

# Iowa Farm Outlook

Department of Economics  
Ames, Iowa

November 2012

Econ. Info. 2031

## Feeder and Fed Cattle Update

### Value of Gain

Harvest is wrapping up and producers are considering cattle feeding opportunities and cow herd operators are evaluating whether to sell their calves or retain ownership this year. Information from the feeder cattle futures market combined with basis forecasts can be utilized to garner value of gain projections to help guide these decisions.

Consider the case of buying a 550 pound steer and selling it at 650, 750, or 850 pounds in the future using the Dunlap, Iowa market for appraisal. Currently, there are historically high values of gain and this is expected to continue as shown by current projections (Table 1). In fact, over the last few weeks the value of adding additional weight to calves has been increasing as there continues to be a desire for feedlots to put less weight on using corn. Of course these projections do not take into consideration costs of adding additional weight and producers will need to compare that to the values of gain. One factor potentially favoring adding weight to calves this fall is the higher than normal amount of drought damaged corn that was chopped for silage and may be available to feed calves.

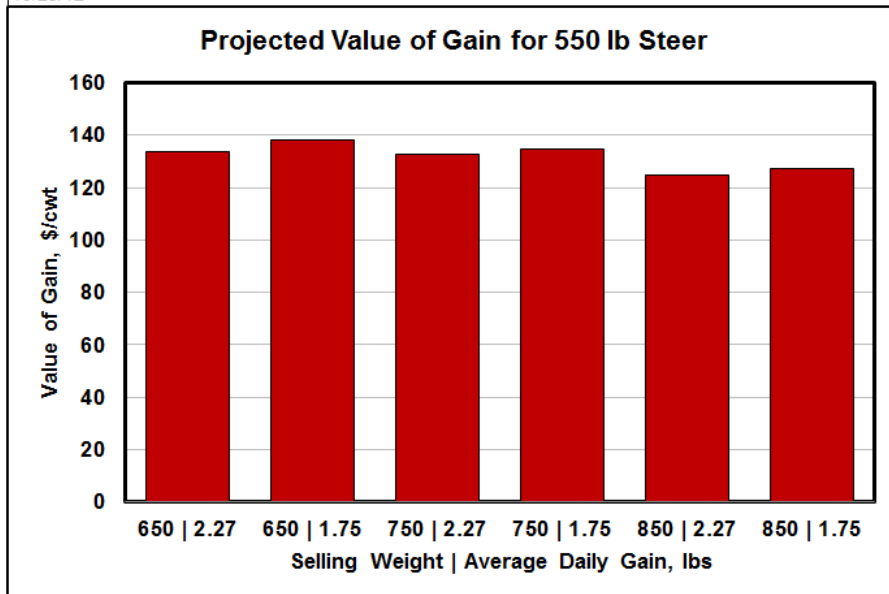
Table 1. Projected Value of Gain

Beginning Date	Ending Date	Beginning Weight, lbs	Ending Weight, lbs	Weight Gain, lbs/head	ADG, lbs	Value of Gain, \$/cwt
10/31/12	12/14/12	550	650	100	2.27	\$133.73
10/31/12	12/27/12	550	650	100	1.75	\$137.96
10/31/12	01/27/13	550	750	200	2.27	\$132.86
10/31/12	02/22/13	550	750	200	1.75	\$134.55
10/31/12	02/28/13	550	850	300	2.50	\$124.65
10/31/12	03/30/13	550	850	300	2.00	\$127.40

Note: Projections derived for the Dunlap, IA market using BeefBasis.com

Related information available at BeefBasis.com

10/29/12



Will values of gain trend downward as we move into 2013? They certainly could, but this is difficult to forecast as values are tied to the price of corn. There might be a decrease from these historically high values but the industry is probably not going back to the values of gain earlier in the decade which was probably under a different paradigm.

