IOWA STATE UNIVERSITY
Extension and Outreach

Iowa Farm Outlook

Department of Economics
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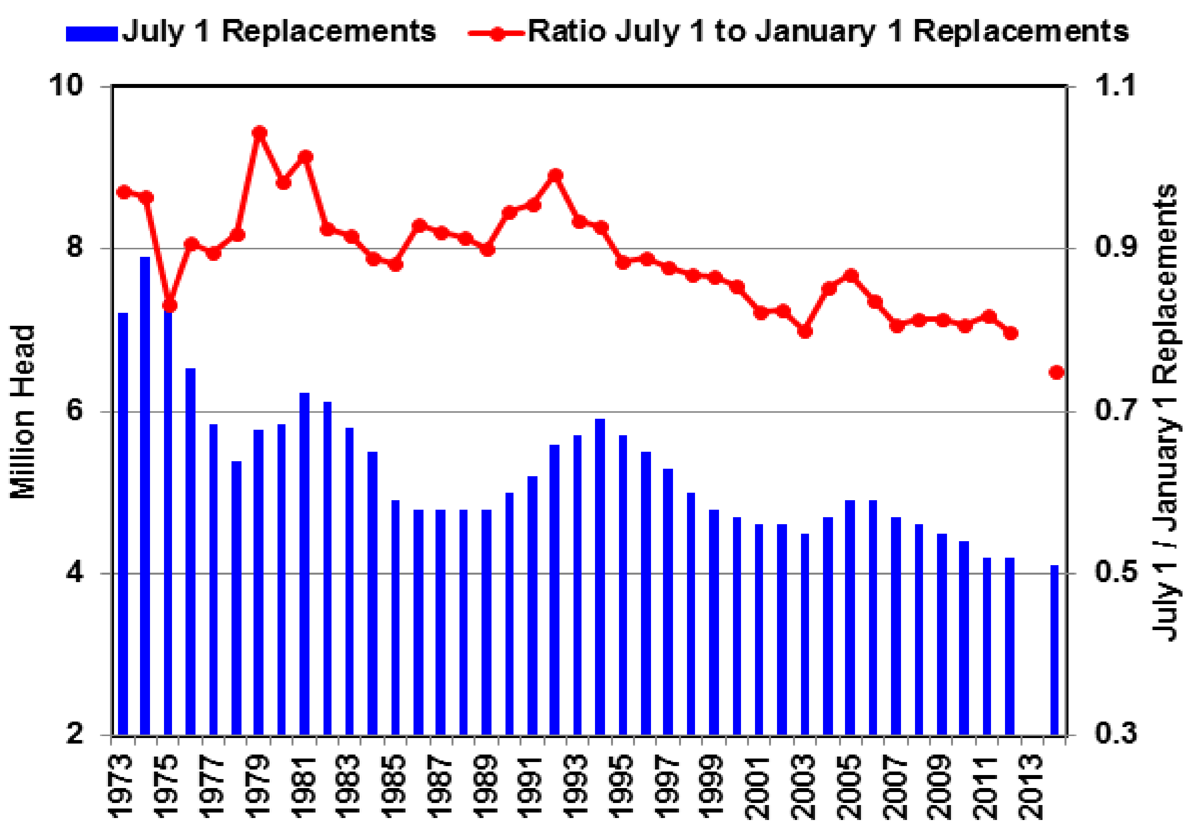
Mixed Signals Regarding Beef Cattle Herd Rebuilding

USDA released two reports estimating July 1, 2014 cattle inventories; the July Cattle report and the July Cattle on Feed report. The USDA data provides some indication that herd expansion may be beginning but more clearly confirms that herd rebuilding will likely be a long process and a slow one, at least initially. This should not be a major surprise since the biology of cattle production implies a strict limit on how fast beef cow herd expansion can take place and while market signals for expansion are stronger than they have been in years there may be several factors limiting herd expansion in the early stages. This expansion will likely not be unlike expansions in the past which included one to two years of herd stabilization with minimal or no herd growth before accelerating for several years.

