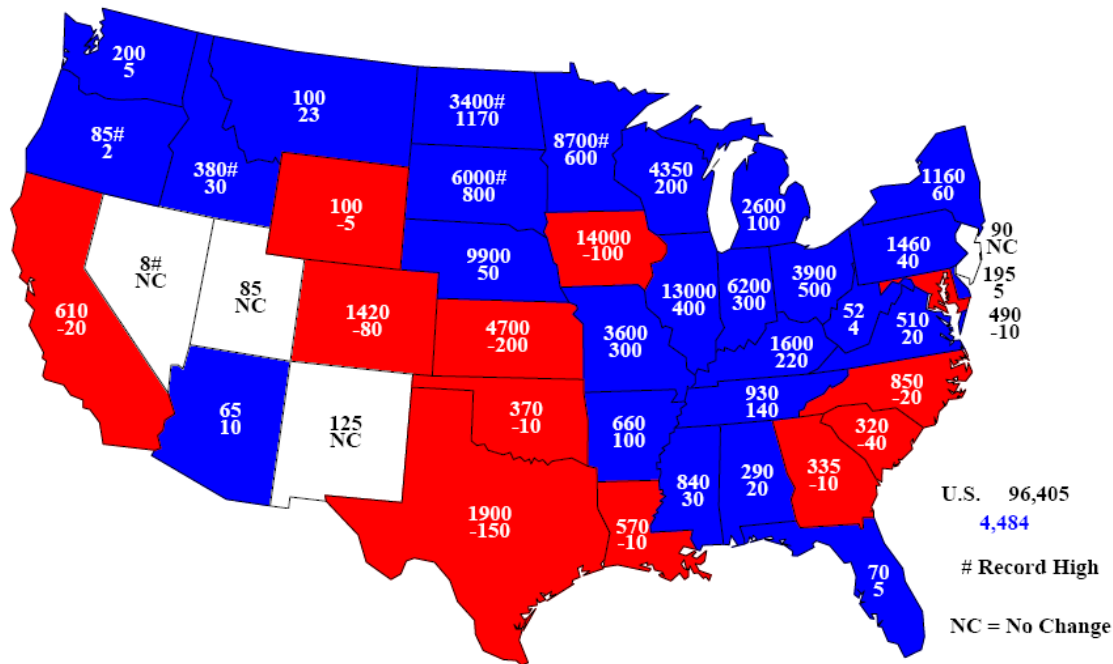
**Figure 1. Corn and Soybean Stock Levels for the 2009-2011 Crop Years**



**Acreage**

Corn and soybean acreage came in above expectations, even though the market had anticipated increased acreage. Corn area is projected at 96.4 million acres, up roughly 500,000 from the March intentions. Soybean area is estimated at 76.1 million acres, up 2.2 million from the March intentions. There were sizable swings in acreage across the states. Iowa reduced corn area to increase soybean area, where Indiana did the opposite. Illinois increased both corn and soybean plantings. Some of the biggest moves were in the Dakotas as both North and South Dakota sets records for corn and soybean plantings. Given the projected harvested area for corn, we could still set a record for corn production if national yields average 147.35 bushels per acre or above.

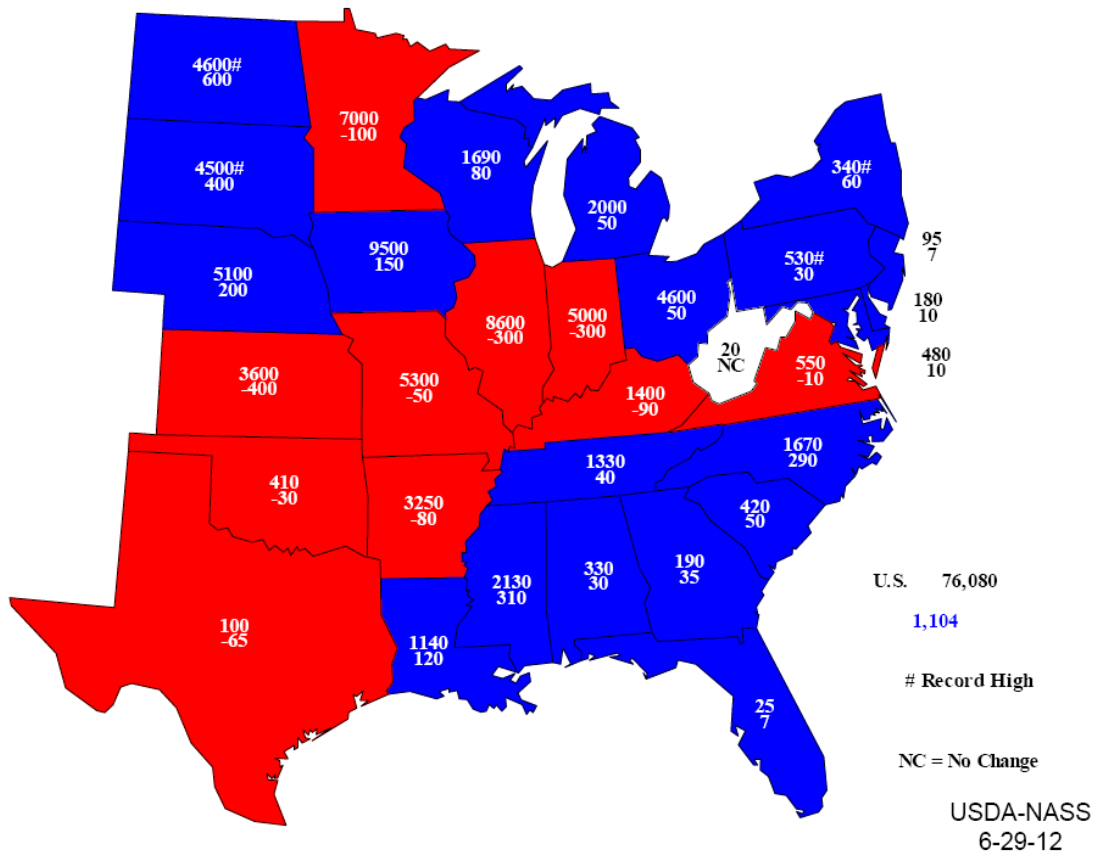
**Figure 2. Corn Acreage and Shifts from Last Year (Source: USDA-NASS)**