### **Cattle on Feed**

USDA's Cattle on Feed report estimating October 1 inventories came as little surprise to industry observers. Note that these numbers are for lots with a capacity of 1,000 head or more. Table 2 contains headline numbers from the cattle on feed report. The report was an important barometer for the cattle industry because it provided insight on how three forces are shaking-out: drought, smaller calf crops, and huge red ink on recent feedlot closeouts. The number grabbing much of the attention was the placements or the number of animals entering feedlots. In most years, August marks the beginning of a ramp-up in cattle entering feedlots which typically extends into October. In the five-year period from 2006 through 2010, placements increased by almost 23% between July and August, on average. Between August and September the increase has been 9 percent, on average. Last year with the Southern Plains drought forcing calves into feedlots earlier than normal, placements only increased by a little more than 5 percent between July and August. Between August and September placements increased by 10 percent. This year, the July to August increase in placements was just above 4 percent; the second smallest August placement figure since the current Cattle on Feed series was started in 1996. From August-to-September there was a 0.2 percent decrease in placements. This is the first time the August to September change in placements has been negative since 2006.

Table 2. October Cattle on Feed Summary

	U.S.		Iowa	
	1,000 head	% of Previous Year	1,000 head	% of Previous Year
September Placements	2,004	81	89	77
September Marketings	1,598	88	87	95
October 1 On-Feed	10,989	97	590	107

A few questions have been answered. Placements of cattle into feedlots are highly seasonal with August, September, and October being peak months. That effect this year has been substantially muted by the relatively large drought-induced placements in July. Furthermore, it looks like the smaller calf crops that were produced both this year and last year that resulted in even further tightening of the feeder cattle supply is showing up in the current placement numbers. As a result, fed cattle numbers in the spring of 2013 are going to be extremely tight.

Tight feeder cattle supplies and higher feed prices appear to be more important factors in placements than fed cattle futures that are still not far off their all-time highs set back in August. Even with the lower corn prices of this fall, this pressure is likely to continue as any gains in feed prices will be offset by higher feeder cattle prices. Will a run-up in fed cattle prices push placements higher? Maybe, but not likely since supplies are so tight. The more likely result will just be higher feeder cattle prices.

*Lee Schulz*

### **Dairy Outlook Overview**

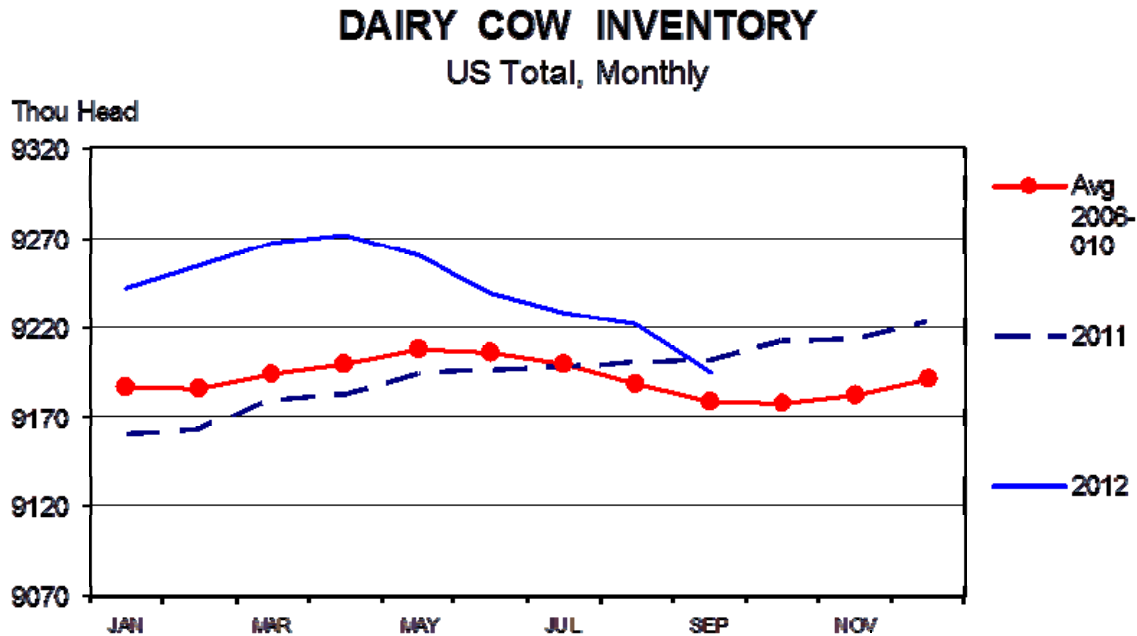
Although milk prices have increased over the summer, they have not kept pace with grain commodity price changes which have resulted in negative profit margins for producers. Dairy product demand and disappearance has remained strong for the first half of 2012 helping to sustain higher milk prices than expected. Projected milk prices are expected to remain strong compared to the range of prices over the past three years. But there is room for upward movement due to decreasing U.S. cow inventory, sustained global milk production, and stable increase in global dairy product demand.

