

Iowa Farm Outlook

Department of Economics
Ames, Iowa

April 2015

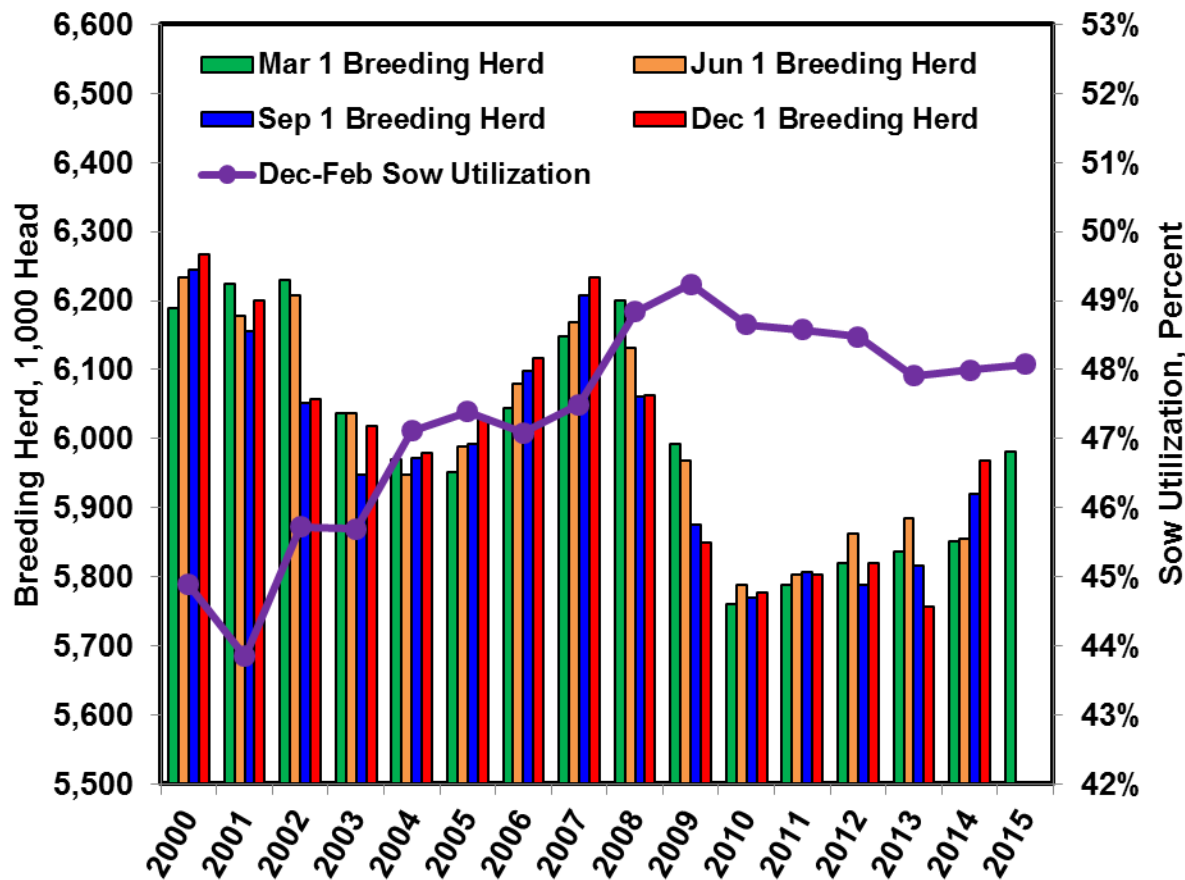
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March Hogs and Pigs Analysis

The USDA March Hogs and Pigs report came in near trade expectations and indicated larger pork supplies ahead. One of the largest increases of any one category was the Dec-Feb pig crop, which will produce the third quarter slaughter, was 9.2% higher than a year ago. Supplies for the coming 12 months are forecast to exceed year earlier levels, but the greatest concern for prices and profits is in the fourth quarter. While disastrously low prices are not currently forecast, larger than expected increases in Mar-May sows farrowing or weaning rates could push total fourth quarter slaughter levels higher and further pressure prices.

The breeding herd inventory, at 5.982 million head, was up 2.2% compared to one year ago. This is the largest breeding herd inventory since June 2009 (figure 1). Breeding herd additions totaled 13,000 head during the December-February period. Sow utilization, December-February sows farrowing divided by December 1 breeding herd, at 48.1% was slightly higher than 2013/14 (48.0%) and but still below the 2008-12 average (48.6%). The increase in the breeding herd and sow utilization was smaller than was expected pre-report and suggests producers have toned-down expansion plans in light of recent price declines.

