



Ag Supplies for 2015

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Markets are the mechanism that balance supply and demand for products. Over the course of the past year, we have discussed the demand patterns for agricultural products in the US and the factors that influence that demand. Now it's time to look at the other half of the marketplace: agricultural product supplies. During the past couple of years, crop and livestock supplies have been moving in opposite directions. Crop supplies have grown as farmers have brought more land into corn and soybean production and weather conditions allowed record yields. Meanwhile, livestock supplies have shrunk as livestock producers reduced herds to control costs. However, changes are expected as we look forward. Stronger livestock prices have created incentives for increased livestock productions, and weaker crop prices normally spur a reduction in plantings.

Livestock Expansion

Starting with cattle, USDA has released the much anticipated inventory of the US cattle herd as of January 1, 2015, and it comes as no surprise that the national cattle herd is on the build. The total number of cattle and calves is 89.8 million head, up 1.4 percent from a year ago. Beef cow numbers are up 2.1 percent. Nearly 5.8 million head of replacement beef heifers are destined to enter the national beef breeding herd, 4.1 percent more than 2014. [Table 1](#) contains a summary of the US and Iowa cattle inventory.

Inventory Category	2014		2015		% Change	
	Million Head	Million Head	2015	2014	2015	% of 2014
Cattle and calves	89,726.0	88,808.0	100.0	98.9	1.1	101.4
Cows and heifers that calved	56,267.0	56,000.0	100.0	99.7	0.3	100.3
Beef cows	29,281.4	29,885.1	100.0	102.0	2.0	102.0
Dairy cows	26,985.6	26,114.9	100.0	96.9	-3.1	96.9
Heifers	3,073.6	3,005.0	100.0	97.8	-2.2	97.8
Calves	33,459.0	32,808.0	100.0	98.1	-0.9	98.1
Feeder calves	28,240.0	28,240.0	100.0	100.0	0.0	100.0
Other calves	5,219.0	4,568.0	100.0	87.5	-12.5	87.5
Expected to calve	7,301.0	7,348.0	100.0	100.6	0.6	100.6
Expected to calve	4,248.0	4,261.0	100.0	100.3	0.3	100.3
Other heifers	2,053.0	3,087.0	100.0	150.4	50.4	150.4
Other heifers	4,248.0	4,261.0	100.0	100.3	0.3	100.3
Heifers 100 percent and over	11,887.4	11,776.1	100.0	98.7	-1.3	98.7
Beef 100 percent and over	2,817.4	2,814.4	100.0	99.9	-0.1	99.9
Dairy 100 percent and over	8,070.0	8,961.7	100.0	111.0	11.0	111.0
Calves under 100 percent	11,571.6	11,538.0	100.0	99.7	-0.3	99.7
Cattle on feed	13,093.0	13,093.0	100.0	100.0	0.0	100.0
Calf crop	11,741.0	11,808.0	100.0	100.6	0.6	100.6

Table 1

Feeder cattle numbers have also increased from a year ago, although they are still at historically tight levels. The number of cattle on feed is currently 13.09 million, up 0.6 percent from a year ago. Increases in feedlot inventories can be attributed to cattle being fed longer and sold at higher weights as feedlots try to offset the high price they paid for feeder cattle with relatively low cost gain.

Beef cattle heifer retention is on the rise with nearly 4.1 percent more than last year's inventory, the largest year over year increase since 1994 ([Figure 1](#)). This is the fourth year in a row that heifer retention has increased. 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 19.5 percent, was the largest in the history of the data, including the large expansionary phase experienced in the early 1990s. This suggests cattlemen have added youth to their breeding herd, which could even further spur growth in this expansionary phase. The number of beef heifers expected to calve in the coming year is up 7.3 percent. That suggests a rapid expansion of the calf crop.

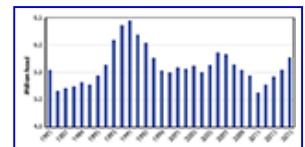


Figure 1

In short, the beef industry is currently at a hot point in the building of the beef cattle herd. The extraordinary prices paid for feeder calves over the past year has encouraged cow-calf producers to build their herds by both heifer retention and culling fewer mature cows. Heifer retention will continue to have an impact on feeder cattle availability, and the possibility of fewer imports of feeder cattle from Canada and Mexico could temper any chance of relief to tight feeder cattle numbers.