## Milk Supply

Although milk per cow has increased year over year, the late summer heat hit U.S. milk production harder than a year ago. Rolling Herd Average at the end of September is 21,915 pounds per cow for the 23 selected dairy states, slightly down from end of second quarter 2012. At the end of September, total milk production was up by 2.44 percent for the year so far, but down 0.48 percent for the month compared with September a year prior.

Tight financial margins and higher cull cow prices have caused herds to evaluate cow efficiency and financial positions creating a decreasing trend in the cow inventory. As shown in the chart below from the Livestock Marketing Information Center, at the end of the third quarter, cow inventory has declined to 9.20 million cows, decreasing below August 2011 inventory numbers.

Figure 1. Dairy Cow Inventory



Iowa milk production has increased at a slower rate since the first half of the year. Milk production per cow increased 545 pounds per cow when comparing annual production from October 2011 to September 2012 to the same time period prior. At the end of September, Iowa saw an increase in total milk production by 1.70 percent for the year so far compared to 2011. Iowa cow inventory has fallen to 200 thousand cows; the dairy herd in Iowa has fluctuated 8 thousand head in the past year. Iowa producers continue to be in the top tier of states in increased milk per cow, but the declining herd inventory results in the state falling to the bottom half of the 23 selected states for total milk production.

Tightened margins and strong cull cow markets have influenced a declining herd size and tighter milk supply. These factors are not estimated to change drastically in the next six months, further maintaining the question of where production and herd inventories will be at the end of 2012.

