

Iowa Farm Outlook

Department of Economics
Ames, Iowa

July 2013

Econ. Info. 2039

Happy Independence Day!

Happy Independence Day! As you enjoy the holiday, be sure to thank those that served and continue to serve our country. They made this holiday possible. Thank you.

June 2013 Hogs and Pigs Report Summary

On June 28 USDA released the Quarterly *Hogs and Pigs Report* as of June 1, 2013. Most final estimates were within the range of pre-report expectations for year/year changes with a few exceptions. Namely, the total market inventory decreased 0.05 percent, feeder pigs under 50 pounds decreased 0.98 percent, and feeder pigs 10-119 pounds decreased 0.37 percent generally suggesting the potential for smaller than expected shorter-term supplies.

A Rundown of the Estimates

USDA made some modest revisions to past inventory estimates to bring them in line with final pig crop, official slaughter, death loss, and updated import and export data. USDA raised their previous estimate of the December 2012 total hogs and pigs inventory by 25,000 head (0.04 percent) and lowered their estimate of the March 2013 total hogs and pigs inventory by 260,000 head (0.39 percent). They decreased the September-November 2012 pig crop by 123,000 head (0.42 percent).

Table 1 is a summary of the June 1, 2013 estimates. The U.S. total hogs and pigs inventory, at 66.6 million head, was 0.02 percent less than a year ago. The breeding herd inventory, at 5.9 million head, was up 0.34 percent and the total market hog inventory was down 0.05 percent at 60.8 million head. The inventory of feeder pigs under 50 pounds, at 19.7 million head, was down 0.98 percent and the inventory of feeder pigs 50-119 pounds, at 18.1 million head, was down 0.37 percent. Heavier classes of market hogs, 120-179 pounds and 180 pounds and over, were up 1.11 percent and 0.89 percent, respectively.

March-May sows farrowing, at 2.9 million head, was down 2.05 percent. This was the tenth smallest March-May sows farrowing since 1973 when the data became available. The March-May pig crop, at 30.1 million head, was up 0.11 percent. This was the largest March-May pig crop in the history dating back to 1973. The industry continues to realize tremendous progress in efficiency as producers have been able to increase pig crops while decreasing the breeding herd as a percent of the total hogs and pigs inventory. In fact, the March-May pigs per litter set a new all-time record high at 10.31, a 2.18 percent increase from the previous year.

The outlook for hog supplies in 2014 will be affected by producer intentions to farrow more sows in the second half of this year. Intentions are for June-August sows farrowing to be down 0.10 percent and September-November sows farrowing to be up 1.00 percent; netting about one-half of one percent increase in the second half of 2013. Projecting farrowing intentions out with projected commensurate pigs per litter it looks like the potential is there for a new record high for the June-August pig crop at 29.9 million head. The September-November pig crop, with such a large year/year increase in sows farrowing intentions, makes a projection of 29.9 million head also a new record high. Overall, the take-home contribution is pig crops remain and project to be very large compared to historical levels, in fact, at or close to record highs.

Prospects for 2014 have begun to come into focus, although the size of this summer's crops can still have a strong influence on final outcomes, especially with regard to costs of production and to pork supplies in 2014. Any large expansion in the hog industry is likely on hold awaiting better clarification of the size and prices for new-crop production and the implications for hog production costs. Expansion, if it occurs, would not be expected until the fall. Retention of additional gilts at that time to expand the herd means the impact on supplies would begin to be realized in the summer and fall of 2014.

Table 1. Summary of USDA June 2013 Hogs and Pigs Report ^{1/}

	U.S.		Iowa	
	1,000 Head	% Change from Year Ago	1,000 Head	% Change from Year Ago
All Hogs and Pigs	66,647	-0.02	20,400	0.00
Breeding Herd	5,882	0.34	1,030	0.98
Market Hogs	60,765	-0.05	19,370	-0.05
<50 lbs	19,676	-0.98	5,140	0.00
50-119 lbs	18,052	-0.37	6,240	-2.04
120-179 lbs	12,339	1.11	4,700	1.51
180+ lbs	10,698	0.89	3,290	1.54
Sows farrowing				
Dec-Feb ^{2/}	2,879	0.52	485	2.11
Mar-May	2,921	-2.05	495	0.00
Jun-Aug ^{3/}	2,925	-0.10	500	1.01
Sep-Nov ^{3/}	2,917	1.00	495	-1.98
Pig crop				
Dec-Feb ^{2/}	29,019	1.64	5,020	2.60
Mar-May	30,111	0.11	5,198	0.97
Pigs per Litter				
Dec-Feb ^{2/}	10.08	1.10	10.35	0.49
Mar-May	10.31	2.18	10.50	0.96

^{1/}The full report can be found at: <http://usda01.library.cornell.edu/usda/current/HogsPigs/HogsPigs-06-28-2013.pdf>.

^{2/} December preceding year.

^{3/} Intentions for 2013.

Relationship of Pig Crops to Commercial Hog Slaughter Two Quarters Later

The historical relationships between pig crops and subsequent slaughter can be used as a guide to forecast slaughter numbers (Figure 1). Based on these estimates July-September 2013 slaughter would be up 1.62 percent, October-December 2013 slaughter up 1.08 percent, January-March 2014 slaughter up 1.97 percent, and April-June 2014 slaughter up 0.72 percent. However, fewer pigs coming from Canada could reduce the number of pigs available for marketing. The 11.4 percent year-to-date decrease in the feeder pig imports from Canada, with the largest decreases occurring in the second quarter of 2013, helps to explain the lower inventories of feeder pigs under 50 pounds and feeder pigs 50-119 pounds.