Switching to hogs, USDA's December Hogs and Pigs report suggested expansion. The breeding herd inventory, at 5.969 million head, was up 3.7 percent compared to one year ago. This is the largest breeding herd inventory since June 2009. Sow utilization was higher than 2013 and approaching the 2008–12 average (49.9 percent). With breeding herd inventories and sow utilization trending higher, many factors indicate expansion in the hog industry.

Pig crop variability is an additional factor that influences hog supplies. Both farrowing levels (number of litters) and farrowing performance (pigs saved per litter) determine pig crops. The September-November pigs saved per litter estimate, at 10.23 pigs, was up 0.7 percent compared to a year ago and indicates a return to a more "normal" productivity level. The September-November sows farrowing, at 2.871 million head, was up 3.3 percent. Thus netting a 4.0 percent increase in the September-November pig crop compared to a year ago.

[Table 2](#) provides a summary of the December 1, 2014 hogs and pigs estimates for the United States and Iowa. The US total hogs and pigs inventory, at 66.050 million head, was 2.0 percent above a year ago. The total market hog inventory was up 1.8 percent and the breeding herd inventory was up 3.7 percent. The Iowa total hogs and pigs inventory was 3.5 percent above a year ago. The total market hog inventory was up 3.4 percent and the breeding herd inventory was up 4.1 percent.

Category	2014		2013		% Change
	2014	% Change	2013	% Change	
Breeding Herd Inventory (million head)					
Total	5,969	+3.7	5,756	+3.7	
Market	5,100	+3.7	4,918	+3.7	
Breeding Herd	869	+3.7	838	+3.7	
Pig Crop (million head)					
Total	10,230	+4.0	9,830	+4.0	
Market	9,830	+4.0	9,430	+4.0	
Breeding Herd	400	+4.0	400	+4.0	
Pigs and Pigs Inventory (million head)					
Total	66,050	+2.0	64,250	+2.0	
Market	64,250	+2.0	62,450	+2.0	
Breeding Herd	1,800	+3.7	1,800	+3.7	

Table 2

Where the cattle expansion seems to have begun in earnest, the hog expansion has been under way for some time and looks to continue through 2015. Farrowing intentions point to a robust expansion, with increasing numbers of hogs reaching market weight in the latter half of 2015. Where growth in the hog sector was limited last year by disease pressures, those pressures have decreased and the hog herd is definitely back on the rise.

Crops May Fail to Contract

Where the livestock sectors are looking to increase supplies, the crop markets are hoping for a little supply reduction. The 2014 crop year was a record breaker. Both the corn and soybean crops set national yield and production records. The corn crop topped 14.2 billion bushels. Meanwhile, the soybean crop nearly reached 4 billion bushels. Those large crops have overwhelmed demand and lowered crop prices to five-year lows.

Typically, when crop prices fall, planted acreage the next year retreats as well. However, much of the chatter in the crop markets this winter has been more about shifting land among crops as opposed to removing land from production. Last year, US producers planted 90.6 million acres to corn and 83.7 million acres to soybeans. Combined, corn and soybeans account for over 170 million acres across the country. The general outlook for

2015 is that the same amount of acres will be planted to corn and soybeans, with some movement from corn to soybeans.

If corn moves down to say 88 million acres, then given USDA's 2015 trend yield of 167.2 bushels per acre, corn production would approach 13.5 billion bushels. That would be down significantly from 2014, but still one of the largest corn crops the US has ever grown. Some early weather projections for the 2015 growing season suggest yields could be slightly better than trend. If so, that just adds to the projected corn supplies.

While corn may lose some acreage, soybeans will likely gain them. If soybean plantings increase to 86 million acres, then given USDA's 2015 trend yield of 46 bushels per acre, soybean production would stay around 3.9 billion bushels. With good growing conditions, a 4 billion bushel soybean crop is not out of the question, continuing the potential for massive supplies in the corn and soybean markets.

In summary, the supply outlook across the Iowa agriculture complex is for increasing livestock production and steady to slightly decreasing crop production. These shifts follow from the price movements each sector has experienced over the past year. Livestock profitability has returned, incentivizing herd expansion, and crop profitability has declined substantially, which is beginning to drag on acreage. However, the acreage reduction may not be large enough to improve the market situation quickly.