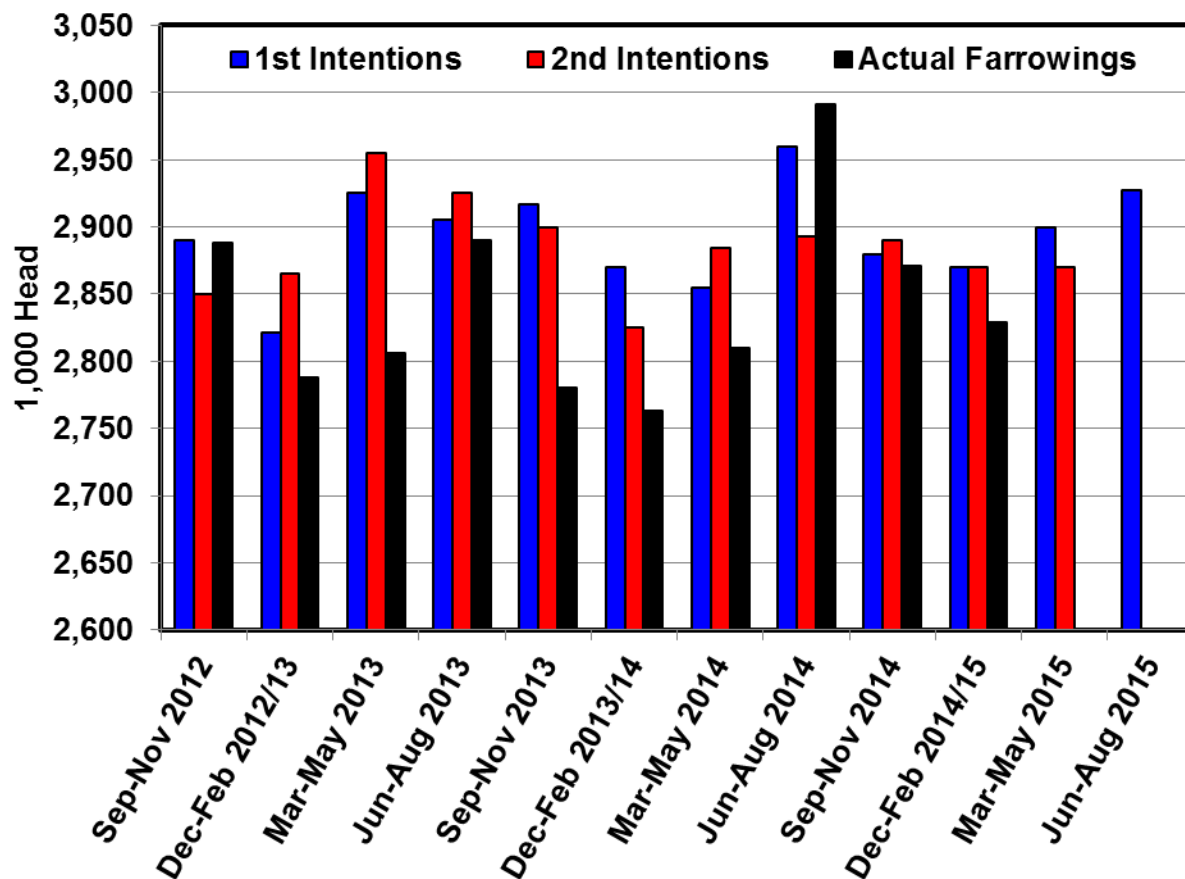
Figure 1. U.S. Breeding Herd Disposition and Utilization



Data Source: USDA-NASS.

The number of sows farrowing during December-February was 2,829,000 head; below the first and second intentions for that quarter (figure 2). Thus, fewer hogs will be marketed in June-August than had earlier been anticipated. The second intentions for March-May were smaller than the first intentions for that quarter. March-May sows farrowing, at 2,870,000 head, would be up 2.1% compared to a year ago. Producer's optimism about future profits have likely waned which has led to reduced farrowing intentions. The first intentions for June-August can be compared to the previous quarter or to the same quarter a year earlier. The level of intentions says producers are increasing supplies relative to the previous quarter but decreasing supplies compared to levels realized a year earlier.