Price Forecasts

Table 2 contains the Iowa State University price forecasts for the next four quarters and the quarterly average futures prices based on June 28, 2013 settlement prices. The futures price forecasts are adjusted for an historic Iowa/Southern Minnesota basis. The table also contains the forecasted year/year changes in hog slaughter, which are expected to see year/year increases.

Figure 1. Commercial Slaughter vs. Pig Crop

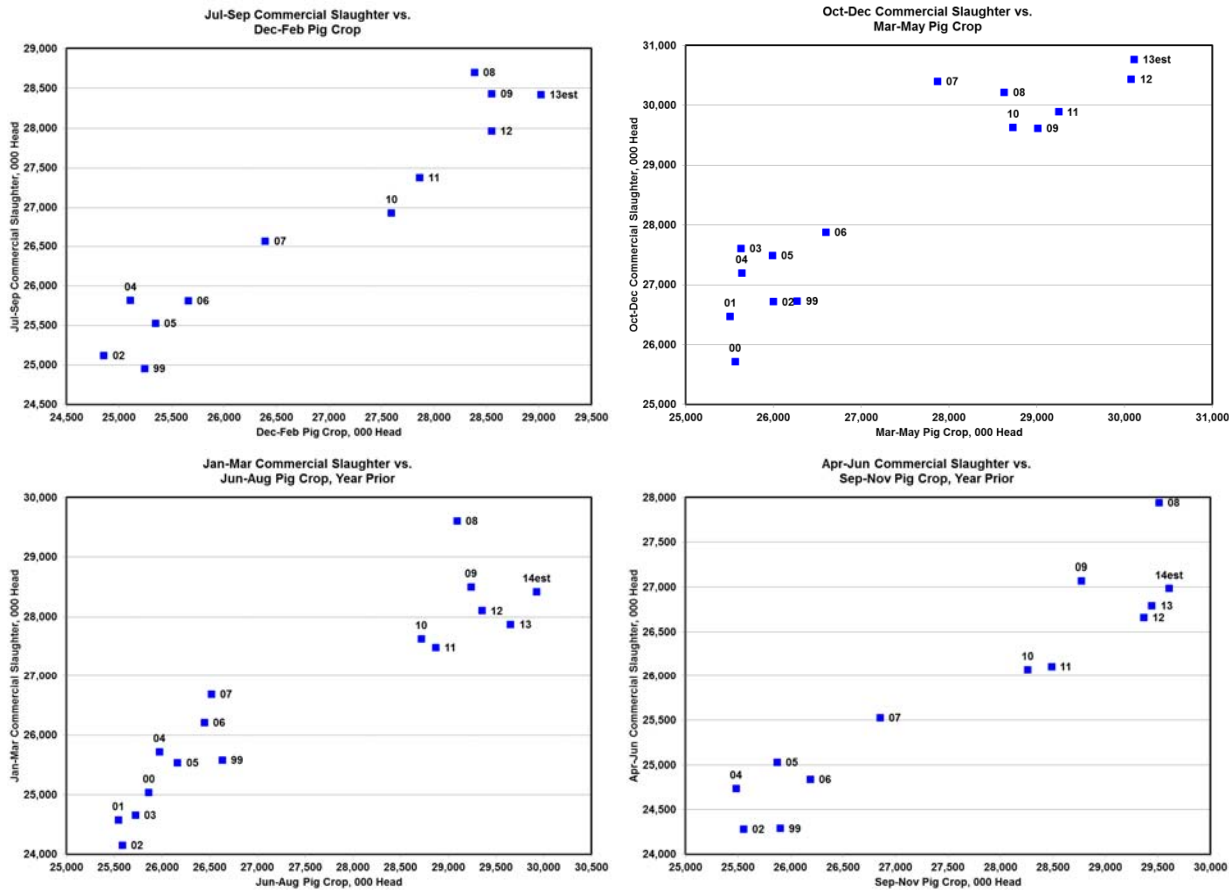


Table 2. Slaughter and Iowa Lean Hog Price Forecasts, 2013-2014

	Slaughter	ISU Model Price Forecast	CME Futures (06/28/13) Adjusted for IA/So MN Basis
	-----% change year/year-----	-----(\$/cwt)-----	
Jul-Sep 2013	1.62	89-95	91.94
Oct-Dec 2013	1.08	77-82	79.90
Jan-Mar 2014	1.97	77-83	80.55
Apr-Jun 2014	0.72	86-90	87.53

