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This Issue

Dear Ag industry associate:

Many agriculture producers would be forgiven for wanting to celebrate the end of 2016, which proved to be a very challenging year. Margins were particularly low in the hog and crop sectors, and while the dairy and beef cattle industries have recently started to improve, the gains come only afer many difficult months.

As crop farmers and other producers think ahead to next season, they should be prepared to provide their lenders with detailed information about their current financials, including the negative effects on cash flow of the past several months of depressed margins. Loan officers will probably also want to know that their debtors have a plan in place to mitigate losses in the future. Our feature article this month, “Give Your Lender More Confidence in Your Future,” provides guidelines that can help you prepare you for those loan discussions. It explains how an annual review allows you to continuously improve your plan and presents specific strategies that can help ensure your operation is protected even if margins remain low.

Our regular Margin Watch reports highlight changes in projected returns for the crop, hog, dairy and beef cattle industries over the past month. November brought the election of Donald Trump, which led to a stregthening U.S. dollar as well as uncertainty about what his policies might mean for agricultural trade. We explore the impact of these and other factors on commodity margins.

As always, if you have questions, please feel free to contact me.

Respectfully,

Chip Whalen

Chip Whalen is the managing editor of MarginManager and the vice president of education and research for CIH. He teaches classes on margin management throughout the country and can be reached at cwhalen@cihedging.com.

Upcoming Education Events

Manage Hog Market Volatility
Chicago

December 14-15, 2016

Crop Margin Management
Chicago

January 11-12, 2017

Give Your Lender More Confidence in Your Future

Historically poor profit margins in 2016 have tightened cash flows across all sectors of production agriculture.

While that's a challenge in itself, it may also mean a more stringent loan renewal process, as lenders will be prompted to scrutinize balance sheets even more carefully. But a sound, detailed margin management policy document can facilitate the credit review step by giving your lenders confidence that you have a well thought-out strategy for managing risk. That's why it's a smart idea to review – and improve – your margin management plan before your loans come up for renewal.

You Learn Something New Every Year

Similar to a will or other planning document, a margin management plan should be reviewed at least once a year to make sure it still reflects your current situation, needs and goals. But an annual update also allows you to more easily incorporate lessons learned over the past 12 months. The result is a continuously improving plan that provides ever more granular guidance for a wider range of possible situations.

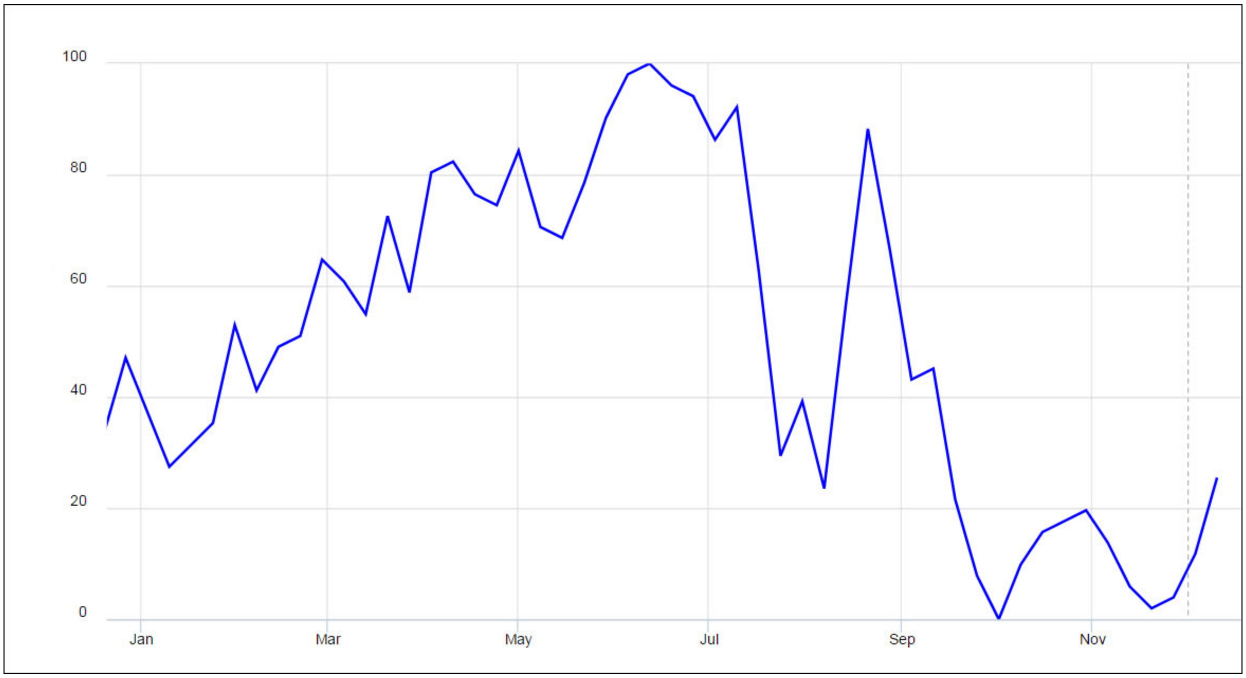
Begin your review by thinking critically about the last 12 months. Given your profit margin outcome, did you have coverage on the right amount of your production? Was your protection strong enough? Was the coverage period long enough to capture sufficient margin opportunities? With the benefit of hindsight after a rough year, you have the perspective to identify changes that may help you retain control of your margins in all market environments.