The July Cattle report showed estimates of herd inventories that were down in most all categories compared to the last report in 2012. Since no 2013 report was available for comparison, it is not clear whether inventories are higher or lower than last year for the various categories but it is likely that most were lower. The July 1, 2014 estimate of all cattle and calves in the U.S. totaled 95.0 million head, 2.9% below the 97.8 million on July 1, 2012. That is the lowest July inventory since the July series began in 1973. It is beginning to sound like a broken record, but it's important to never lose sight of the fact that we have historically tight cattle numbers. That is one of the key fundamental metrics underpinning another fact that is not news to anybody in the beef industry—record high cattle prices, regardless of the weight class being discussed.

Figure 1. Heifers Held as Beef Cow Replacements



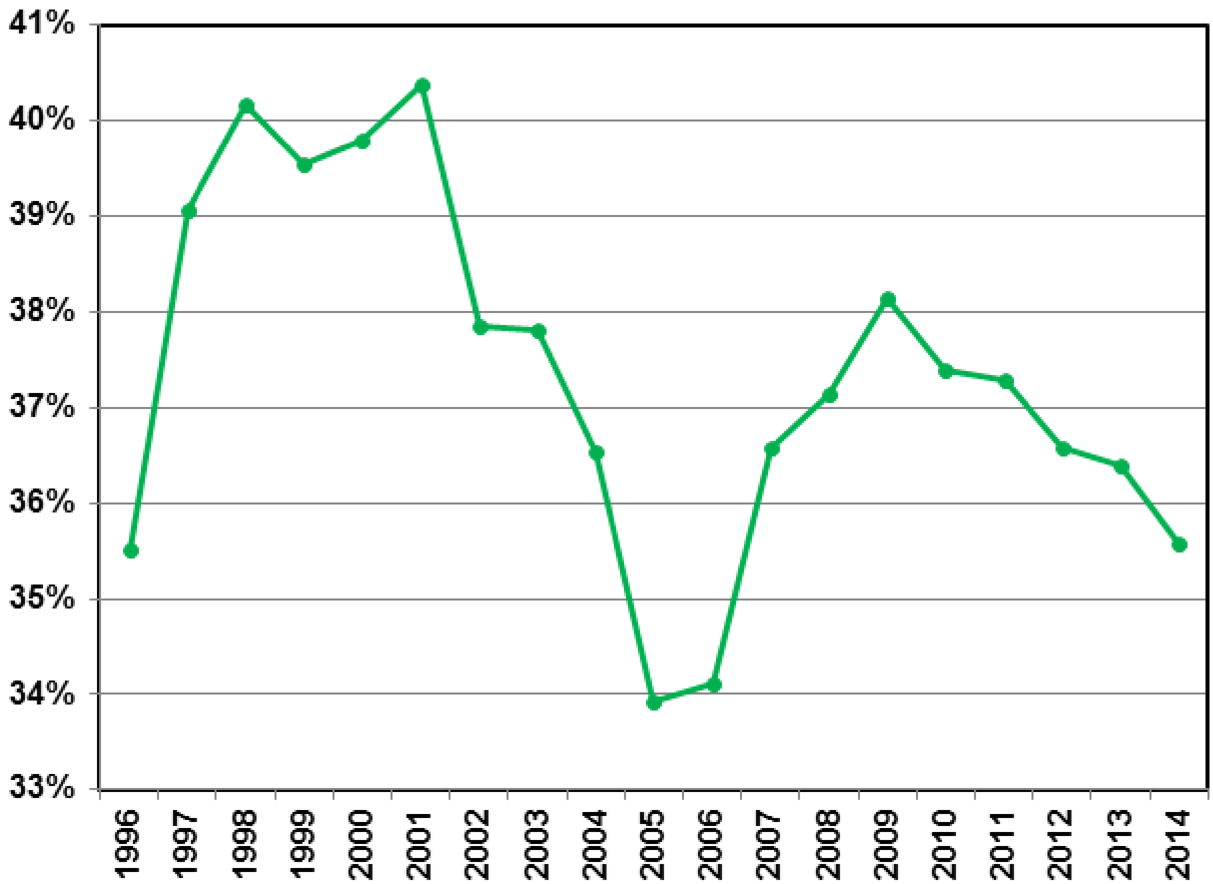
Data Source: USDA-NASS

The beef cow herd, at 29.7 million head was 2.5% smaller than in 2012. Now that the industry has a midyear estimate it will be important to pay close attention to what is happening with the breeding herd. Year-to-date beef cow slaughter is 16.8% below 2013 levels and 21.6% below the 2008-12 average. At first glance it may appear that beef cow slaughter changes are signaling a desire to grow the breeding herd but such comparisons are tricky because beef cow slaughter may be lower so far this year than in the recent past simply because there are fewer beef cows.