Lee Schulz

Milk Production Increases in May

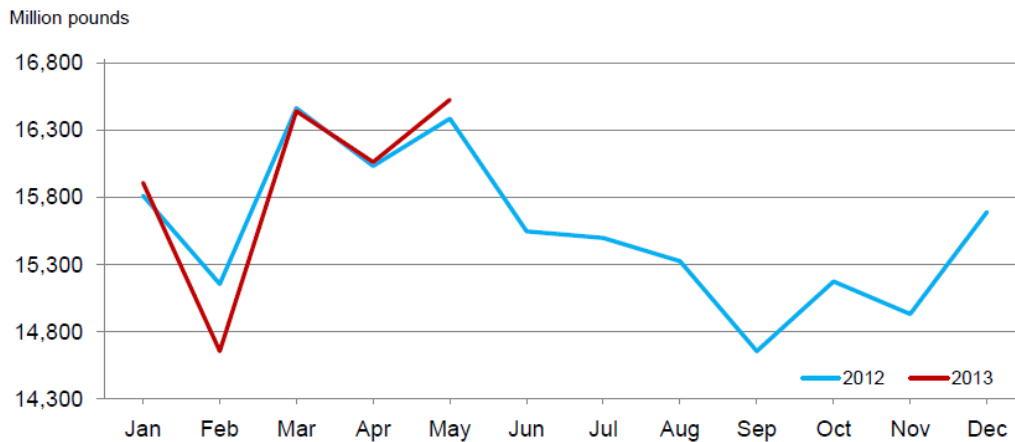
May 2013 23 major dairy states milk production increased by 0.9%. April 2013 milk production was revised to a 0.2% from the prior year, which was a drop of 0.1% or a decrease of 20 million pounds. The following chart does not include the usual data since the National Ag Statistics Service of USDA has suspended the survey needed to include all of the numbers. Some of the usual graphs are missing for the same reason. Seven of the 23 reporting dairy states lost milk production, MO, OR, CA, AZ, NM, UT and TX. KS was the largest milk production gainer at 8.05% and second was Indiana at 5.2%.

USDA's "Livestock Slaughter" report said dairy producers sent 244,000 dairy cows to slaughter during May 2013, 20,000 less than April 2013 and 3,000 less than one year ago. Because USDA is not surveying dairy farms to ascertain milk cow slaughter numbers due to sequestration, we do not know current milk cow numbers.

Table 1. Milk Production: Selected Dairy States, May 2013

State	2012	2013	% change total milk
	total milk production (million pounds)	total milk production (million pounds)	
Iowa	382	393	2.88%
MN	777	791	1.80%
WI	2,339	2,366	1.15%
IL	171	174	1.75%
CA	3,744	3,726	-0.48%
CO	278	282	1.44%
KS	236	255	8.05%
ID	1,172	1,175	0.26%
AZ	418	410	-1.91%
NM	722	714	-1.11%
PA	914	935	2.30%
NY	1,153	1,177	2.08%
TX	847	840	-0.83%
23-State	16,384	16,525	0.86%

Monthly Milk Production – 23 Selected States



Source: Milk Production, USDA

Livestock Slaughtered Under Federal Inspection, By Class – United States

[Data may not add to totals due to rounding]

Class	May 2012	April 2013	May 2013	January to May		May 2012	April 2013	May 2013	January to May	
	(1,000 head)	(1,000 head)	(1,000 head)	2012	2013	(percent of total)	(percent of total)	(percent of total)	2012	2013
Cattle				(1,000 head)	(1,000 head)	(percent of total)	(percent of total)	(percent of total)	(percent of total)	(percent of total)
Steers	1,489	1,313	1,455	6,514	6,470	52.5	48.8	51.5	49.1	49.2
Heifers	786	780	762	3,939	3,788	27.7	29.0	27.0	29.7	28.8
All cows	514	548	555	2,586	2,680	18.1	20.4	19.7	19.5	20.4
Dairy cows	251	268	248	1,294	1,347	8.9	10.0	8.8	9.8	10.2
Other cows	263	280	307	1,292	1,333	9.3	10.4	10.9	9.7	10.1
Bulls	47	47	50	219	218	1.7	1.8	1.8	1.6	1.7
Total	2,836	2,689	2,823	13,257	13,156	100.0	100.0	100.0	100.0	100.0

Source: Livestock Slaughter, USDA

Demand or Disappearance

Commercial disappearance fell by 0.6% Jan-Mar 2013 compared to the same period one year ago. Fluid milk consumption is down 2.1% for the same Nov-Jan 2013. One year ago fluid milk consumption was down 0.9% Jan-Mar 2013. When adding the April consumption report, YTD fluid milk consumption is -2.3. Butter consumption was up by 5.4% Jan-Mar 2013. American cheese was up 0.3% during the same period. NFDM was off by 15.4% however.

Item	Jan.-Mar.	Percent	Jan.-Mar.	Percent	Jan.-Dec.	Percent	Jan.-Dec.	Percent
	2012	change ^{2/}	2013	change ^{2/}	2011	change ^{2/}	2012	change ^{2/}
Million Pounds								
MILK								
Production	51,044	4.3	50,495	0.0	195,674	1.3	200,284	2.1
Marketings	50,798	4.3	50,251	0.0	194,686	1.3	199,297	2.1
Beginning Commercial Stocks ^{2/}	10,983	0.5	12,194	11.0	10,927	-3.6	10,983	0.5
Imports ^{2/}	775	8.4	811	5.9	3,220	3.9	3,673	13.8
Total Supply ^{2/}	62,556	2.9	63,256	2.8	208,833	1.1	213,953	2.0
Ending Commercial Stocks ^{2/}	13,600	12.3	15,106	11.1	10,983	0.5	12,194	11.0
Net Removals ^{2/}	0	0.0	0	0.0	0	-100.0	0	0.0
Commercial Disappearance ^{2/}	48,956	1.5	48,150	-0.6	197,850	1.2	201,759	1.7
SELECTED PRODUCTS ^{2/}								
Butter	430.8	0.8	449.0	5.4	1,809.9	11.0	1,844.4	1.6
American Cheese	1,072.0	0.4	1,063.1	0.3	4,271.1	0.1	4,369.4	2.0
Other Cheese	1,683.3	3.2	1,666.9	0.1	6,670.2	4.4	6,795.8	1.6
Nonfat Dry Milk	468.0	27.1	393.8	-15.0	1,494.6	-3.6	1,766.7	17.9
Fluid Milk Products ^{2/}	13,538.8	-2.4	13,275.4	-0.9	53,714.2	-1.9	52,850.7	-1.9