Margin Management is Risk Management

Remember that your margin management plan is intended not only to protect attractive profit margins, but also reduce the effects of unfavorable markets. Consider the extent to which your plan addresses both of those goals. A basic plan will spell out triggers (in terms of levels of historical profitability) for capturing profit margin opportunities as they arise. But as discussed in the October issue of MarginManager, a really solid plan will also provide guidance for protecting your operation in case those trigger levels are never reached.

For some producers, it may make sense to place minimum levels of coverage based on seasonal margin tendencies. For example, crop prices typically rise from the beginning of the year into the summer, and then drop as harvest approaches, as shown in the chart below.

December Corn Seasonal Index



The chart above shows an index of December corn futures prices for the 10-year period from November 2007 to November 2016.

But if margins never reach a trigger level for initiating coverage to protect a profit, a crop operation might want to scale into some minimum amount of coverage starting in early April, and continue to add protection until July, as illustrated in the following table.

Date	Minimum Cumulative Coverage
April 1	15%
May 1	30%
June 1	45%
July 1	60%

This coverage might take the form of a flexible strategy using option contracts.

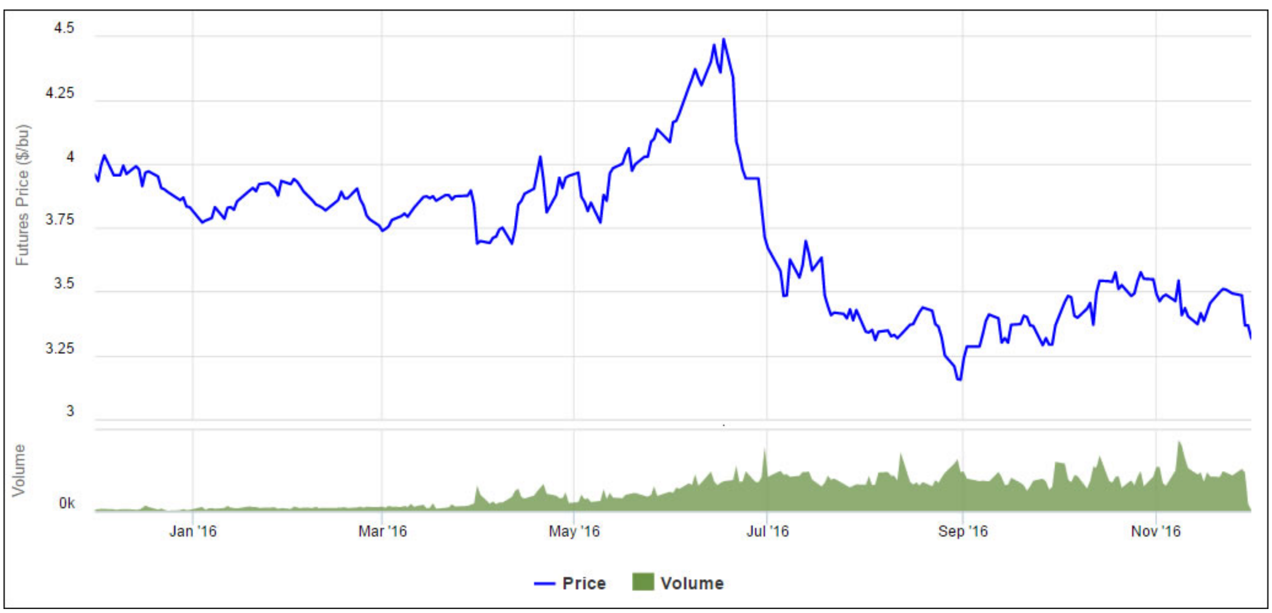
For other producers, a minimum level of coverage might be placed on a percentage of production at certain points in a given marketing period. This approach aims to align the amount of protection with the length of time remaining, and the window of opportunity for margins to improve, before you will need to act on your current production.

