

# Iowa Farm Outlook

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## January Cattle Report from USDA

USDA's annual cattle inventory report confirmed what the industry had been suspecting for the past year — another year of contraction. Most final estimates were within the range of pre-report expectations with a few exceptions (namely heifers for beef cow replacement being up only 1.7%, calves under 500 pounds being down considerably at 3.7%, and the annual calf crop being down only 1.0%) ultimately reminding us that while herd rebuilding is pending in the beef cattle sector, it will likely be a slow process (at least initially) given the historically small inventory that the herd will be rebuilding from. All told, market signals for expansion are stronger than they have been in years and continue to grow and the industry is poised to respond. Conditions permitting, 2014 could be a year of herd stabilization (with little or no growth) that often occurs in first year of herd expansion. Most herd expansions in the past have included one to two years of minimal or modest herd growth before accelerating for two to three years.

### U.S. Cattle Inventory

Table 1 provides a summary of the report for the U.S. cattle inventory. All cattle and calves in the U.S. as of January 1, 2014 totaled 87.73 million head, a 1.8% decrease from January 1, 2013. This was the lowest January

Table 1. U.S. Cattle Inventory

	USDA				Pre-Report Estimates	
	Initial 2013	Revised 2013	2014	2014 as % of 2013	Average	Range
January 1 inventory *						
Cattle and calves	89,300	89,300	87,730	98.2	98.6	98.0 - 99.1
Cows and heifers that calved	38,515	38,515	38,251	99.3	98.9	98.7 - 99.3
Beef cows	29,295	29,297	29,042	99.1	98.5	98.3 - 99.1
Milk cows	9,220	9,218	9,209	99.9	99.9	99.8 - 100.0
Heifers 500 pounds and over	19,129	19,134	18,751	98.0	99.0	97.9 - 99.6
For beef cow replacement	5,361	5,381	5,471	101.7	103.1	102.4 - 103.5
For milk cow replacement	4,551	4,551	4,539	99.7	100.3	98.9 - 101.1
Other heifers	9,218	9,203	8,741	95.0	95.9	93.2 - 97.1
Steers 500 pounds and over	15,813	15,813	15,415	97.5	98.4	97.3 - 99.6
Bulls 500 pounds and over	2,056	2,056	2,035	99.0	99.0	98.4 - 99.7
Calves under 500 pounds	13,787	13,782	13,278	96.3	97.9	97.0 - 99.1
Cattle on feed	13,352	13,364	12,695	95.0	95.0	95.0
Calf crop **	34,279	34,279	33,930	99.0	97.9	97.7 - 98.1

\* 1,000 head, \*\* Initial 2012, revised 2012, and 2013

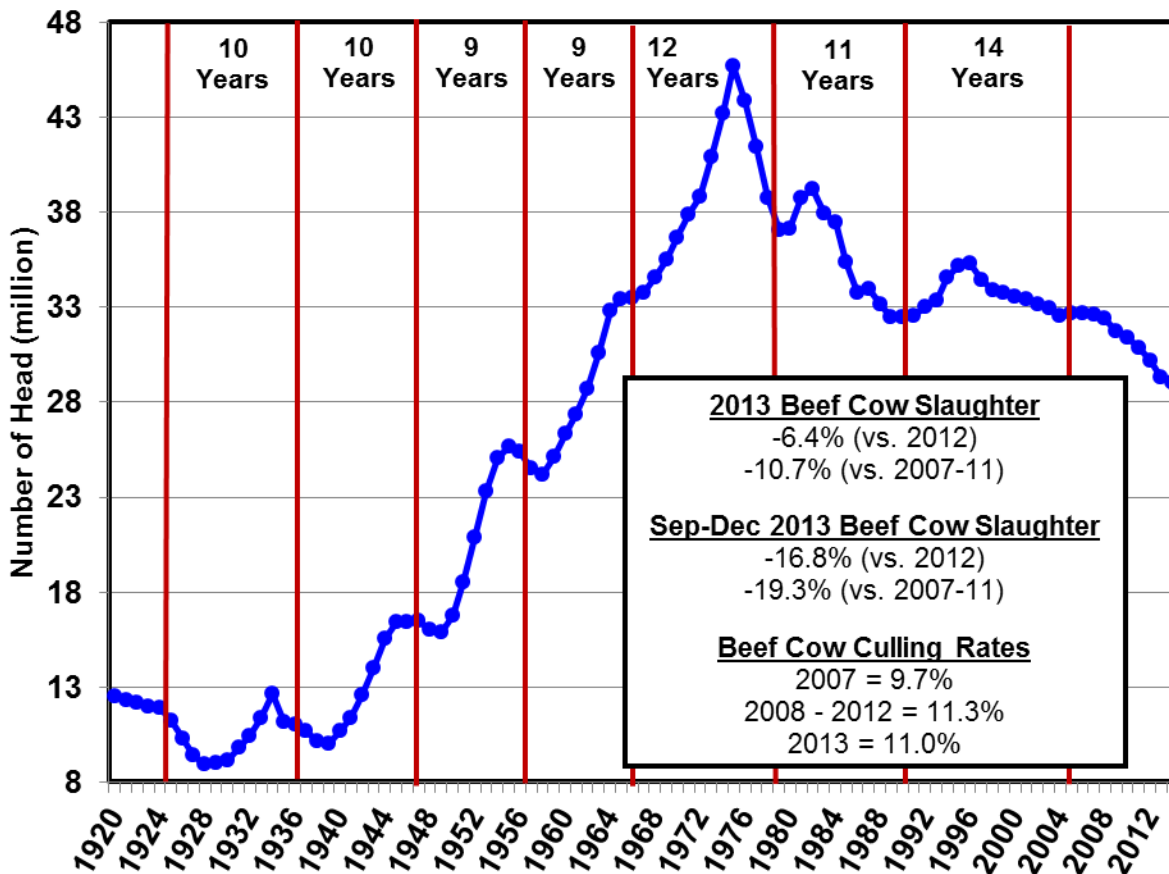
Data Source: USDA/NASS. The full report can be found at: <http://usda01.library.cornell.edu/usda/current/Catt/Catt-01-31-2014.pdf>.