Figure 2. Quarterly U.S. Sows Farrowing and Farrowing Intentions



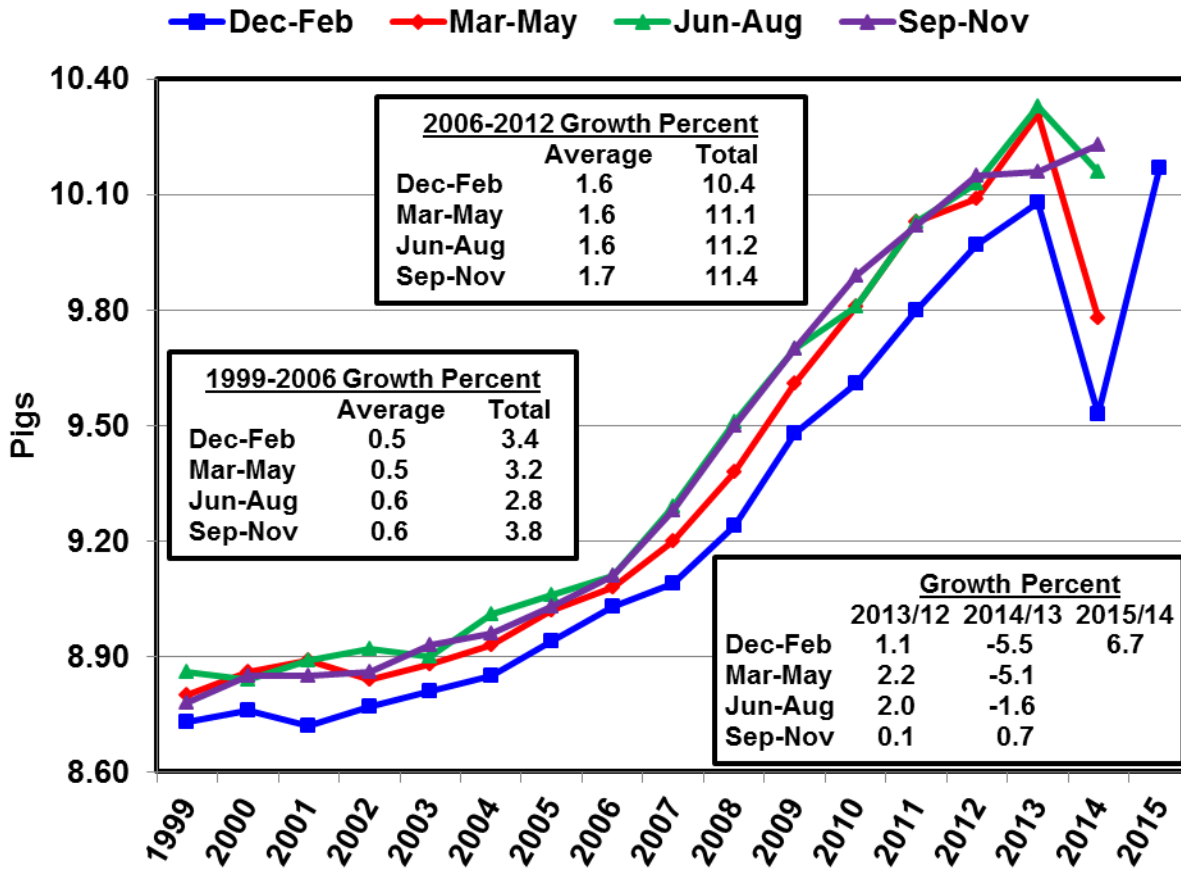
Data Source: USDA-NASS.

The December-February pigs saved per litter estimate, at 10.17 pigs, was up 6.7% compared to a year ago and a return to a more “normal” productivity level but one well short of the 1.6% growth rate that been seen from 2006 to 2012 (figure 3). The December-February sows farrowing, at 2.829 million head, was up 2.4%. Thus netting a 9.2% increase in the September-November pig crop compared to a year ago.

USDA Hogs and Pigs Estimates

Table 1 provides a summary of the March 1, 2015 hogs and pigs estimates for the U.S. and Iowa. The U.S. total hogs and pigs inventory, at 65.934 million head, was 7.2% above a year ago. The total market hog inventory was up 7.7% at 59.953 million head and the breeding herd inventory, at 5.982 million head, was up 2.2%. The Iowa total hogs and pigs inventory, at 20.400 million head, was 4.6% above a year ago. The total market hog inventory was up 4.8% at 19.370 million head and the breeding herd inventory, at 1.030 million head, was up 2.0%.

Figure 3. Quarterly U.S. Pigs Saved Per Litter



Data Source: USDA-NASS.