If beef cow slaughter is held considerably lower beginning in September, a time of year in which cow slaughter is typically trending upward, this may give an indication that more cows are staying home, a necessary component of herd expansion.

The number of heifers held for beef cow replacement, at 4.1 million head was 2.4% smaller than in 2012. The July 1 estimate of beef replacement heifers was down from July 2012 despite the fact that January 1 estimates of beef replacement heifers increased each of the past three years. The ratio of the July 1 beef replacement heifers to the January inventory of replacement heifers is the lowest since the July estimates began in 1973 (figure 1). This ratio typically rises during herd expansion and decreases during liquidations. One factor that might be limiting expansion and helps to explain the current beef replacement heifer estimates is that the record high feeder cattle prices that will eventually stimulate full-fledged herd expansion may, in the short run, be increasing the temptation to sell heifers rather than retain them for breeding. Additionally, the record high prices that cattle sellers currently enjoy also imply high prices for breeding females that may be a deterrent to expansion, at least initially, for some producers.

Figure 2. Heifers as % of Total Placements on Feed, July 1



Data Source: USDA-NASS

The suggestion of additional herd liquidation as indicated by the beef replacements estimate is somewhat in contrast to the heifers on feed in the July Cattle on Feed report which was down 4.6% from year ago levels. At the beginning of the third quarter of 2014, 35.6% of cattle placed on feed were heifers, which is a lower value than in the third quarter of previous years and the smallest percentage since 2006 (figure 2). That is significant because 2005-2006 was the last time the industry attempted to expand. So far this year, heifer slaughter is down 7.8%; a significantly larger decrease than steer slaughter, which is down 2.6% for the year to date. This decrease in heifer slaughter coupled with the decrease in beef cow slaughter noted above strongly suggests that herd expansion is beginning and the capacity for herd expansion is greater than what has been observed thus far in inventory estimates.