1 inventory of all cattle and calves since the 85.57 million head in 1951. Beef cows totaled 29.04 million head, a 0.9% decrease from last year. Looking at the beef cow herd, the foundation of the total cattle inventory, a distinct cycle of growth and liquidation has defined the industry (figure 1). By 2014, one of the longest and most severe liquidation phases in the history of cattle cycle has reduced the U.S. beef cow herd to its lowest level since 1962 – well below the trough of the previous cycle. Last year marked the eighth consecutive year of declining beef cow numbers. And, although the 2013 beef cow culling rate of 11.0% (2013 beef cow slaughter as a percent of the January 1, 2013 beef cow inventory) was recorded as the sixth consecutive year of double digit beef culling, low rates of beef cow slaughter in the last quarter of 2013 suggest producers are indeed beginning the process of herd rebuilding.

The report suggests collectively cattlemen have continued to add youth to their breeding herd as replacement heifers are up from last year while the national beef cow herd has declined. Heifers for beef cow replacement totaled 5.47 million head, a 1.7% increase from last year. While heifer replacements are higher than estimates for 2011, 2012, and 2013 they collectively still remain lower than any consecutive years since the early 1990’s suggesting “real industry-wide expansion” has yet to be initiated. But perhaps one of the most notable things about the report was that the inventory of beef replacement heifers as a percent of the beef cow herd, at 18.8% was the largest in almost 40 years, including the large expansionary phase experienced in the early 1990’s.

The cattle on feed inventory for all feedlots was 12.70 million head, 5.0% lower than a year ago. This was the lowest January 1 cattle on feed inventory since the 12.42 million head in 1995. The combined inventory of steers 500 pounds and over, other heifers 500 pounds and over, and calves under 500 pounds was down 3.5% from the previous year. After accounting for cattle already in feedlots, the supply of feeder cattle outside feedlots was 2.7% lower than a year ago. Much of the year-over-year decrease in feeder cattle supplies is bolstered by the 5.0% decrease in other heifers and 3.7% decrease in calves under 500 pounds and highlights the effect of historically small calf crops coupled with increasing heifer retention.

**Figure 1. January 1 Beef Cow Inventory**



Pre-report estimates anticipated about a 2.1% decrease in the 2013 total calf crop — justifiable given the January 1, 2012 reported cow herd being 1.5% smaller than one year earlier. However, the total calf crop for 2013 was 33.93 million head, only 1.0% lower than a year ago. This is somewhat perplexing as the January 1, 2012 cow herd and the calf and yearling inventories cited earlier would have likely corresponded to a smaller calf crop. Strong profit potential in 2013 and the foresight of growing and sustained profits in coming years likely encouraged producers to maximize calving opportunities but the calf crop estimate, at the very least, is at the very upper end of expectations.

### Iowa Cattle Inventory

Table 2 provides a summary of the report for the Iowa cattle inventory. Iowa’s total cattle inventory was 3.70 million head, down 150,000 head or 3.9% lower than a year ago. The bulk of the decline came from a 40,000 head or 4.3% decline in the number of beef cows. The number of beef cows now stands at 885,000 head. Some of the drop is likely related to the dry pasture conditions that persisted for much of the year. According to USDA/NASS 49% of Iowa pastures were rated as poor to very poor at the close of the productive season in 2013 this is compared to 28% in the Cornbelt region (IL, IN, IA, MI, MN, MO, OH, WI ) and 29% nationally.