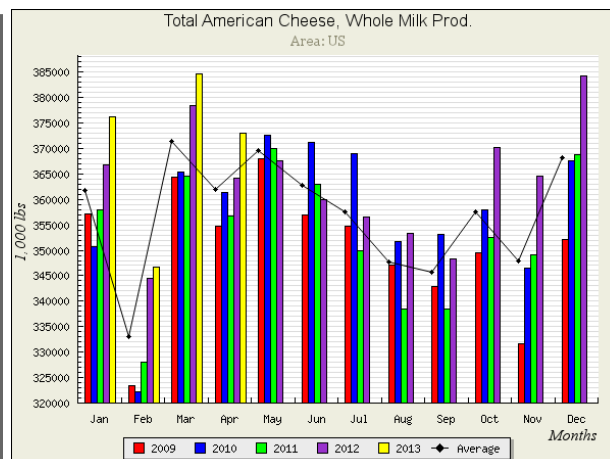
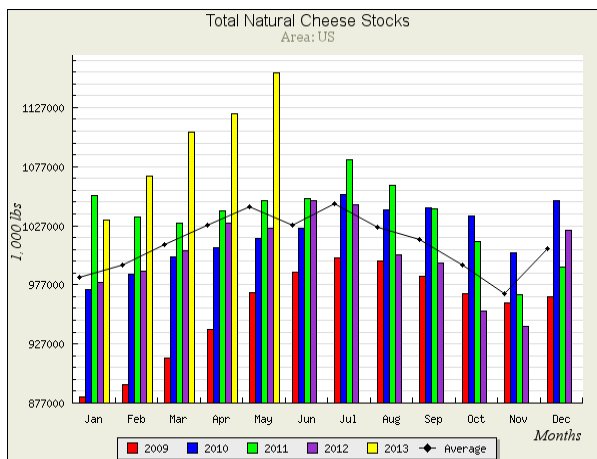
Source: Dairy Market News, USDA

Table 2. Dairy Product Manufacture: April 2013

Product	Production	Apr 2012	Mar 2013	YTD
	1,000 pounds	% change	% change	% change
Butter	169,348	-0.30	-6.9	2.1
Cheese, total	928,223	3.20	-2.9	1.3
Cheddar	276,291	4.40	-2.7	
Other American	96,757	-2.80	-3.8	
Swiss	26,487	-4.60	7.7	
Italian Style	397,001	2.90	-4.0	0.1
NDM	160,780	-15.70	7.0	-15.9
Sour Cream	97,992	0.90	-6.7	-0.2
Yogurt	378,118	8.30	-9.9	3.4
Dry Whey, total	81,975	-2.60	-1.5	-6.9
Lactose	88,956	1.80	-4.5	0.8
WPC	37,617	1.40	-3.3	-1.5
Frozen	1,000 gallons			
Ice cream, regular	71,575	1.50	2.0	-1.4
Ice cream, lowfat	39,105	-12.10	-3.3	-13.3

Source: Dairy Products, USDA

The most recent report on cheese stocks reported over 1.156 billion pounds in cold storage. That is the largest cheese stocks since July 1984. And the cheese stocks grew by 8% from one year ago and 3% compared to the previous month.

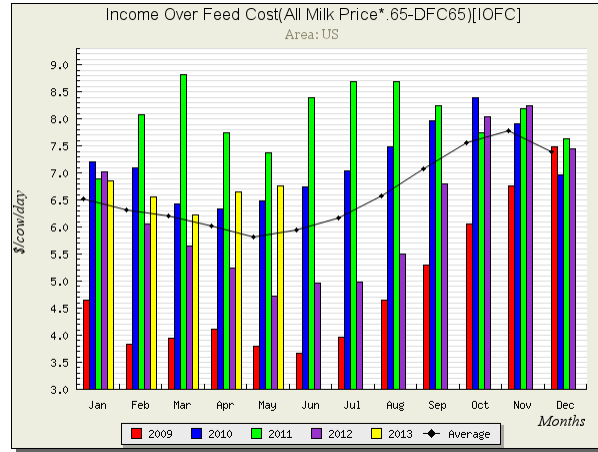
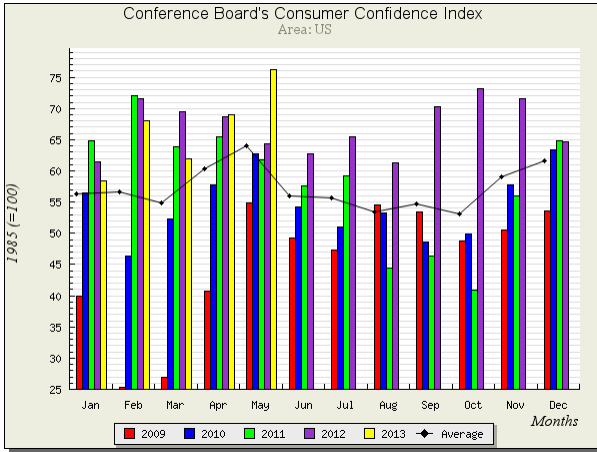