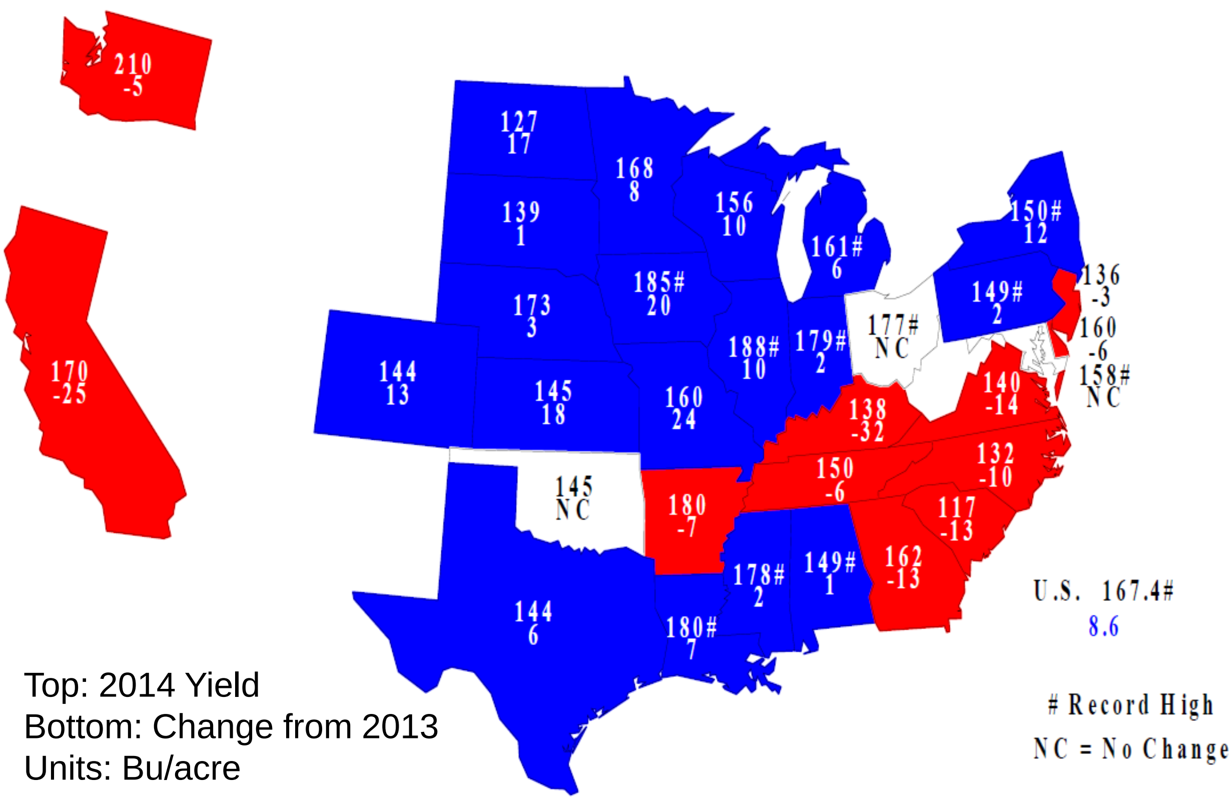
Lee Schulz

Big Crops Stay Big

As the crop season progresses, crop conditions continue to hold at very good levels. And the projections for record crops for both corn and soybeans are holding as well. When USDA released its August numbers, it confirmed that massive crops are headed into the marketplace this fall. The futures markets had been preparing for these crops for a while. And crop prices are at levels we haven't seen in five years.

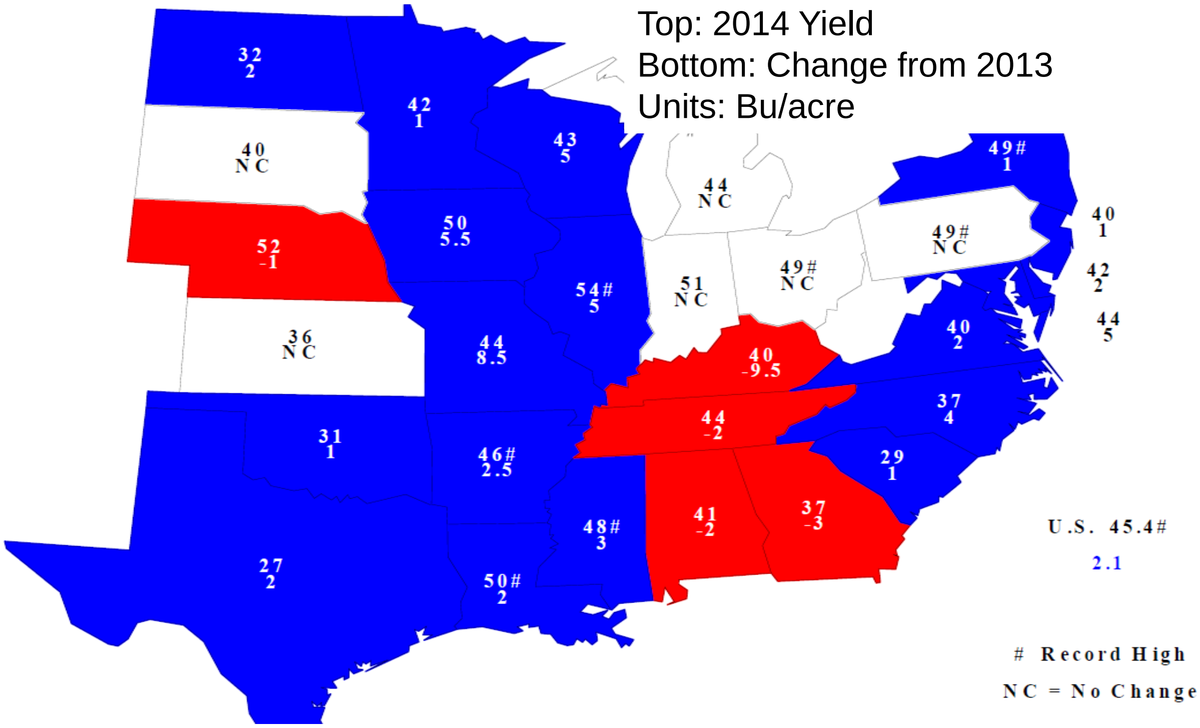
The first set of corn yield projections provided the outline for a 14 billion bushel corn crop. The nation as a whole, along with 11 states, are expected to achieve record corn yields, including the I-states (Iowa, Illinois and Indiana). The record corn yield band stretches from Iowa to New York. And the corn along the Gulf Coast also looks promising as Louisiana, Mississippi and Alabama are projected to reach records and those crops are starting to be harvested. Those strong yields are being established on a record number of ears per acre. USDA found an average of roughly 28,500 ears per acre. That's roughly a thousand more than last year and 3,000 more than 2012. Along with more ears, USDA estimated a higher grain weight per ear.