Heifers for beef cow replacement in Iowa totaled 150,000 head, unchanged from last year. However, important to note is heifers for beef cow replacement are at or above levels dating back to 1997 (an expansionary phase in the Iowa herd) and the inventory of beef replacement heifers as a percent of the beef cow herd, at 16.9%, was the largest in the history of the data revealing quite explicitly what the industry in Iowa would like to do.

The number of cattle on feed in Iowa was 1.9% lower at 1.23 million head. Iowa’s total calf crop in 2013 was 1.02 million head down 30,000 head or 2.9%.

Table 2. Iowa Cattle Inventory

	USDA			
	Initial 2013	Revised 2013	2014	2014 as % of 2013
January 1 inventory *				
Cattle and calves	3,850	3,850	3,700	96.1
Cows and heifers that calved	1,130	1,130	1,090	96.5
Beef cows	925	925	885	95.7
Milk cows	205	205	205	100.0
Heifers 500 pounds and over	950	950	890	93.7
For beef cow replacement	150	150	150	100.0
For milk cow replacement	120	120	120	100.0
Other heifers	680	680	620	91.2
Steers 500 pounds and over	1,250	1,250	1,240	99.2
Bulls 500 pounds and over	60	60	60	100.0
Calves under 500 pounds	460	460	420	91.3
Cattle on feed	1,280	1,270	1,230	96.9
Calf crop **	1,050	1,050	1,020	97.1

\* 1,000 head, \*\* Initial 2012, revised 2012, and 2013

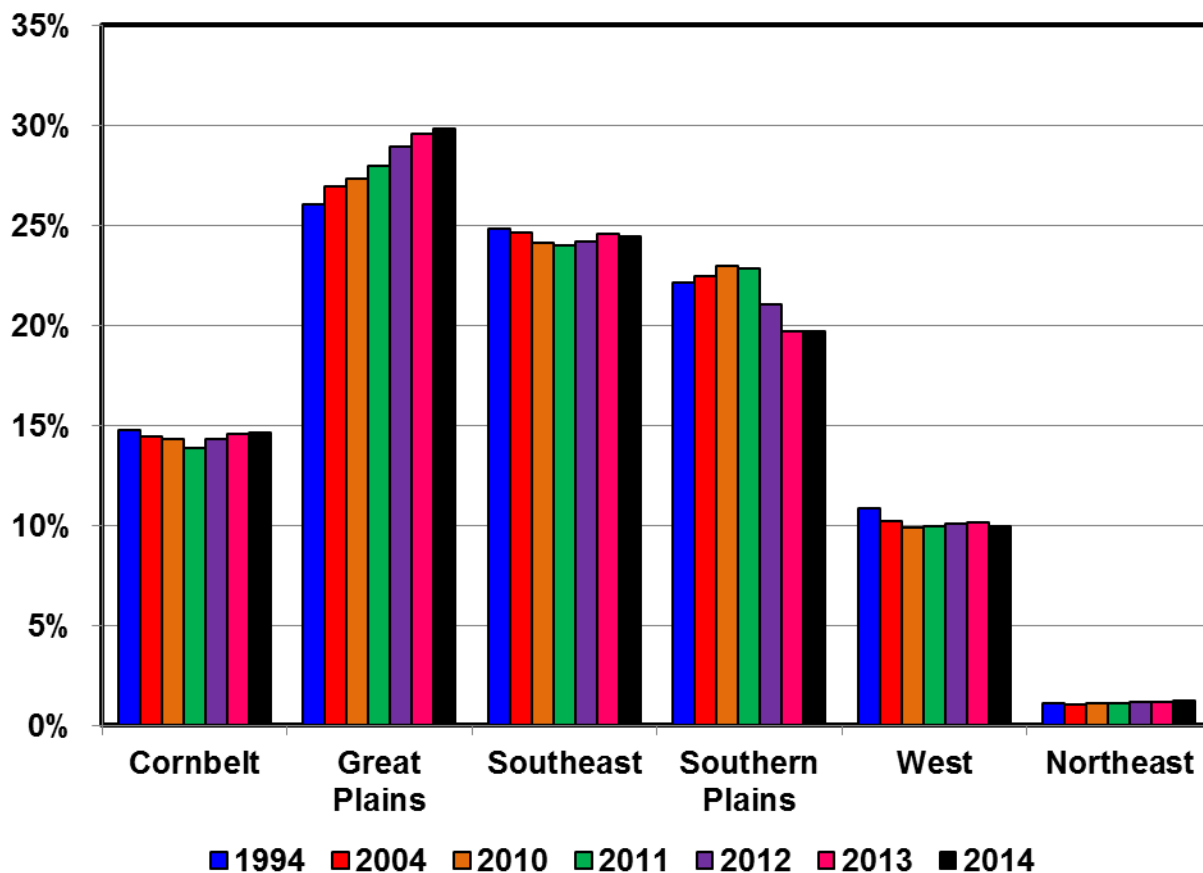
Data Source: USDA/NASS. The full report can be found at:

[http://www.nass.usda.gov/Statistics by State/Iowa/Publications/Livestock Report/reports/2014/Cattle/IA\\_cattle01\\_14.pdf](http://www.nass.usda.gov/Statistics_by_State/Iowa/Publications/Livestock_Report/reports/2014/Cattle/IA_cattle01_14.pdf)

## Inventory Trends

A deeper assessment of multi-year adjustments can shed additional light on transitions underway in the industry. Figures 2 and 3 were developed to provide regional comparisons of closely watched beef cattle herd statistics. These comparisons can reveal some important broader trends that can easily be missed by looking solely at year-over-year changes. Figure 2 highlights how stable the geographic dispersion of the beef cow herd has generally been and a few adjustments recently taking shape. For example, while in total head the Great Plains has followed the national trend of downsizing, its relative role as home to beef cows and heifers being retained for replacements (figure 3) has accelerated recently. Conversely while the share of the country's beef cows has been stable in the Southeast, this region has a longer history of a decreasing role in retaining heifers for beef cow replacement. Between the patterns of these two regions is the Southern Plains. Prior to the regional drought of 2011, the herd in Texas was contracting while the herd in Oklahoma was expanding leading to a limited net change in the region's collective role in the industry. However, since 2010 the portion of both beef cows and retained heifers residing in the Southern Plains has fallen markedly.

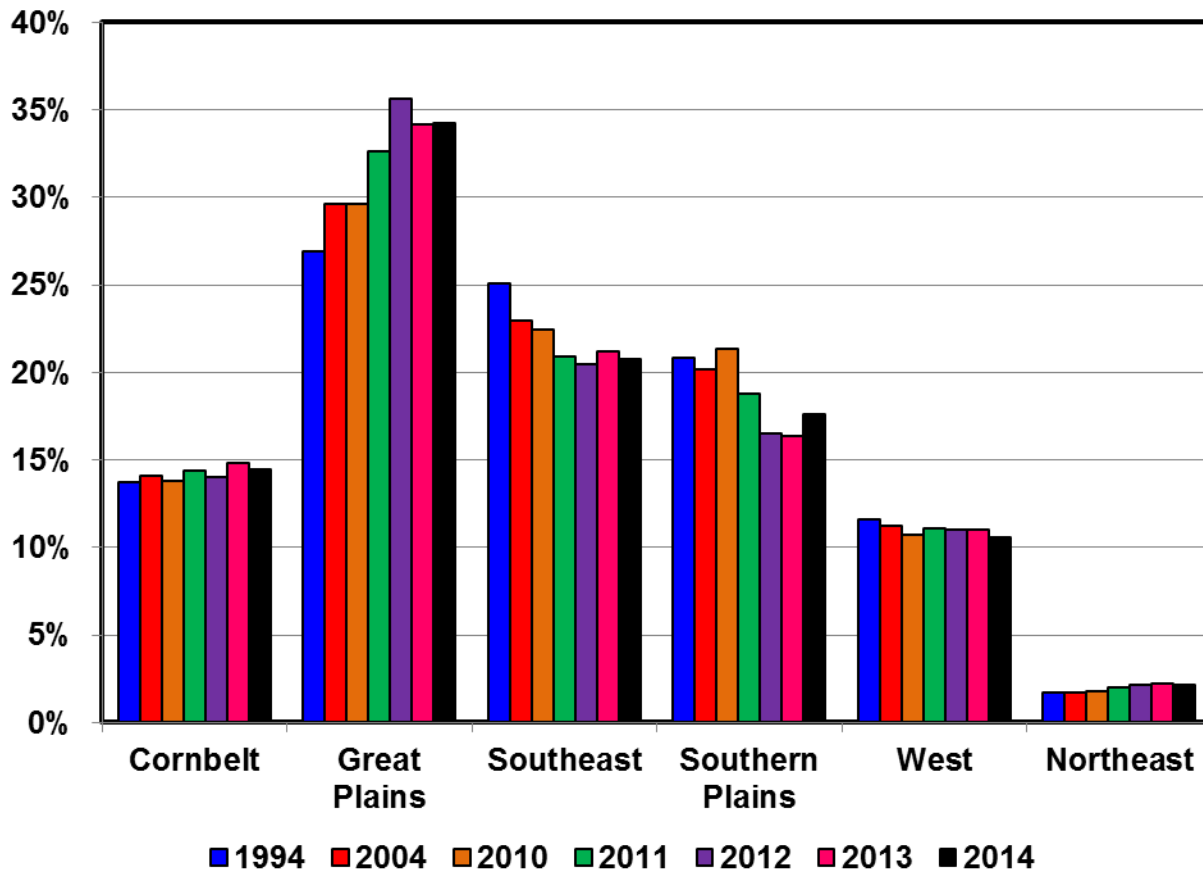
**Figure 2. Beef Cows that Calved Regionally as a Percent of the U.S., January 1 Inventory**