Source: Understanding Dairy Markets, U of WI

Source: Understanding Dairy Markets, U of WI

Analysis

The Consumer Confidence Index took a big jump for May, up 7.2 points to 76.2. The restaurant performance was once again above 100. “Driven by higher same-store sales and an improving outlook among restaurant operators, the National Restaurant Association’s [Restaurant Performance Index](#) (RPI) hit a 10-month high in April.” Source: National Restaurant Association. Income Over Feed Cost rose by 11.7 cents from April to May 2013.

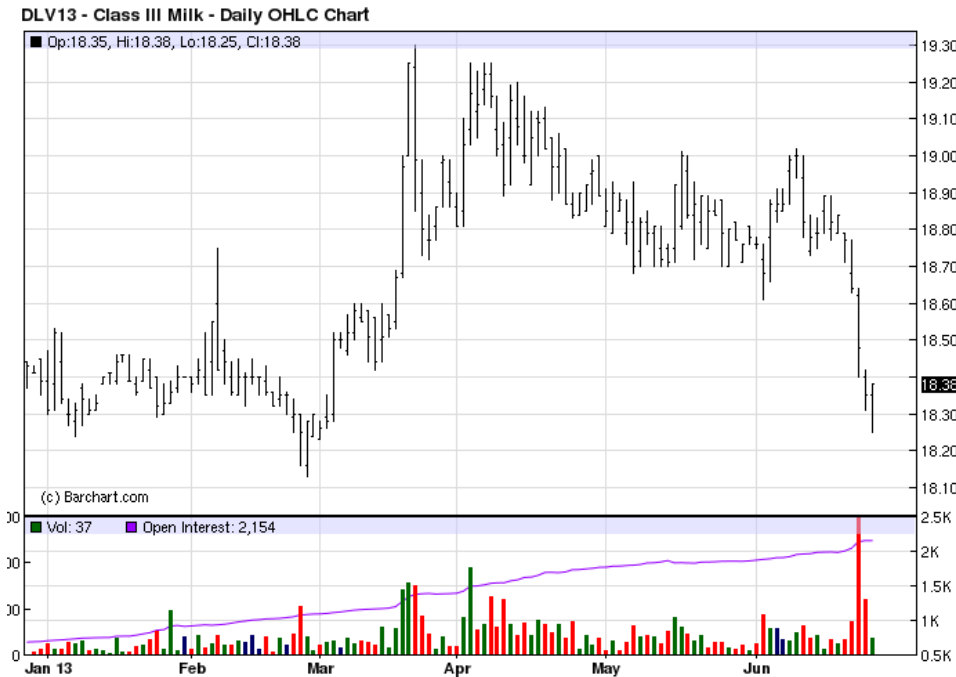


Source: Understanding Dairy Markets, U of WI

Source: Understanding Dairy Markets, U of WI

Below is the Oct 2013 Class III milk price at the CME as of June 26. Class III milk for Oct 2013 closed at \$18.38. We have lost just over \$1 per cwt. in the past 2 months.

The dairy markets appear to be responding to the addition to cheese stocks during the last few months as well as additional milk production. We also have seen reduced new crop corn prices compared to old crop. That crop price change is likely to cause some traders to expect dairy farmers to produce more milk in the near future.



Barchart.com: October 2013 Class III milk

Acreage Aplenty

Late June is always an important time for USDA reports. We get updates on both old and new crop prospects. For the old crop, the update is in the Grain Stocks report. For the new crop, the update is in the Acreage report. Let's start with the old crop. With the drought last year, supplies were down and thus, stocks have been running well below last year's levels. The June update was no exception to this pattern. Corn stocks were down 12% from last year, at 2.76 billion bushels. Soybean stocks were down 35% from last year, at 435 million bushels.