Table 1. USDA NASS Quarterly Hogs and Pigs Report Summary

	U.S.			Iowa		
	2014	2015	2015 as % of 2014	2014	2015	2015 as % of 2014
March 1 inventory *						
All hogs and pigs	61,494	65,934	107.2	19,500	20,400	104.6
Kept for breeding	5,851	5,982	102.2	1,010	1,030	102.0
Market	55,643	59,953	107.7	18,490	19,370	104.8
Under 50 pounds	17,336	18,959	109.4	4,570	4,930	107.9
50-119 pounds	15,487	16,509	106.6	5,780	6,260	108.3
120-179 pounds	12,538	13,290	106.0	4,850	4,810	99.2
180 pounds and over	10,281	11,195	108.9	3,290	3,370	102.4
Sows farrowing **						
Dec-Feb farrowed ¹	2,763	2,829	102.4	480	500	104.2
Mar-May farrowed ²	2,810	2,870	102.1	470	490	104.3
Jun-Aug farrowed ²	2,991	2,927	97.9	530	510	96.2
Dec – Feb Pig Crop *	26,326	28,758	109.2	4,752	5,350	112.6
Dec – Feb Pigs per Litter	9.53	10.17	106.7	9.90	10.70	108.1

Full report: <http://usda.mannlib.cornell.edu/usda/current/HogsPigs/HogsPigs-12-23-2014.pdf>

* 1,000 head. ** 1,000 litters. ¹ December preceding year. ² Intentions.

Commercial Hog Slaughter Projections and Lean Hog Price Forecasts

Table 2 contains the Iowa State University price forecasts for the next four quarters and the quarterly average futures prices based on March 27, 2015 settlement prices. The futures price forecasts are adjusted for a historic Iowa/Southern Minnesota basis. The table also contains the projected year over year changes in commercial hog slaughter. Taking the report as is, using pig crop numbers for Sep-Nov and Dec-Feb and farrowing intentions for Mar-May and Jun-Aug with commensurate pigs saved per litter to project supplies, one would expect hog slaughter in 2015.Q2 to be up about 6.26%, 2015.Q3 slaughter to be up 8.98%, 2015.Q4 slaughter to be up 6.39%, and 2016.Q1 slaughter to be up 0.92% compared to previous year levels.

Table 2. Commercial Hog Slaughter Projections and Lean Hog Price Forecasts, 2015/16

	Year over Year Change In Commercial Hog Slaughter (percent)	ISU Model Price Forecast (\$/cwt)	CME Futures (3/27/15) Adjusted for Negotiated IA/So MN Basis (\$/cwt)
Apr-Jun 2015	6.26	68-73	69.77
Jul-Sep 2015	8.98	69-74	71.34
Oct-Dec 2015	6.39	61-66	64.43
Jan-Mar 2016	0.92	64-69	68.76

Lee Schulz

Still Set Up for Big Crops

What a difference a year makes. Last year at this time, the crop markets were in the mist of a rally that provided a good pre-harvest marketing opportunity of the upcoming crops. This year, the crop markets have been beaten back as large supplies hang over the market and the potential of additional large crops are set. As they do every March, USDA releases reports outlining the grain stocks and intended plantings situation. These reports provide a good snapshot of both old and new crop supplies.

Looking at the old crop situation, corn stocks were on the high side of trade expectations. While the trade average guess was in the 7.6 billion bushel range, USDA found 7.74 billion bushels in storage. Overall corn disappearance for the 2nd quarter of the marketing year (December to February) was good at 3.47 billion bushels, up slightly from last year. But given the record crop last fall, that left plenty of corn sitting in bins across the country. Both on- and off-farm storage are holding more corn this year. As Figure 1 shows, this is the most corn we have had going into spring since 2009, the last marketing year where the season-average price stayed below \$4 per bushel. And USDA's current season-average price estimate is in the \$3.70 per bushel price range.

While corn stocks were on the high side, soybean stocks were roughly in line with trade expectations. 1.33 billion bushels of soybeans are still in bins as of March 1. That's up 34 percent from last year. Again, not a surprise given the record soybean crop this past fall. Soybean disappearance over the quarter has been good as 1.19 billion bushels were used, up 3 percent from last year. The biggest shift was in soybeans being held on the farm, up 60 percent from last year. Farmers have held onto soybeans much more this year than in past years. Prices throughout the fall and winter did not excite sales and stock levels are the highest they have been in three years. The question becomes can soybean demand pull a repeat of the 2011 marketing year. Then, domestic crush and international export demand held strong throughout the marketing year to reduce final ending stocks below 200 million bushels. The current USDA projections have final ending stocks approaching double that level, with prices hovering in the \$10.20 per bushel range.