Figure 1. Corn yield projections. Source: USDA-NASS.



The story is similar for soybeans. The nation and seven states (although Iowa is not one of them) are projected to enjoy record yields. Given these numbers, USDA has projected a soybean crop of over 3.8 billion bushels. So big supplies are on the menu this fall. The big question now is how quickly can demand work through these supplies and how much will be held in storage.

Figure 2. Soybean yield projections. Source: USDA-NASS.



On the demand side, USDA's current projections also show strong demand, just not strong enough to raise prices. Overall corn demand was 13.6 billion bushels for the 2013 crop and is projected to be nearly that high for the 2014 crop. Feed and residual demand is expected to increase by 75 million bushels as the pork and poultry sectors expand. Corn demand via ethanol is expected to dip slightly, but remain above 5 billion bushels per year. But the biggest shift in demand over the past year has been in exports. International demand for U.S. corn has rebounded tremendously as corn prices fell. Corn exports had fallen below 800 million bushels with the drought and high prices of 2012. They have since surged above 1.9 billion bushels for the 2013 crop. USDA projects some moderation in exports for the coming marketing year, but I think exports are the one area where the corn market could see additional building demand. Figure 3 shows the advance corn export sales for the 2014 crop (these are sales of the crop that's still in the field). The advance sales for 2014 are running just behind the pace from 2013, consistent with USDA's outlook. But I'll be watching these advance sales to see if we get increased buying pressure as the harvest begins in earnest.

For soybeans, demand is projected at record levels. Domestic usage of soybeans is expected to exceed 1.75 billion bushels. And export demand is headed to another record of 1.675 billion bushels. Advance export sales are running slightly ahead of last year. The Chinese market remains the key to soybean exports as they represent over 60% of the export picture.

Summing it all up, supplies and demands are at record levels. But supplies are outpacing demands, so stocks will build and prices will remain significantly lower than we have had over the past few years. And this scenario is not only playing out for corn and soybeans in 2014, but also for other crops and for future years. Crop returns will be down across the board for 2014. The lack of returns across crops may have the effect of holding crop acreage in place for 2015. That would set up the potential for continuing with 90+ million acres of corn and 80+ million acres of soybeans in 2015. That's enough acreage to continue to produce at levels above demand. So projected prices for 2015 are lower than projected production costs.

Figure 3. Advance corn export sales. Source: USDA-FAS.