More Time Brings More Opportunities

The longer your time horizon, the greater the likelihood that you might reach some, or all, of your margin targets. For that reason, you may want to extend the future production periods that you actively manage. Moreover, the earlier you capture a margin opportunity, the longer the potential runway to adjust those positions over time to incrementally improve your final price.

Many producers limit the scope of their marketing plans to just one year at a time due to capital constraints. In the case of crop producers, for example, few would have thought about marketing their 2016 corn crop before the 2015 harvest. Yet, a longer term view can multiply opportunities for protecting margins. The December 2016 corn futures market was largely range-bound, trading between $3.70 and $4.00 a bushel, from November 2015 to April 2016, as shown in the chart below.

December 2016 Corn Futures
November 2015 – November 2016

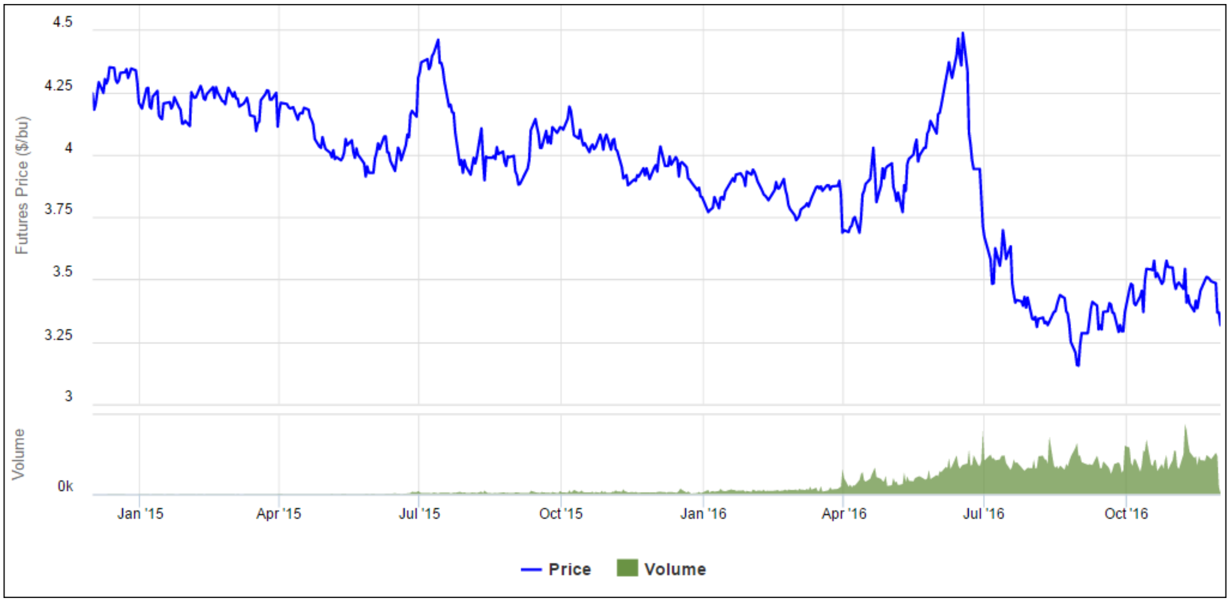


During the 12-month period between November 2015 and November 2016, December 2016 corn futures spiked just one time, during the summer months.

A summer rally up to $4.50 in June provided a crop producer with the one and only opportunity to protect margins on this year’s corn before the market turned downward.

But what if the crop producer had allocated some of the capital earmarked for the 2015 crop to protect the 2016 crop? If we expand our view of December 2016 corn futures backwards to November 2014, we see that there were actually two opportunities to protect margins, as shown in the chart below.

December 2016 Corn Futures
November 2014 – November 2016



By extending to a 24-month active monitoring period, a corn producer would have gained a second opportunity to capture and protect margins.