Figure 1. U.S. corn stocks (Source: USDA-NASS).

Billion Bushels

United States

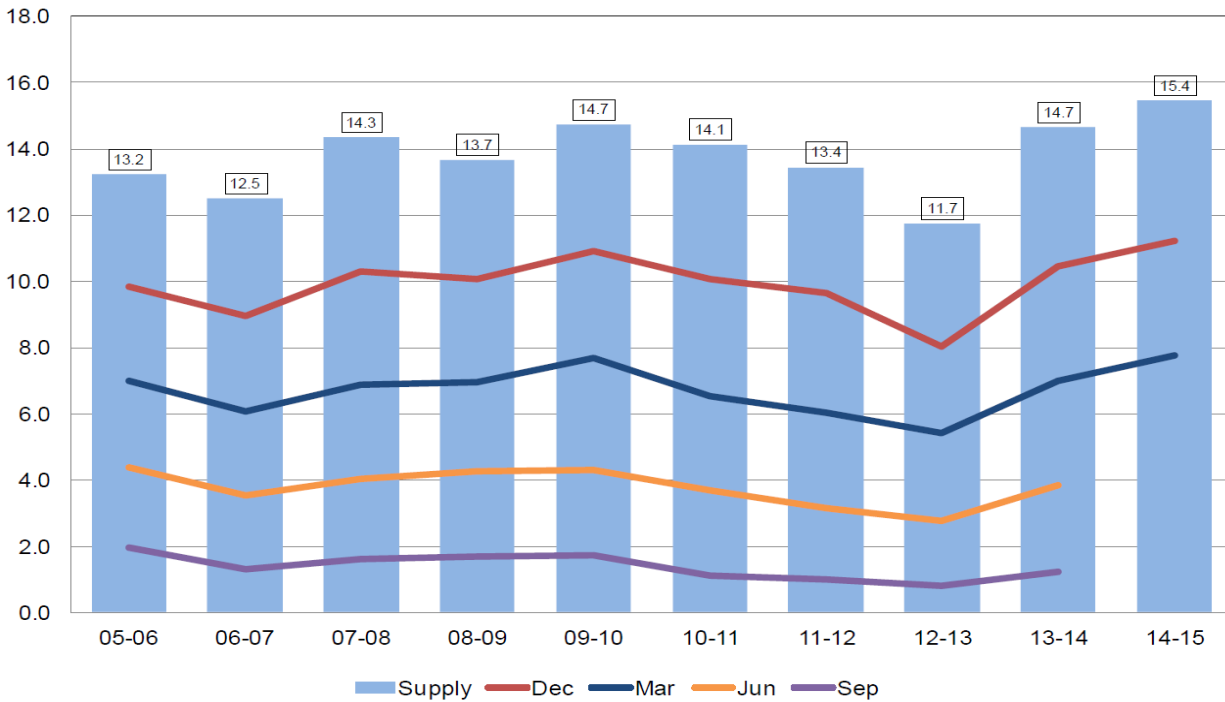
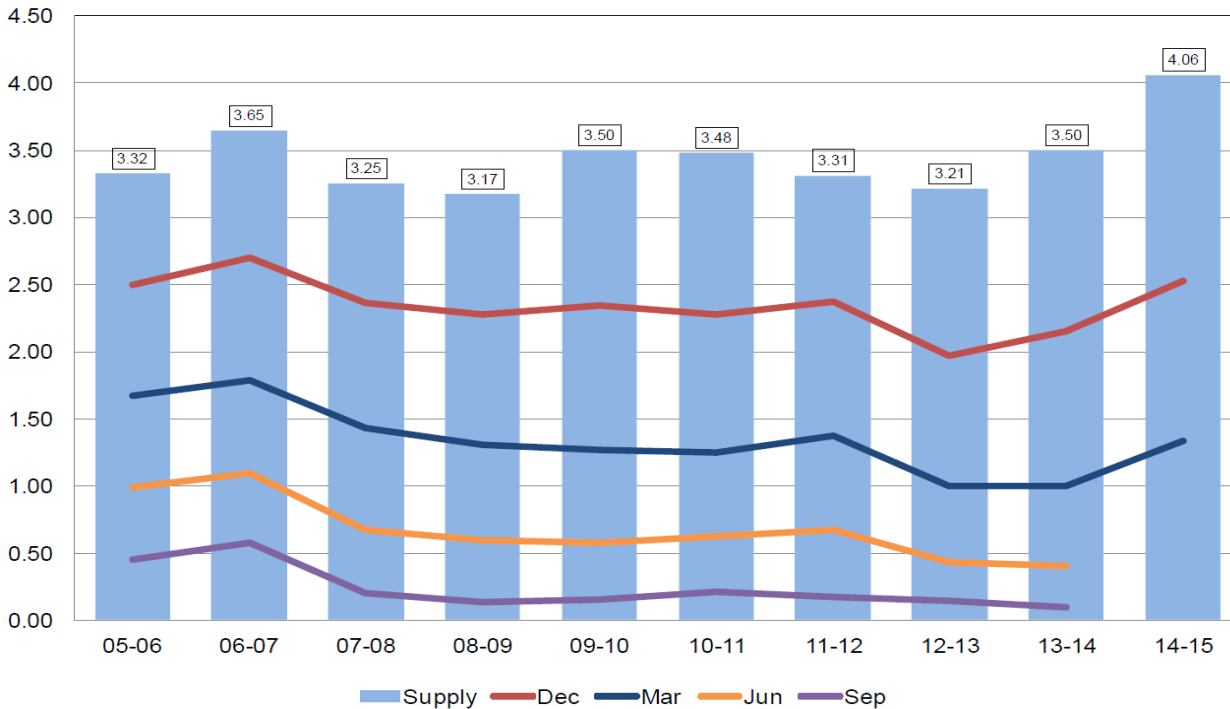