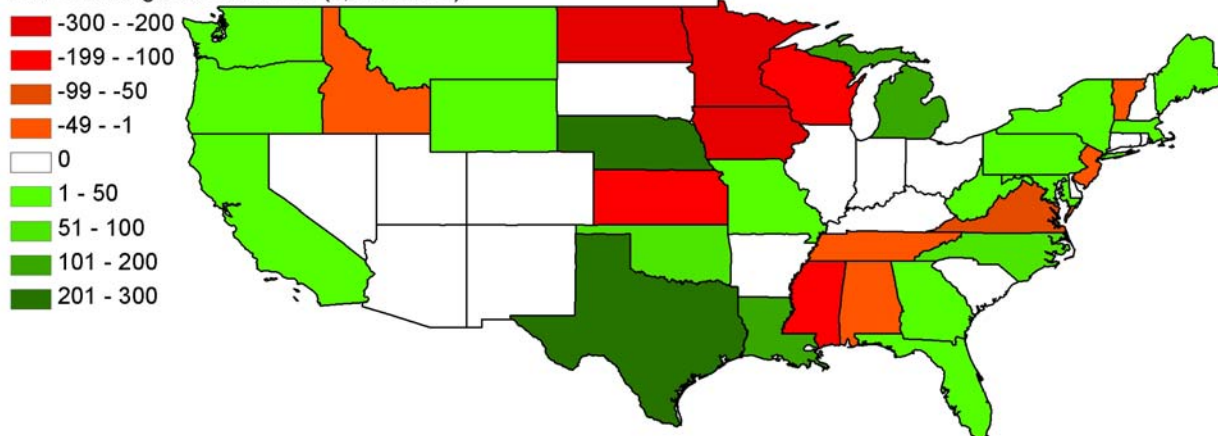
Quarterly disappearance (March-May) for corn was 2.64 billion bushels, down 8% from last year. For soybeans, 564 million bushels were used this quarter, down 20% from last year. So stock levels remain tight, but that was expected. One of the more interesting features in the stocks report was where the stocks are being held. For corn, the split is fairly even between on-farm and off-farm storage. Both are down 10-15% this year. For soybeans, more beans are held off-farm, but the percentage decline from last year is much bigger there as well. While on-farm soybean stocks are down 4% from last year, off-farm soybean stocks are down 46%. So elevators and soybean processors are in a much tighter situation than last year.

Overall for the 2012 crops, the picture remains as it has been for awhile. Stocks will end near pipeline levels. Corn prices will average nearly \$7 per bushel. Soybeans will finish the year with a season-average price above \$14 per bushel. Both crops will set record prices for the 3rd year in a row.

Shifting gears to look at the new crops, the Acreage report did have a surprising number for corn. Going in, the expectation was for lower corn area and higher soybean area. Well, we got half of that. Compared to the March planting intentions, corn plantings were up nearly 100,000 acres for a total of 97.4 million acres. Soybean planted area was up roughly 600,000 acres for a total 77.7 million acres. That's a record for soybeans and the highest corn area since 1936. Figures 1 and 2 show where the gains came from. For corn, the vast majority of the acreage gains came from states outside the Corn Belt. Iowa, Minnesota, Kansas, North Dakota, and Wisconsin lost a lot of projected corn acres. But the gains from the coasts, Nebraska, Texas, and Michigan more than made up for those losses. So while the acreage is high, we need to temper our production estimates because the yields are traditionally lower where the new acreage came from.

Figure 1. Corn Plantings vs. Intentions

Corn Plantings vs. Intentions (1,000 acres)



For soybeans, the land gains were more concentrated in the major producing regions. Missouri gained the most, compared to intentions, but most of the Corn Belt states increased soybean plantings. The biggest losses were in Michigan and North Dakota. Some of Michigan's intended soybean land ended up in corn, given the favorable planting conditions there. North Dakota ended up shifting away from both corn and soybeans.

The crop acreage maps mirror the story being told in Figure 3, a soil moisture map. Wet conditions have hampered plantings in North Dakota, Minnesota, Iowa, Wisconsin, Missouri, and Illinois. Dry conditions still hold sway over the Central and Southern Plains. The best weather conditions for corn and soybean planting have been in the eastern Corn Belt, especially from Indiana through Pennsylvania.

Figure 2. Soybean Plantings vs. Intentions

Soybean Plantings vs. Intentions (1,000 acres)

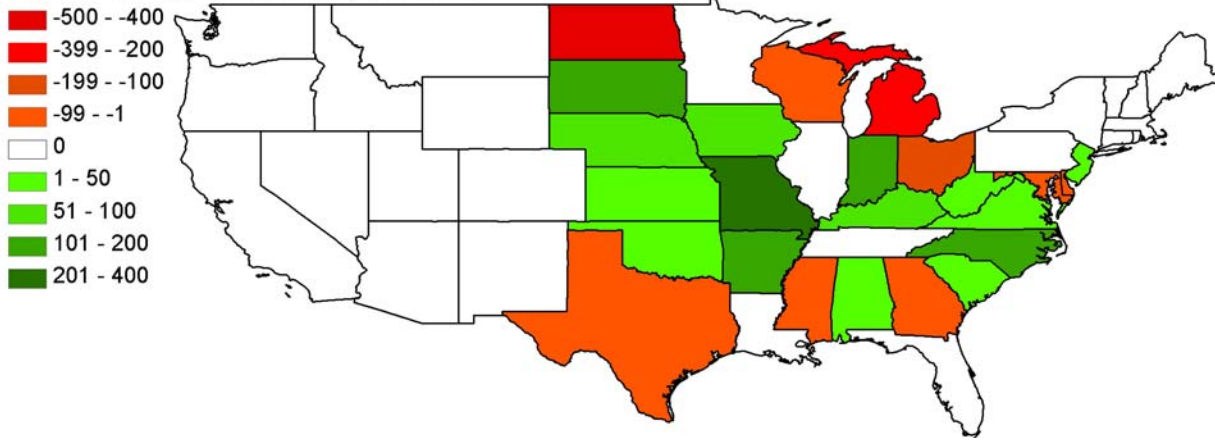
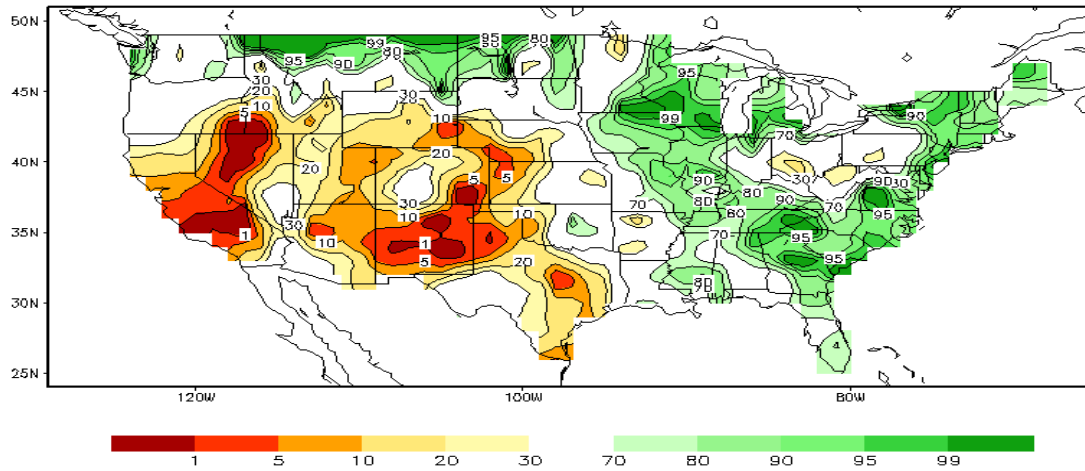