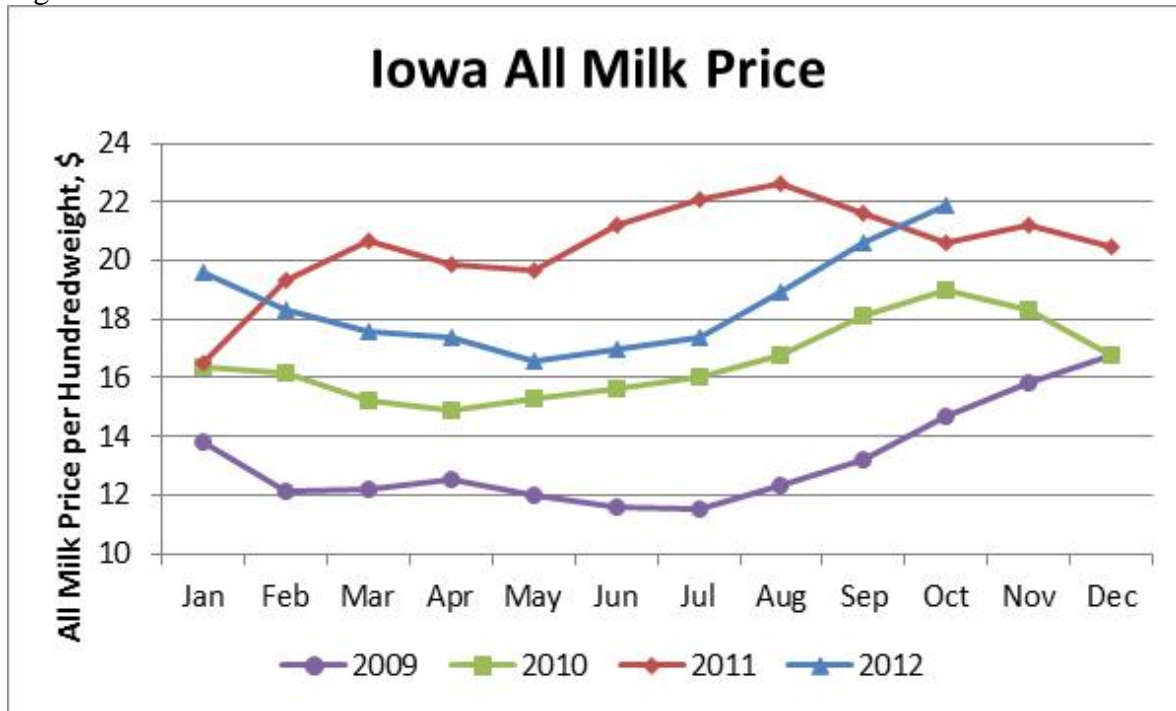
## Milk Demand

For the first half of 2012, commercial disappearance of dairy products is up 3.05 percent. There has been a large gain in nonfat dry milk production and cheese export sales since the beginning of the year. Current global demand for dairy products is strong with continued growth in demand from emerging countries and key export countries including China, Mexico, Middle East, and Southeast Asia. Despite strong production in Australia and New Zealand, total global milk supply is expected to remain tight in late 2012 due to drought conditions and tightened feed supplies in U.S., Europe, and South America. These factors have helped to keep dairy product and milk prices at higher levels than expected in the second half of 2012.

## Dairy Profitability

The U.S. All Milk Price for October was \$21.10 per hundredweight, up from \$19.00 at the start of the year. Iowa producers saw an additional \$0.80 on All Milk Price at \$21.90 in October. As shown in the chart below, milk prices have gained over the summer months from a prior steady decline in early 2012.

Figure 2. Iowa's All Milk Price



Milk prices are holding for the remainder of 2012, however, they are softening over the course of the coming year when basing on the Class III Milk futures. However, with expected reduced total milk supply and sustained global demand growth, there is opportunity for milk prices to improve if our dairy products can be price competitive and meet the needs of our global consumers.

Current feed prices have subsided slightly in the past few months with corn in the low \$7 range for the current corn crop in 2013. Better than expected yields with late cuttings of hay has helped hay prices to level off in some areas of the U.S. Feed quality and inventory assessments will need to be completed as purchase of additional feed may compromise the financial position of farms if not properly planned for.

Based on current market prices, profit margins are slim to negative for all types of dairy enterprises, pasture or conventional. Milk price protection, lower feed prices, or alternative sources of income will need to be explored to result in positive profit margins for some operations. Both individual cow production records and enterprise cost analysis should be completed to determine areas of improvement so dairy producers can weather the storm of higher feed input costs and tight margins over the next year.

*Kristen Schulte*

## Summarizing The Year So Far

Despite the drought, the agricultural crop sector continues to record breaking crop values. Even though corn and soybean production fell dramatically in 2012, both corn and soybeans will set records in terms of the values of the crops due to the high prices being received. A decade ago, the corn crop was worth \$20 billion. The 2012 corn crop is currently valued at over \$80 billion. In 2002, the national soybean crop had a production value of \$15 billion. The current crop is valued at nearly \$45 billion. So crop agriculture continues to produce significant economic value, even as the rest of the economy has struggled to grow.