Note: The top number is the corn acreage in thousands of acres. The bottom number is the change in acreage from last year in thousands of acres. The symbol “#” indicates record acreage in the state.



**Figure 3. Soybean Acreage and Shifts from Last Year (Source: USDA-NASS)**



Note: The top number is the corn acreage in thousands of acres. The bottom number is the change in acreage from last year in thousands of acres. The symbol “#” indicates record acreage in the state.

### Price Response

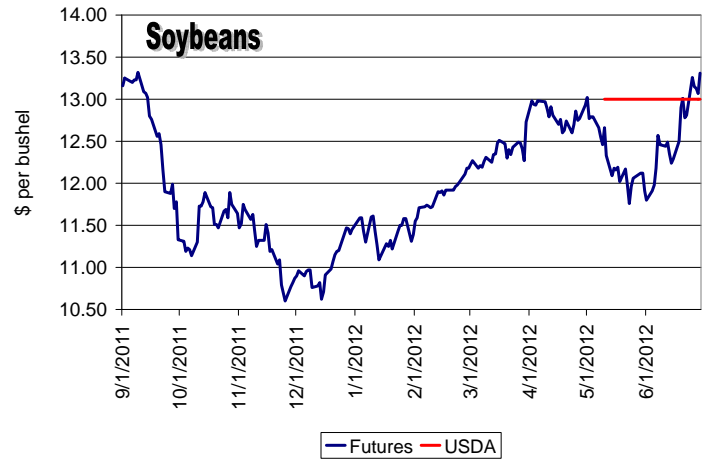
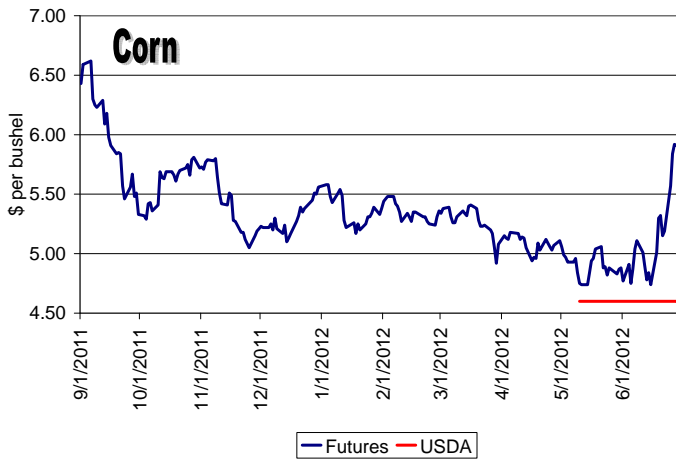
The market reaction was quick as we traded these reports for a few seconds, and then moved back to talking about the weather. Let me give Ray Jenkins credit for this line as he indicated the easy part of the price rally is now in. As we push corn prices back solidly in the \$6-7 range and soybean prices near \$15, demand will start to erode. The softness in the corn export market and the recent shutdown of a couple of ethanol plants show that erosion has begun.

Figure 4 shows the recent movement in the season-average price estimate based on futures prices. Currently, USDA has the 2012/13 season-average prices projected around \$4.60 per bushel for corn and \$13 per bushel for soybeans. For corn, the futures market has maintained prices above that mark since last fall. The weather rally has added over a buck a bushel to the price estimate over the past two weeks. So the futures market is currently indicating a 2012/13 corn season-average price around \$6 per bushel. And with our ISU Extension production costs of \$4.41 per bushel, prices right now are at fairly profitable levels.

For soybeans, the futures market had been more pessimistic about the 2012/13 crop. But the weather rally has added roughly \$1.50 per bushel here to bring the futures-based price estimate slightly above the USDA projection. With production costs at \$11 per bushel, soybean prices are also at profitable levels. The weather forecast seems to point to additional stress, and thus, higher prices. But again, demand could be on the decline as the global economy is still not in a good position. As my predecessor, Dr. Wisner, once said, it’s hard to lose money when you make a profit. And now is one of those times in the market. Forward selling a little crop now (but not more than you have insured) offers some profit. The weather rally also provides another opportunity to use put options to establish an inexpensive price floor. At the end of June, you could get a \$5.00 corn put option for December for 8 cents. Assuming a 30 cent basis at harvest, that \$5.00 put establishes a price floor at \$4.62 (the put strike price less basis and option premium). It is not often you can find price insurance above production costs that inexpensive.



**Figure 4. Projected 2012/13 Season-Average Cash Prices Based on Futures Prices**



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