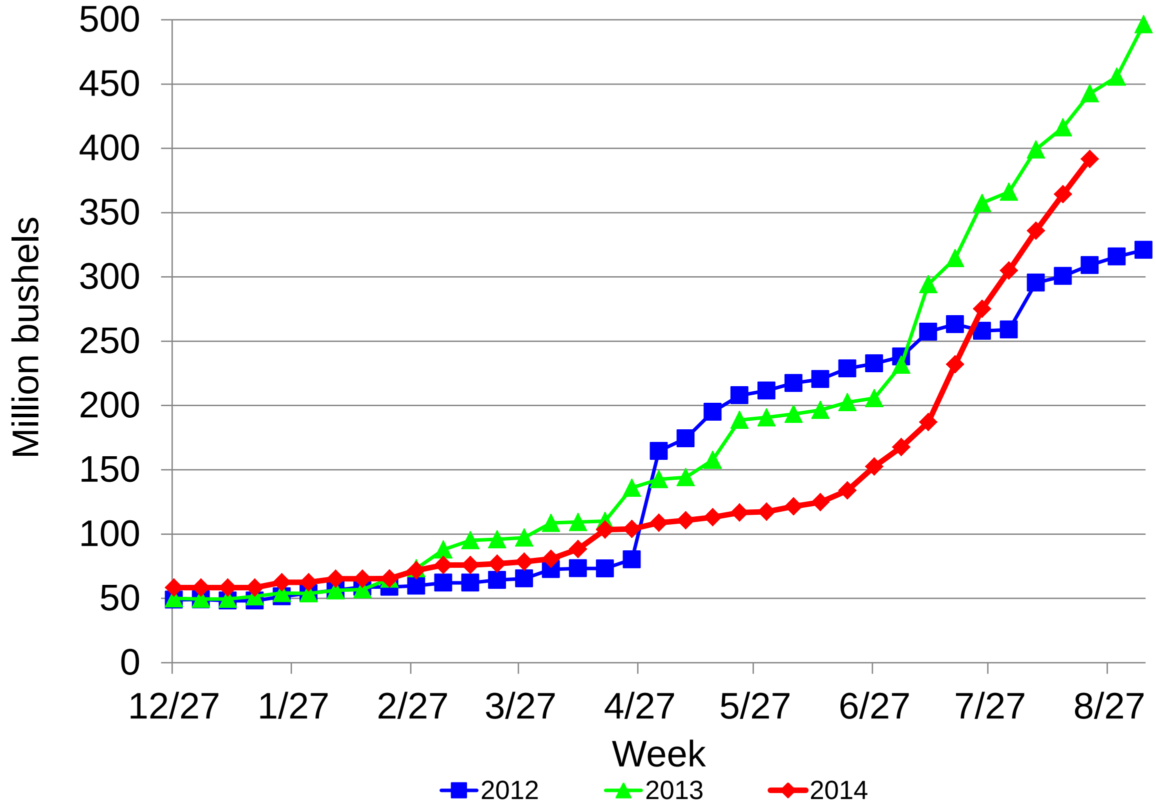
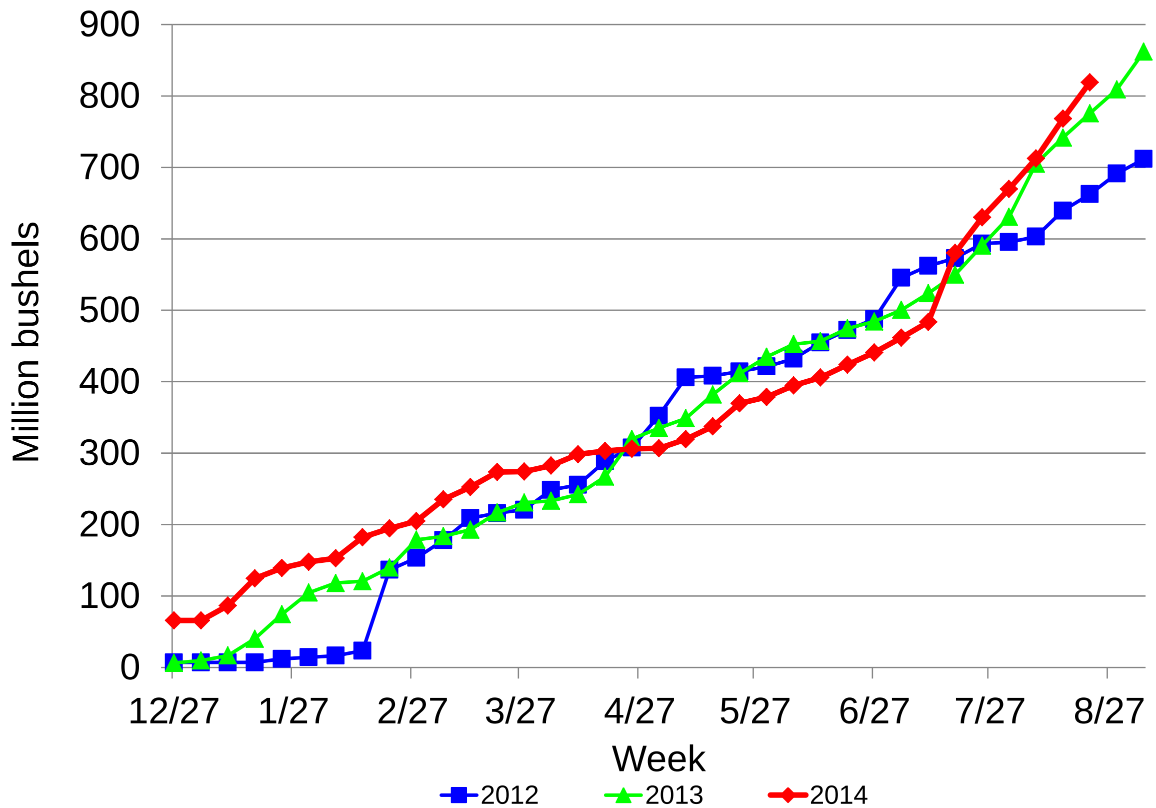


Figure 4. Advance soybean export sales. Source: USDA-FAS.