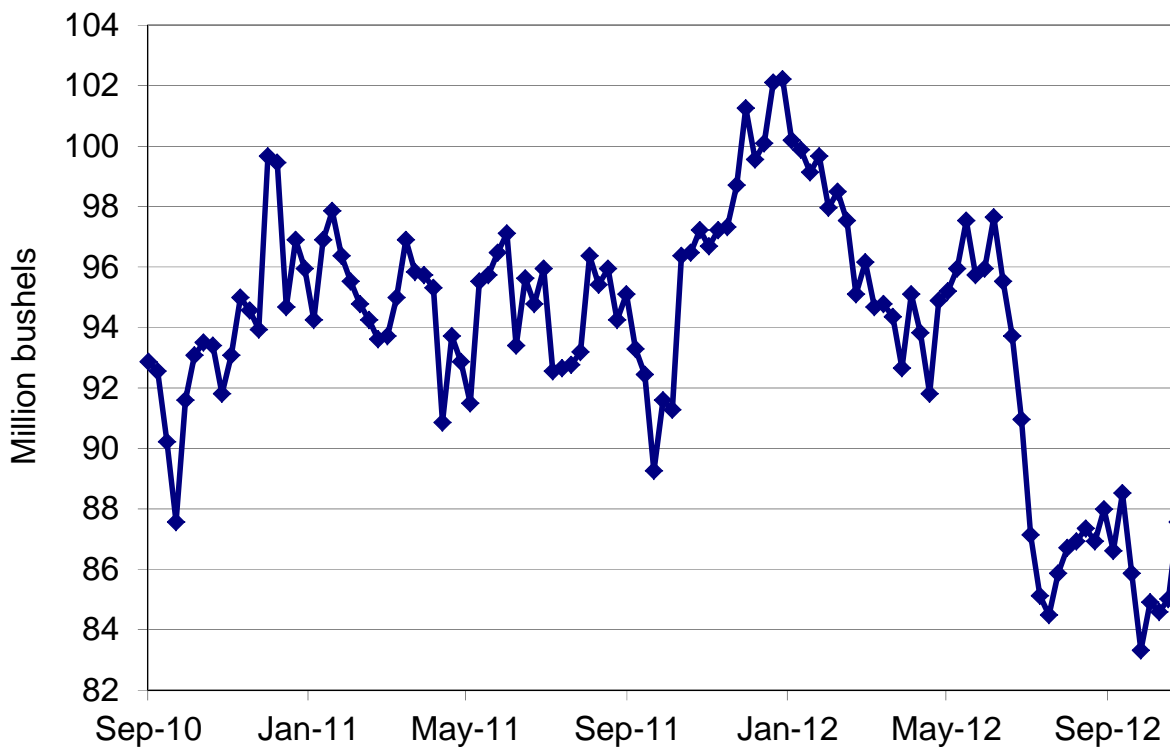
The impact of the drought worked very quickly into the crop markets as prices this summer reached record levels. As the harvest rolled in, prices have softened a bit, but the markets are still offering very strong values. And the lack of production this year has the markets offering stronger prices for next year's crops as well. Many sectors of demand have backed off with the drought and the higher prices, but demand is still outpacing supply. Biofuels continue to be the leading source of crop demand. Exports have been supportive for soybeans. And livestock feed remains a critical part of the demand picture.

The supply picture for 2012 was drastically altered by the drought. As we started the year, there was the potential for record production as corn and soybean plantings were increased. Corn area increased by 5 million acres and soybean area increased by 2.2 million acres in 2012. But the drought sharply reduced yields and lowered production. Compared to last year, corn yields were down 17% nationally, 19% here in Iowa, and 38% in Illinois. For soybeans, national yields were down 10%, Iowa was down 17%, and Illinois fell 18%.

Given the supply shortfall, prices have risen and demand has weakened. Last year, ethanol passed domestic livestock feed as the #1 use of U.S. corn. Corn demand via ethanol topped the 5 billion mark for the 2011 crop. The outlook for the 2012 corn crop suggests ethanol usage of corn will fall in the current marketing year. As Figure 1 shows, the ethanol industry cut back on production this summer as the drought took hold. Just as higher corn prices represent higher feed costs for livestock producers, they also represent higher feedstock costs for ethanol plants. With somewhat steady oil prices and higher corn prices, ethanol production margins were squeezed and the industry pulled back on production. A few ethanol plants shut down, while many others slowed down. Overall, the ethanol industry retreated 10% this summer and had not ramped back up this fall.

One of the bigger for the ethanol industry is that with gasoline consumption declining over the past few years, the potential market for ethanol has shrunk. And the industry has grown large enough to fill that potential market and provide some ethanol for the export market. Ethanol stocks now fluctuate between 750 and 950 million gallons. Those stocks keep ethanol prices fairly low and limit production margins. So the growth in corn demand via ethanol has stabilized, taking away the major growth factor in the market over the past five years.