Data Source: USDA/NASS. Great Plains (CO, KS, MT, NE, ND, SD, WY), Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV), Southern Plains (OK, TX), Cornbelt (IL, IN, IA, MI, MN, MO, OH, WI), West (AZ, CA, ID, NV, NM, OR, UT, WA), and Northeast (CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT).

Exactly how persistent these patterns will be “if” and “when” the industry enters full-expansionary mode will be instructive to monitor. Currently however there are several indications that the beef cow herd may be moving north and west compared to how it has traditionally been dispersed within the country.

**Figure 3. Heifers for Beef Cow Replacement Regionally as a Percent of the U.S., January 1 Inventory**



Data Source: USDA/NASS. Great Plains (CO, KS, MT, NE, ND, SD, WY), Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV), Southern Plains (OK, TX), Cornbelt (IL, IN, IA, MI, MN, MO, OH, WI), West (AZ, CA, ID, NV, NM, OR, UT, WA), and Northeast (CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT).

*Lee Schulz*

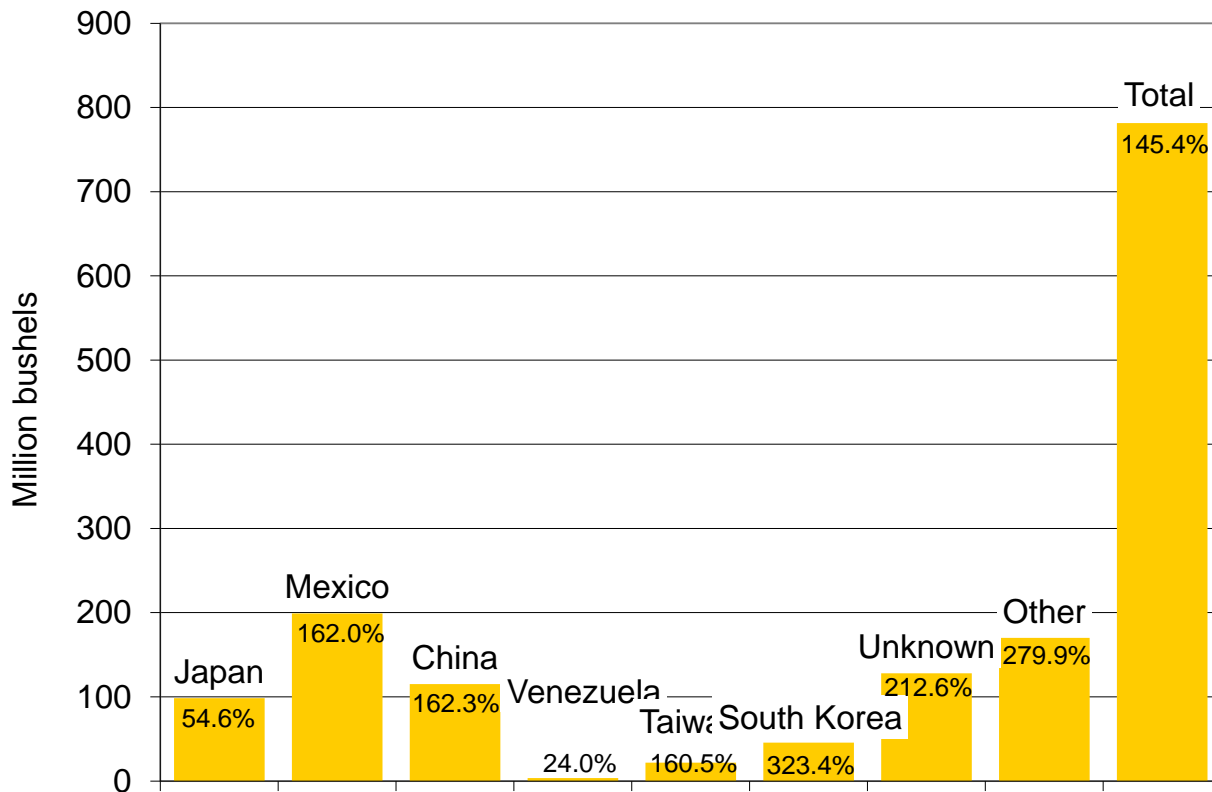
### **A Little Bounce in February**

Just as we look for temperatures to improve as we move through the month of February, crop farmers are looking for prices to improve as well. And at least for the 1<sup>st</sup> part of month, farmers got a little bounce in the corn and soybean markets. March corn futures have rallied 10 cents over the first 10 days of February. December corn futures have done the same. March soybean futures have gained 50 cents, while November soybean futures have risen 20 