Figure 3. Soil Moisture (Source: NOAA-CPC)

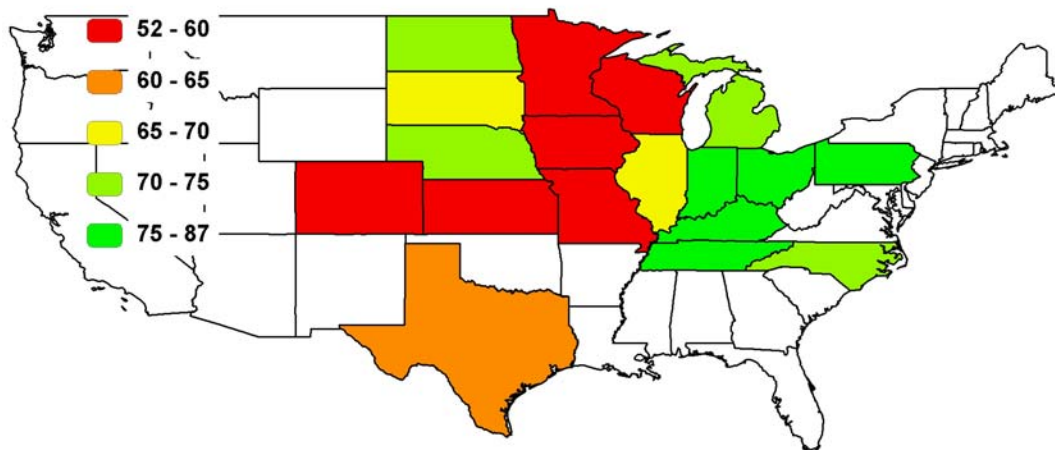
Calculated Soil Moisture Ranking Percentile
JUN 28, 2013



And those same features show up as we look at crop ratings for the young crops. Figures 4 and 5 show the crop ratings at the end of June. For both crops, the eastern Corn Belt has the best crops. Illinois is caught in the middle. And the crops along the I-35 corridor are in the most trouble. Crop conditions improve again as we venture farther west.

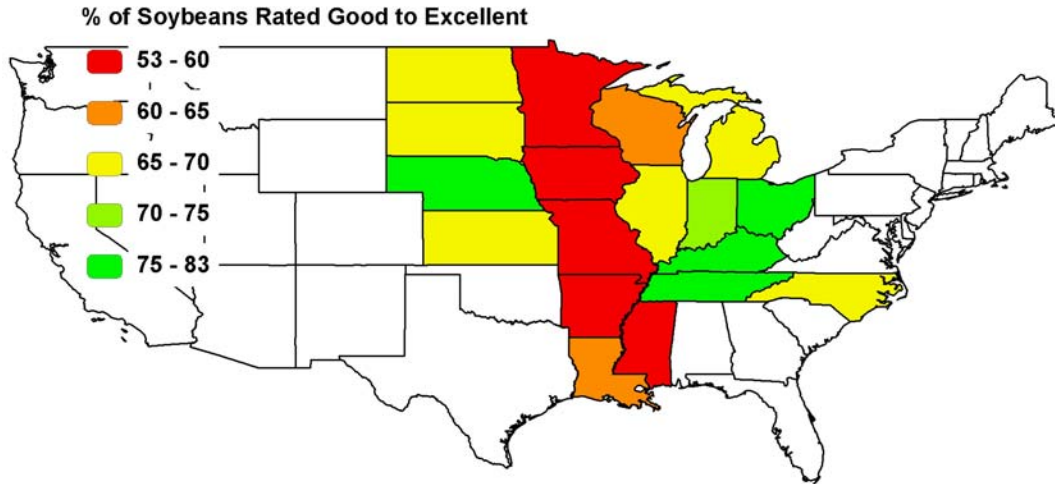
Figure 4. % of Corn Rated Good to Excellent