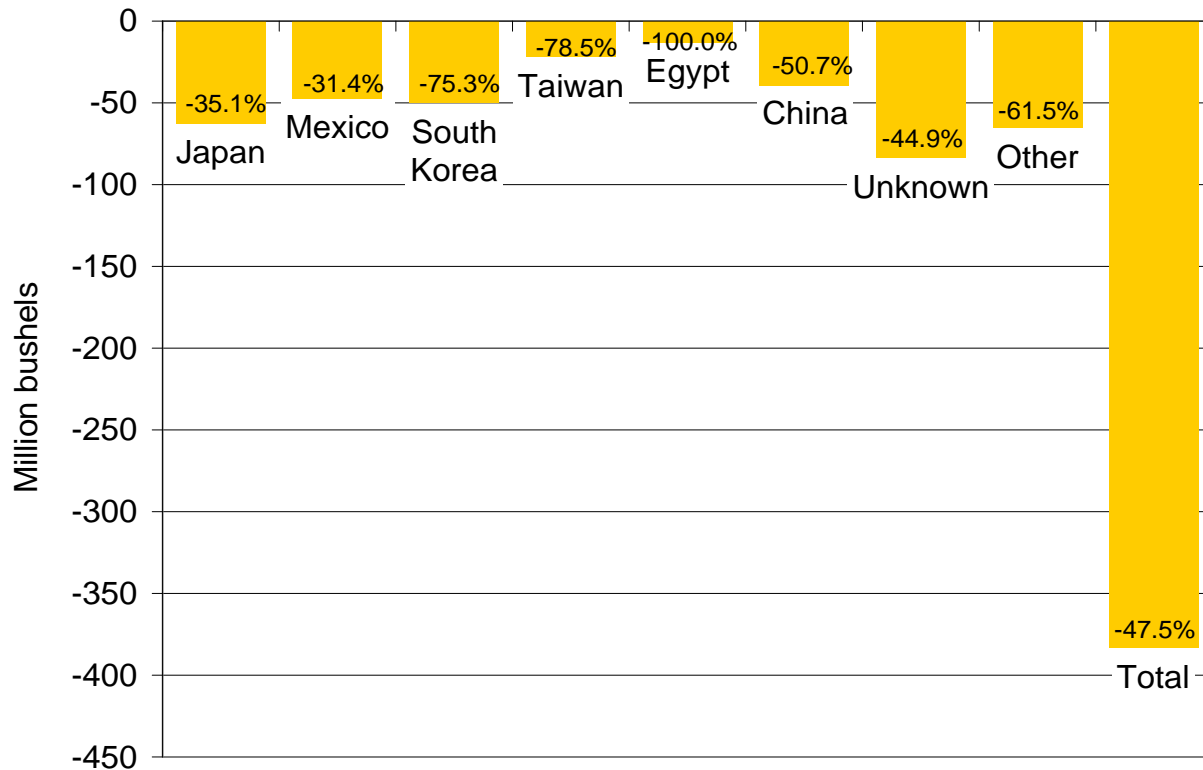
Figure 1. Weekly Corn Use by Ethanol Plants



Corn feed and residual demand for the 2012 crop is projected at 4.15 billion bushels, as feed demand continues to shift lower. Returns to the livestock industry have retreated again as livestock prices could not keep pace with feed costs. Livestock production is in decline across the board as beef, pork, and poultry production is projected to lower in 2013. As was true last year, a big issue is price competition in feeds. Given corn's relatively high price in comparison to other feeds, livestock feeders have moved to replace corn in part of the ration with lower cost feed.

Corn export demand is estimated at 1.15 billion bushels, down significantly from last year. The feed competition due to high corn prices is limiting corn exports. Figure 2 displays export sales so far this marketing year. All segments of the corn export market are lower this year. And the losses are significant. Sales to Japan and Mexico are down over 30%. Chinese purchases are down 50%. And exports to South Korea and Taiwan are off by more than 75%.