Figure 2. U.S. soybean stocks (Source: USDA-NASS).

Billion Bushels

United States

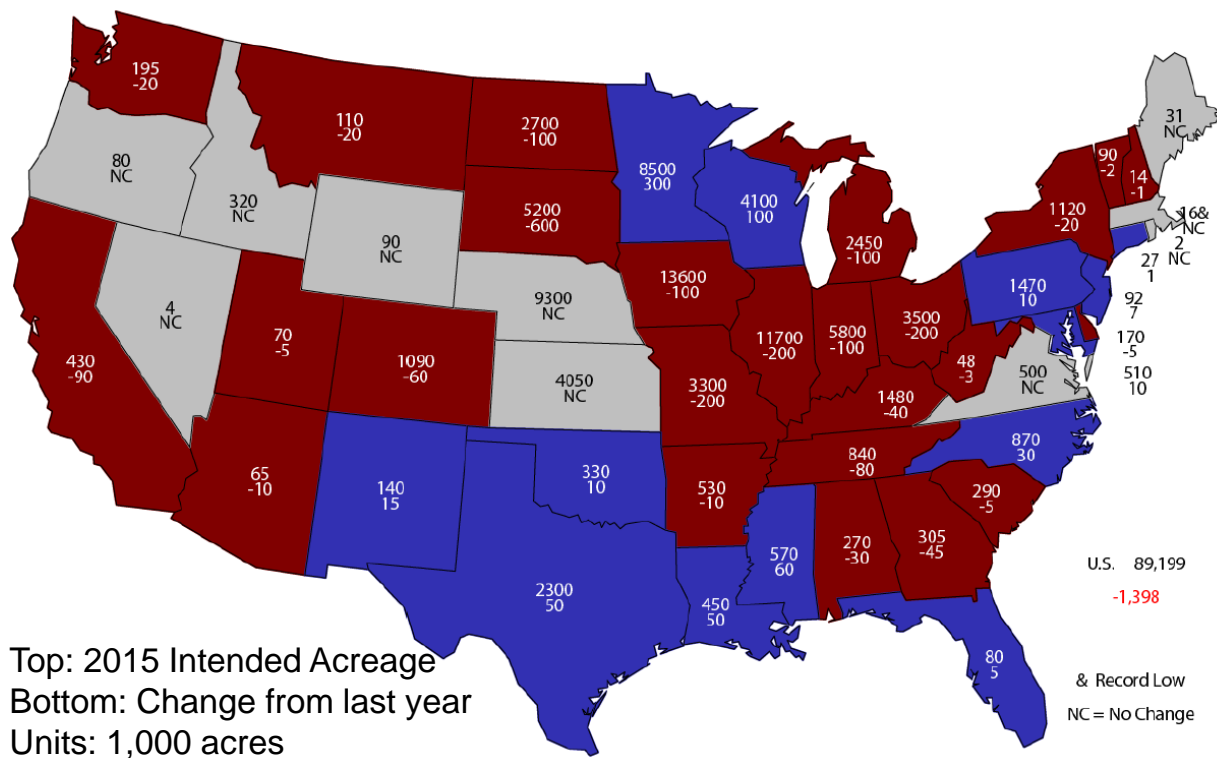


So currently available crop supplies are ample enough to meet expected demand and have reduced the price outlook in the near term. The longer term picture for the crops we are about to plant seem to echo the storylines from last year's crops. In general, even though corn acreage is declining and soybean acreage is not as large as expected, the potential for strong production continues. And that strong production possibility is preventing significant upward pricing movement.

Farmers indicated that this spring they hope to plant 89.2 million acres to corn. That would be 1.4 million acres less than last year and just slightly above USDA's early estimate of 89 million acres. As Figure 3 shows, the reduction in corn area is fairly broad-based, but there were some significant differences across regions. The

largest swing occurred in South Dakota, where producers are decreasing corn plantings by over 10 percent. Most of the Corn Belt states are seeing a 100,000 to 200,000 acre drop in corn plantings. However, there are a few areas of the country where more corn is going in. Producers in Minnesota and Wisconsin are looking to plant more corn, as are producers in the Southern Plains and Mississippi Delta.

Figure 3. U.S. projected corn acreage (Source: USDA-NASS).

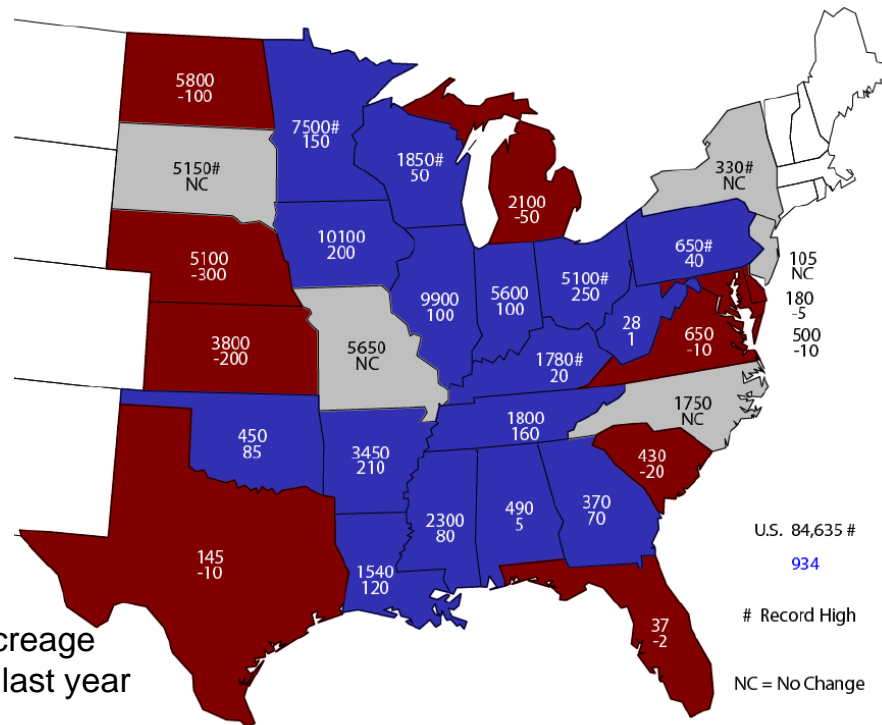