% of Corn Rated Good to Excellent



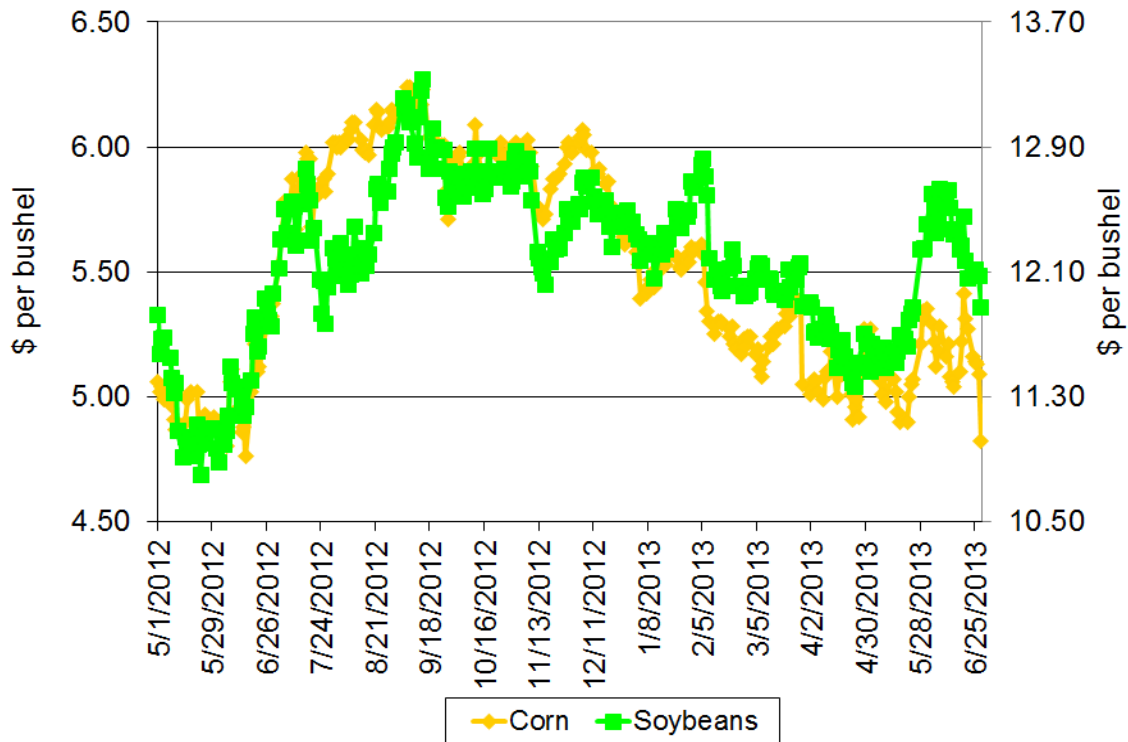
A few days ago I drove from Ames to Dubuque and back. The view was decidedly mixed. While there were some fields that looked as they should for this time of year, many fields had drowned-out patches, showed definite evidence of replanting, and/or had significant variable plant height. Hopefully, I was seeing the worst of this year's crops from my windshield tour.

Figure 5. % of Soybeans Rated Good to Excellent



The crop markets are trying to decipher which will have the bigger impact, the great looking crop in the eastern Corn Belt or the poor looking crop in Iowa. The market's initial reaction to the reports was downward, but not too much below where we have already been. Figure 6 shows my tracking of the 2013/14 projected season-average prices based on futures prices. While corn did slide below \$5 per bushel after the Acreage report, the prices are still in the range we saw in April and May. Soybeans held up a bit better and new crop prices are holding above the levels we had in April and May.

Figure 6. Projected Season-Average Prices from Futures



The new acreage numbers, when combined with USDA's current yield estimates, point to just under a 14 billion bushel corn crop and 3.4 billion bushel soybean crop. Both of those crops would be records. Typically, record production drives prices down below production costs. But that is not setting up to be the case thus far.

Projected margins for both corn and soybeans remain positive, just a little smaller than before. Barring a major weather event, prices will likely continue to hover in the \$5 range for new crop corn and \$12 range for new crop soybeans over the course of the summer. Those prices will allow demand to continue to rebuild and set up the 2013/14 crop year as another profitable one.

Chad Hart

Dr. Chad Hart
Associate Professor of Economics
Extension Crop Marketing Specialist
468 Heady Hall
Phone: (515) 294-9911
Fax: (515) 294-0221
chart@iastate.edu
www.econ.iastate.edu/~chart

Dr. Lee Schulz
Assistant Professor of Economics
Extension Livestock Economist
478 Heady Hall
Phone: (515) 294-3356
Fax: (515) 294-0221
lschulz@iastate.edu
www.econ.iastate.edu/people/faculty/schulz-lee

Robert Tigner
Extension Educator
University of Nebraska, Lincoln
135 West 5th Street
Imperial, NE 69033
Phone: (308) 882-4731
robert.tigner@unl.edu

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Many materials can be made available in alternative formats for ADA clients. To file a complaint of discrimination, write USDA, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964.