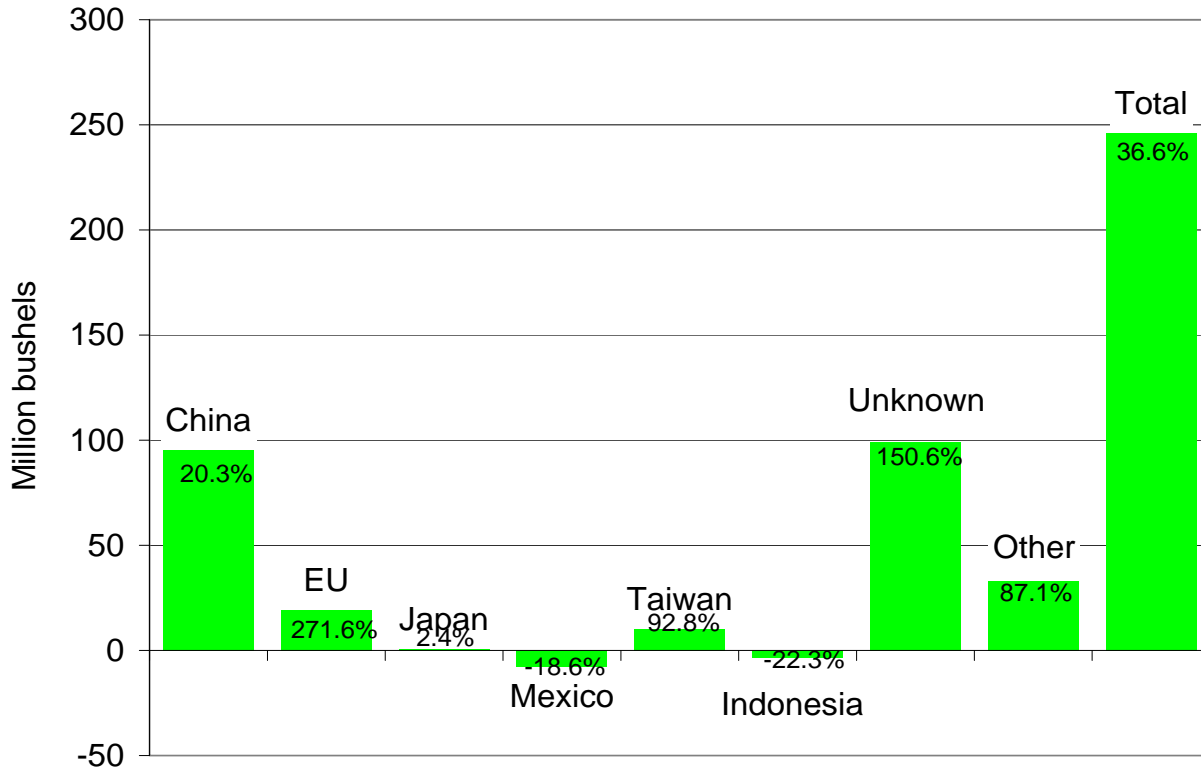
Figure 2. Corn Exports through Late October (Source: USDA-FAS)



As like last year, exports remain the big story for soybeans, especially exports to China. While USDA has lowered its export estimate to 1.265 billion bushels, actual sales so far this year have higher than last year's pace. The early sales data show strong demand from several countries. China leads the way, purchasing roughly 100 million bushels more thus far. But other countries such as Japan, Taiwan, and the European Union have also increased their soybean imports. As Figure 3 shows, current soybean exports are running nearly 40% above last year's pace.