Plugging in a typical harvest ratio and USDA’s current trend yield points to a potential 2015 corn crop of 13.625 billion bushels. That would be roughly 600 million bushels less than last year’s crop, but would still be the 3rd largest corn crop the U.S. has ever produced. So large supplies are projected for next fall as well. Now the question turns toward planting conditions and progress. The early word from the southern U.S. is that corn plantings are currently running behind usual. If planting conditions are good early, we tend to see more corn planted. If planting is delayed, we see acreage shift to soybeans.

Speaking of soybeans, farmers indicated that this spring they hope to plant 84.6 million acres. That would be 900,000 acres more than last year, but 1.1 million acres above USDA’s early estimate of 83.5 million acres. Figure 4 shows the pattern in soybean area. More soybean plantings in the central part of the nation, with the far east and west fringes decreasing soybean plantings. The largest swing occurred in Nebraska, where producers are decreasing soybean plantings by 300,000 acres. Ohio, Arkansas, and Iowa are all increasing soybean area by at least 200,000 acres. Seven states are projected to set records for soybean area in 2015. In fact, looking at the national map for combination of corn and soybean planting, we see some interesting patterns. The Northern and Central Plains states are moving out of corn and soybeans, while Minnesota, Wisconsin, and Iowa are adding to those crops. Also, much of the South has increased land to corn and soybeans. So the trend of more corn and soybean production in the South continues, while Northern and Central Plains are now backing off and returning to other crops.