cents. So both old and new crop prices have edged higher recently. A lot of the news around this rally has concentrated on export markets. So the news is positive, but it may be short-lived. With the South American harvest starting to roll, export prospects will diminish. Hence, the bounce may not last much longer. But this bounce does show that demand continues to grow for both corn and soybeans globally.

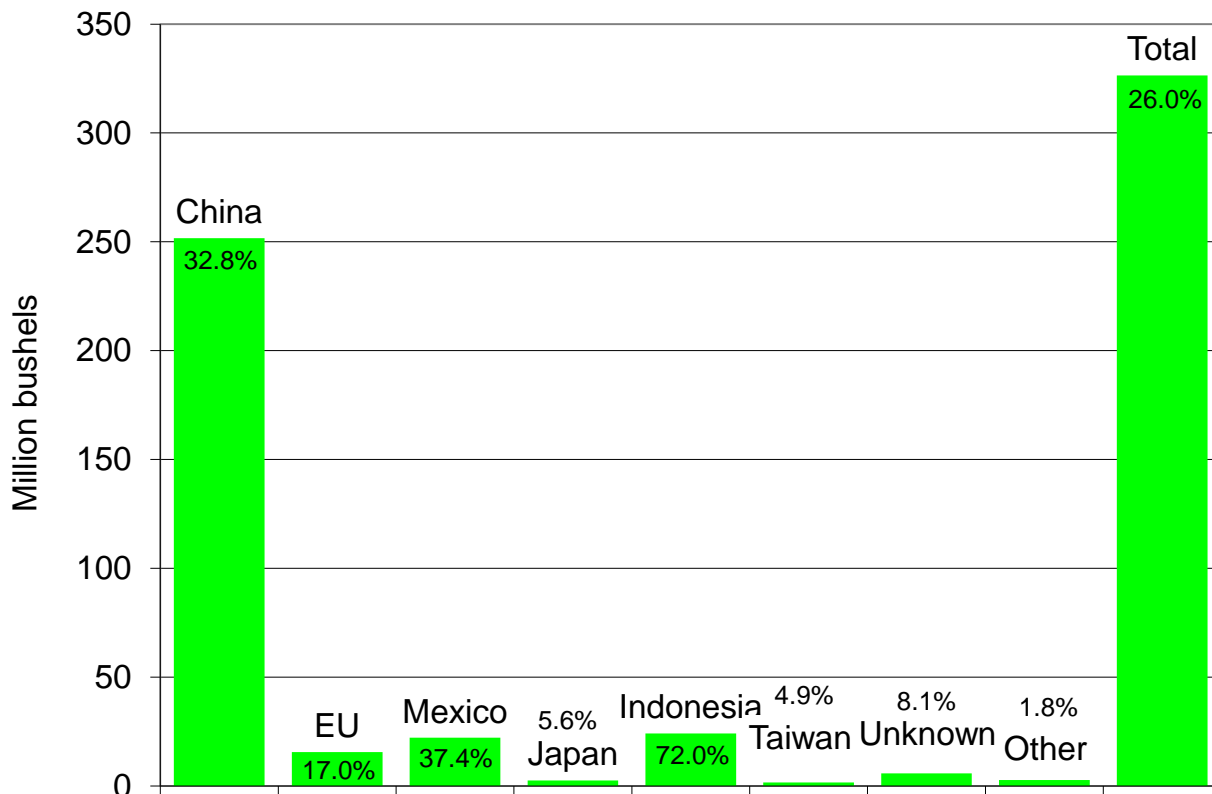
Global demand for corn has been very strong this marketing year, especially given the record corn crops many parts of the world had. U.S. corn exports have been increasing to many countries across the globe. As the figure below shows, all of the top 6 customers from last year have increased corn purchases. In fact, exports to Mexico, China, Taiwan, and South Korea have more than doubled. Totaling up the other global markets, U.S. corn exports outside those top 6 customers have risen by 280%. Overall, the shift in corn exports has moved nearly 800 million bushels more this marketing year as opposed to last year. Chinese demand led the way earlier in the year, now Japanese demand is rebuilding. Right now, the export pace is strong enough that I expect USDA to raise its export projection in the upcoming supply and demand report. Given last month's stocks report, corn demand is off to a roaring start as it looked like export, feed, and ethanol demand were

running well ahead of last year's pace. But demand usually declines as we proceed through the marketing year. The key this year will be how quickly that occurs.