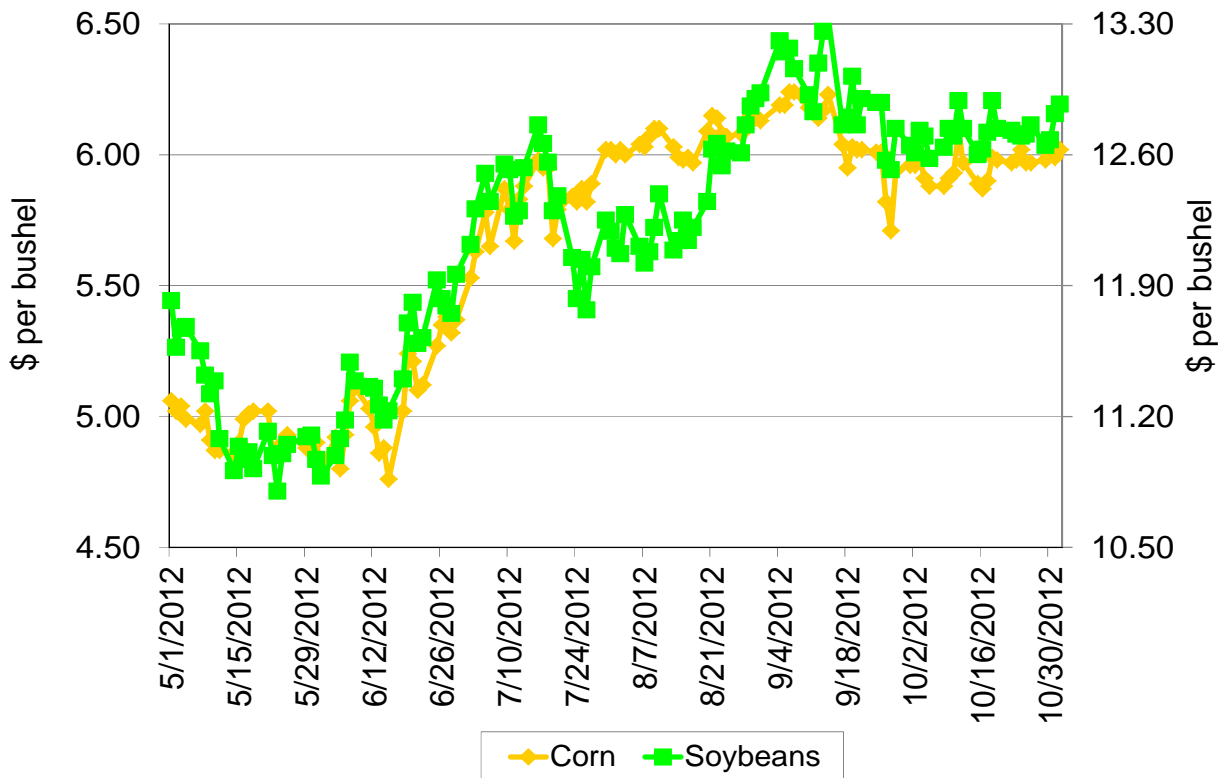
From their early October outlook, USDA had projected ending stocks for corn at 619 million bushels, over 250 million bushels less than last year. Soybean ending stocks were estimated at 130 million bushels, down 39 million bushels from last year. So U.S. ending stocks remain tight. Currently, USDA projects 2012/13 season-average prices at \$7.80 for corn and \$15.25 for soybeans. The futures markets have backed off from those levels though. Current futures prices point to 2012/13 season-average prices around \$6.95 per bushel for corn and \$14.37 per bushel for soybeans.

Figure 3. Soybean Exports through Late October (Source: USDA-FAS)



With the sustained high prices for both crops, the acreage competition for 2013 should be interesting again. Corn again looks to have the upper hand in the competition. Futures indicate 2012/13 season-average prices in the \$6 range for corn and \$13 range for soybeans. But the biggest issue in the acreage decision may be soil moisture. Most of the country still remains under drought conditions. While some hurricane-induced rains have reduced soil moisture problems in the Eastern Corn Belt, the western Corn Belt continues to dry out.

Figure 4. Projections for 2013 Season-Average Prices Based on Futures



---

Dr. Chad Hart, Assoc. Professor  
Extension Grain Marketing Specialist  
468 Heady Hall  
Phone: (515) 294-9911  
Fax: (515) 294-0221  
[chart@iastate.edu](mailto:chart@iastate.edu)  
[www.econ.iastate.edu/~chart](http://www.econ.iastate.edu/~chart)

Dr. Lee Schulz, Asst. Professor  
Extension Livestock Economist  
478 Heady Hall  
Phone: (515) 294-3356  
Fax: (515) 294-0221  
[lschulz@iastate.edu](mailto:lschulz@iastate.edu)  
[www.econ.iastate.edu/people/faculty/schulz-lee](http://www.econ.iastate.edu/people/faculty/schulz-lee)

---

Kristen Schulte  
Extension Farm & Agribusiness Management Specialist  
132 1<sup>st</sup> Avenue West  
Cresco, IA 52136  
Phone: (563) 547-3001  
[kschulte@iastate.edu](mailto:kschulte@iastate.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.