Under USDA’s current trend yield, expected soybean production computes to 3.85 billion bushels. That would be the 2nd largest soybean crop ever, following up on last year’s record. Just as with corn, ample supplies are projected for fall.

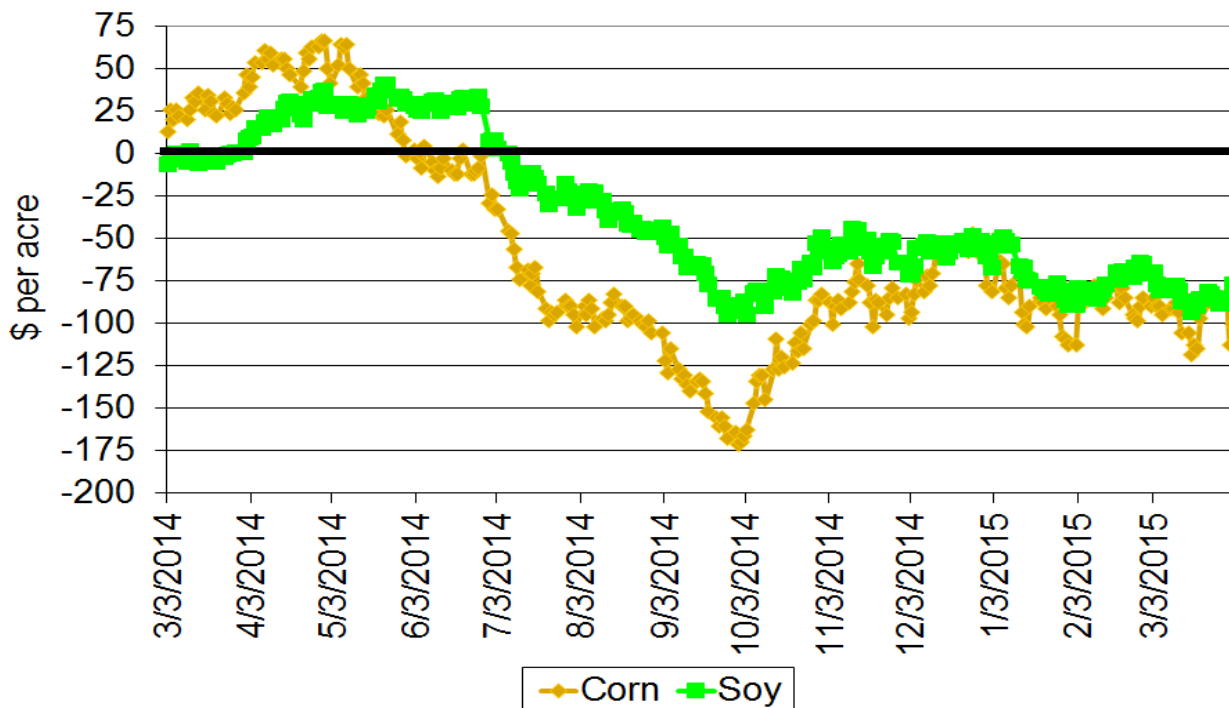
Figure 4. U.S. projected soybean acreage (Source: USDA-NASS).



Top: 2015 Intended Acreage
 Bottom: Change from last year
 Units: 1,000 acres

USDA’s initial price outlook for the 2015 crops had corn in the \$3.50 per bushel range, while soybeans were in the \$9 per bushel range. Once the markets digested the reports, they ended up being a bit more bullish than USDA. Given the futures settlement prices for April 1, futures pointed to a season-average price for corn in the \$3.90 range and soybeans in the \$9.40 range. However, all of those prices are well below estimated production costs for 2015. Our ISU extension cost estimates are roughly \$4.40 per bushel for corn and \$11 per bushel for soybeans. Figure 5 displays projected crop margins for corn and soybeans, based on ISU production costs and futures prices. As the graph shows, neither crop is offering a positive margin. Soybean margins are slightly better than corn. And the reports didn’t have much of an effect on that outlook.

Figure 5. 2015 projected crop margins.



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