**Figure 1. 2013/14 Corn Exports (Source: USDA-FAS).**



**Figure 2. 2013/14 Soybean Exports (Source: USDA-FAS).**

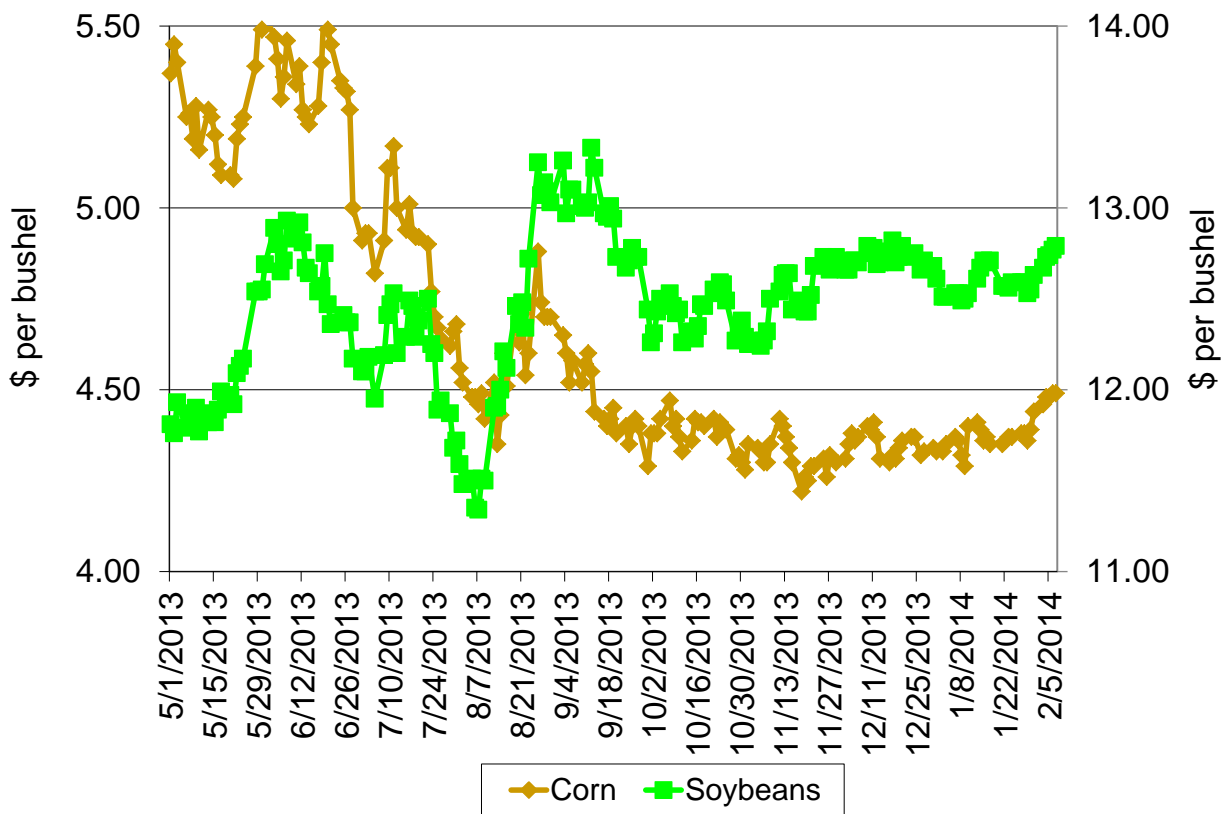


The discussion for soybean exports parallels that of corn. Globally strong production is met by strong global demand. For U.S. exports, the percentage growths are quite as exciting, but the overall level of exports is. We

are on pace to set a record for soybean exports, possibly breaking through the 1.6 billion bushel barrier. Export sales growth has been broad based, but given the concentration in the market, it is still China that really moves the market. Chinese soybean purchases are up 32% or 250 million bushels, compared to last year. But we are also getting additional sales in the EU, Mexico, Japan, and Indonesia. But given the impending South American harvest, market watchers are reacting quickly to soybean export news. Last year, the U.S soybean export market topped out by the 1<sup>st</sup> of April. This year, it will probably plateau sooner. But, all in all, crop demand is off to a very good start this marketing year for both crops. And that's helped hold prices around breakeven levels for corn and maintain some profit margins for soybeans.

The relative strength in exports over the past few weeks has pulled the projection for the 2013/14 season-average price of corn back into the \$4.50 range. It hasn't been that high since early September. Our ISU estimated production costs for 2013 corn were around \$4.50 per bushel. So the corn market is back to breakeven (ignoring storage cost for now). The season-average price estimate for soybeans has rebounded back to where it was just before Christmas. And for soybeans, old crop margins remain in positive territory as our estimated production costs were in the \$11 range. But both crops are still valued well below where they were in mid-2013.