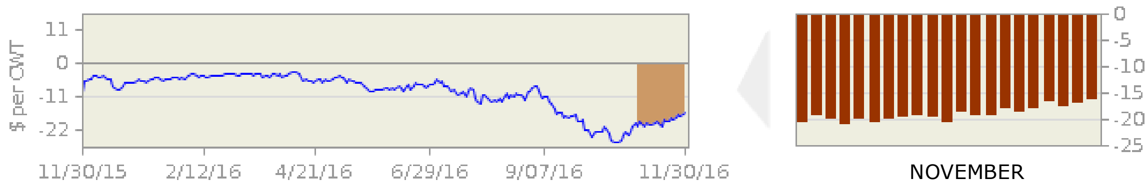
In the summer of 2015, corn had approached the same $4.50 level. What's more, margins similarly deteriorated almost immediately afterwards. That decline might have prompted the producer to make adjustments to the initial position, setting the stage to further benefit from the price increase the following year.

Make a Plan to Strengthen Your Plan

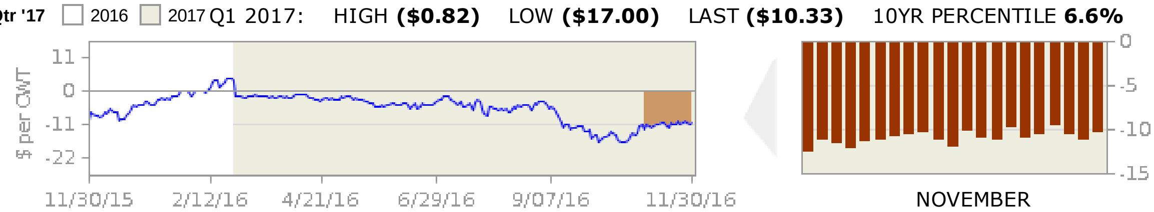
No two marketing periods will be exactly alike, and years like 2016 are a good reminder to be prepared for all possibilities. Reviewing your margin management plan to incorporate lessons learned can help both you and your lender gain greater confidence in your ability to manage your operation's financial risk. But keep in mind that even the best strategies will fall short of your goals unless you actually execute them. That's why it's critical to not only review – but also to follow through on – your plan for next year. If you have questions or would like help improving your margin management plan, please call CIH at 1.866.299.9333.

Hog finishing margins were mixed over the second half of the month, improving in spot Q4 while flat to lower in deferred marketing periods. Both feed and hog prices have been relatively flat since the middle of November, with limited movement in the markets. Recent optimism over demand helped hog prices hold onto recent gains since bottoming out in October. Slaughter runs continue to track well above what would have been expected from the September Hogs and Pigs report; however, average slaughter weights seem to indicate that producers may be sending hogs to market early in order to avoid a glut in December. If producers have in fact been “pulling hogs forward,” it may be a positive indication for the market. USDA reported total pork in cold storage as of October 31 at 597.975 million pounds, a decrease of 44.328 million pounds, or 6.90%, from September. This compares to the average build of 0.36% from September to October over the last ten years. The Cold Storage report was considered supportive given strong pork production in October. On the feed side, both corn and soybean meal prices held relatively steady over the past two weeks. Demand remains strong despite recent strengthening of the U.S. dollar following the election. As the market adjusts to the incoming Trump administration, trade policy and its potential impact on exports for both protein and feedstuffs remains a key unknown. Given the recent hog market strength, our hog producer clients are making strategic adjustments to strengthen existing hog hedges.

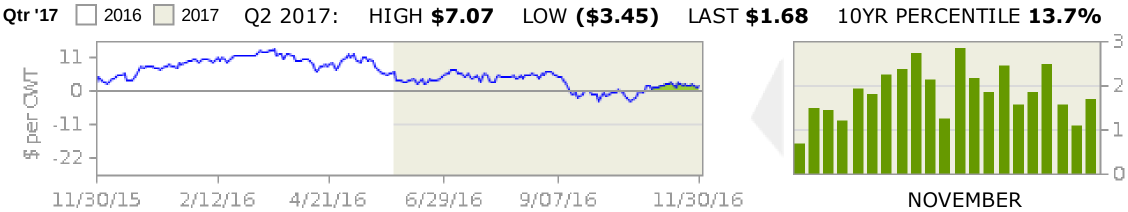
4th Qtr '16 2015 2016 Q4 2016: HIGH **($2.93)** LOW **($26.09)** LAST **($16.13)** 10YR PERCENTILE **5.9%**