The erosion in prices has been quite dramatic for both corn and soybeans. The drop for corn started roughly a month before the decline for soybeans. But now, projected margins for both crops are holding well below zero. Carry has returned to the futures markets. Corn and soybean futures are showing 20 cents between December and May. A lot of producers are preparing to hunker down and store the upcoming harvest. But even with the additional carry, profitability will be elusive.

Figure 5. 2014/15 projected crop margins.

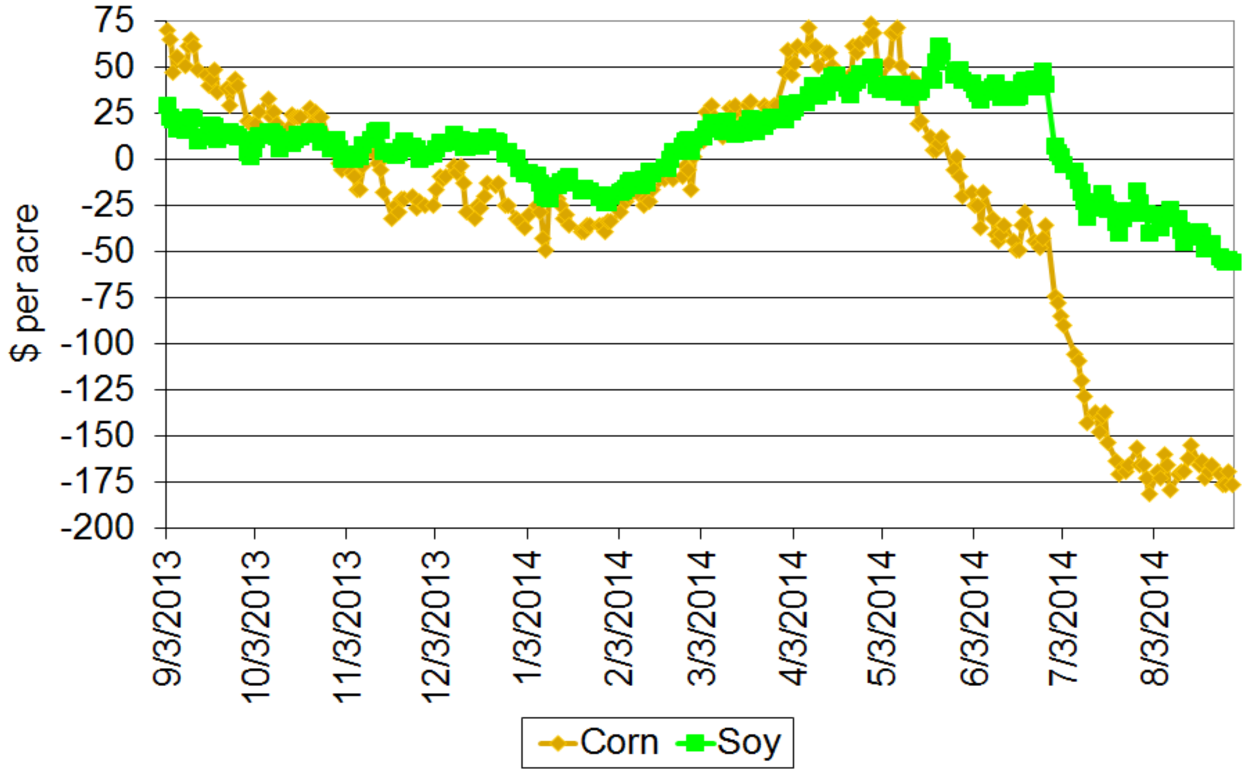
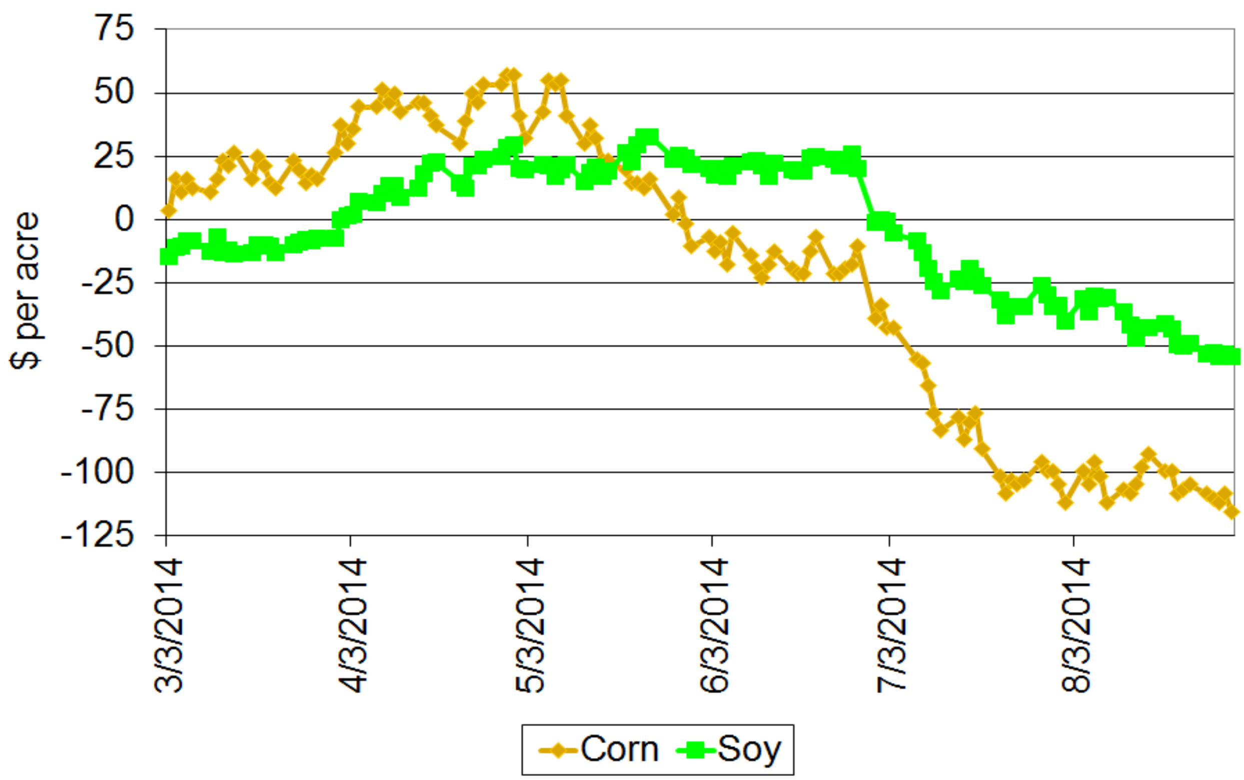


Figure 6. 2015/16 projected crop margins.



And that lack of profitability extends into 2015, as Figure 6 shows. Early chatter on 2015 production costs indicate costs will be fairly similar to 2014. And with only modest improvement in the current futures prices for the 2015/16 crops, projected margins for the 2015 crops are below zero. The 2015 crops may be the first crops in several years that may not see pre-harvest profitable marketing opportunities arise. But thankfully, there is still a lot of time for the markets to improve. A little supply disruption here, continuing demand improvement there, and prices will be on the upswing. A couple of keys to watch this fall will be export demand as our harvest rolls in and the progress of South American planting. The start of any price rally is likely to come from one of these two areas.

Chad Hart

Dr. Chad Hart	Dr. Lee Schulz
Associate Professor of Economics	Assistant Professor of Economics
Extension Crop Marketing Specialist	Extension Livestock Economist
468 Heady Hall	478 Heady Hall
Phone: (515) 294-9911	Phone: (515) 294-3356
Fax: (515) 294-0221	Fax: (515) 294-0221
chart@iastate.edu	lschulz@iastate.edu
www.econ.iastate.edu/~chart	www.econ.iastate.edu/people/faculty/schulz-lee