**Figure 3. 2013/14 Projected Season-average Prices.**

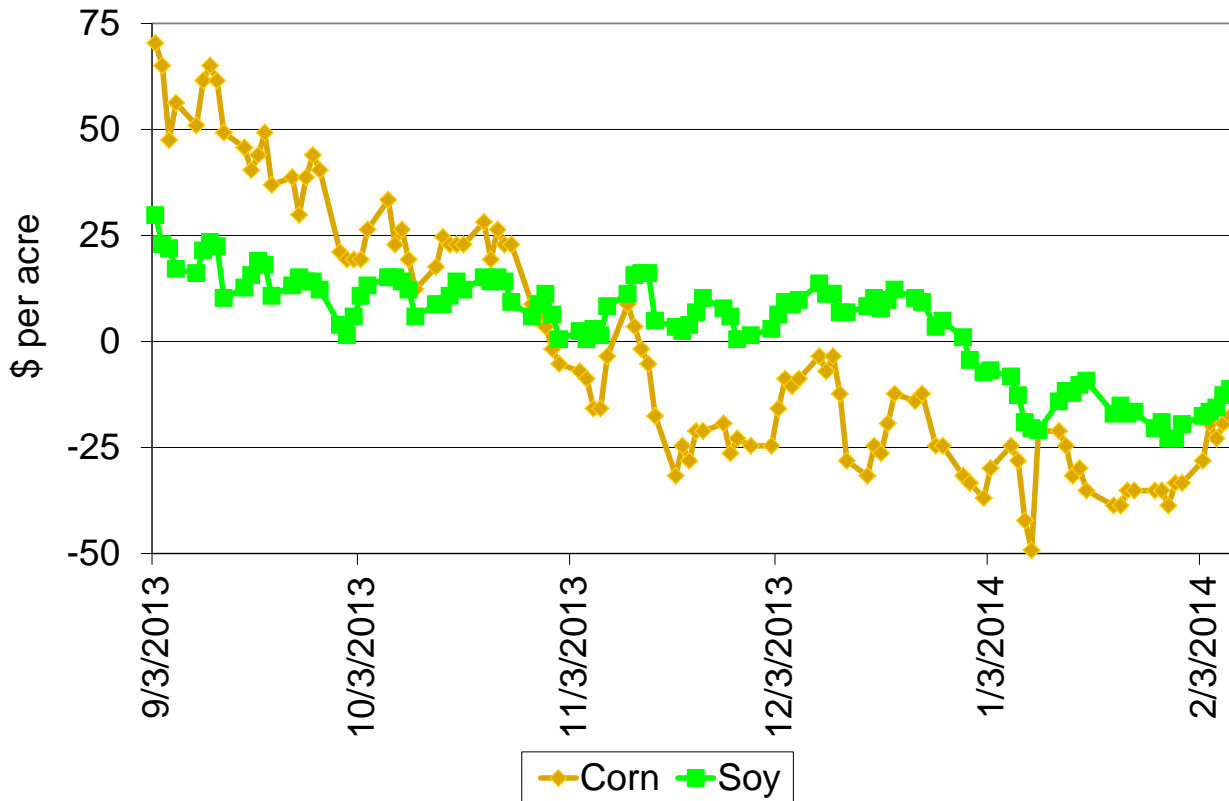


Looking forward to the upcoming planting season, the projected margins for the 2014 crops are still below breakeven. But the recent rally has added roughly \$15 per acre to soybeans and \$20 per acre to corn. Based on these projections, soybeans still have a slight margin advantage over corn, but the gap has shrunk. USDA will release an unofficial set of crop projections for the 2014 crops in the next few weeks. But the ag press has already seen some private industry projections and the numbers point to another large set of crops this fall. With corn plantings still expected to be above 90 million acres and soybeans reaching 80 million acres, the stage is set for record corn and soybean crops. And the weather patterns that seem to be setting up for this spring and summer have some of agricultural climatologists pointing to the potential for above-average yields. I had the pleasure of listening to both Dr. Elwynn Taylor and the climatologists from Freese-Notis this past week and both indicated that based on the information they have right now, they would estimate the national corn yield at 166 bushels per acre, with soybeans also seeing above-trendline yields. If I put those yields together with my most recent planting estimates, the U.S. would produce another 13.9 billion bushel corn crop



and 3.6 billion bushel soybean crop. Corn would be roughly at record levels, but soybeans would blow by the previous record. And given that outlook, the markets don't have a strong incentive to offer positive margins.

**Figure 4. Projected Crop Margins based on 2014/15 Futures.**



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