1st Qtr '17 2016 2017 Q1 2017: HIGH **($0.82)** LOW **($17.00)** LAST **($10.33)** 10YR PERCENTILE **6.6%**



2nd Qtr '17 2016 2017 Q2 2017: HIGH **$7.07** LOW **($3.45)** LAST **$1.68** 10YR PERCENTILE **13.7%**

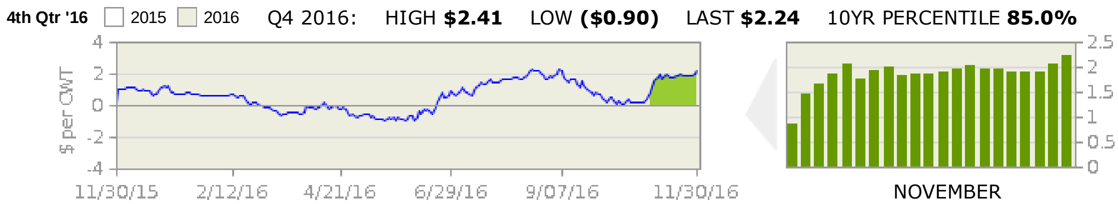


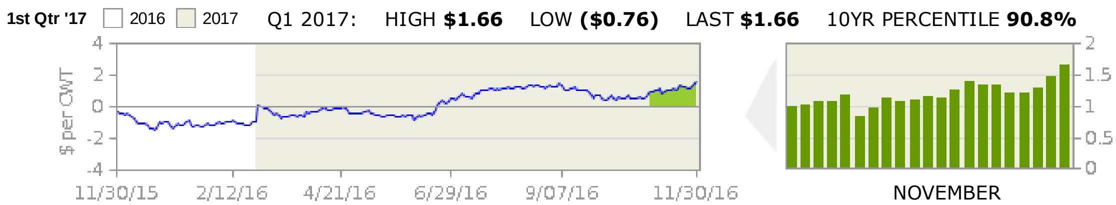
3rd Qtr '17 2016 2017 Q3 2017: HIGH **$0.80** LOW **($6.86)** LAST **($1.99)** 10YR PERCENTILE **15.8%**

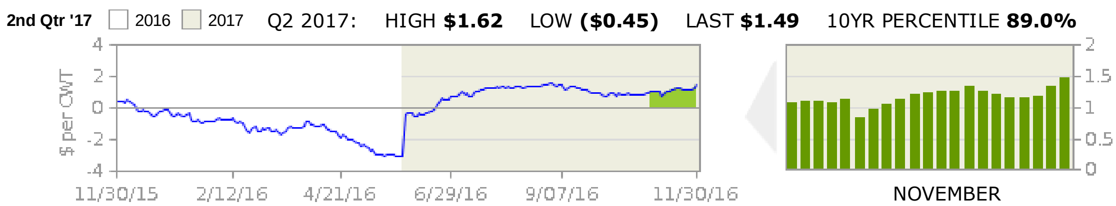
The Hog Margin calculation assumes that 73 lbs of soybean meal and 4.87 bushels of corn are required to produce 100 lean hog lbs. Additional assumed costs include $40 per cwt for other feed and non-feed expenses.

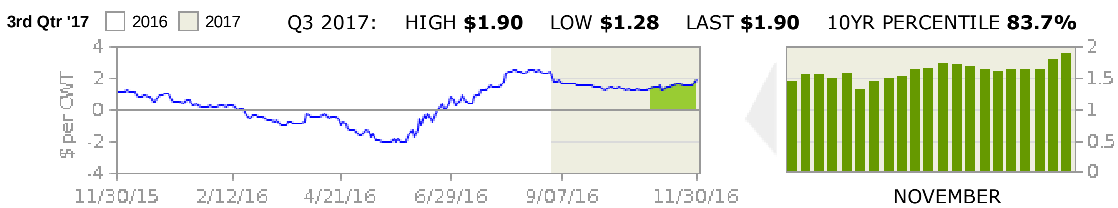
Dairy Margin Watch: November

Dairy margins continued to improve over the second half of November following higher milk prices with feed costs holding relatively steady. Spot margins in Q4 are now at the 85th percentile of the past 10 years, Q1 margins have breached the 90th percentile and Q2 is close to that threshold. Forward margins further into Q3 2017 and beyond are also at or above the 80th percentile of the past ten years. Milk prices are being supported by both domestic and international factors. Recent milk production data from Oceania and Europe reflect growing year-over-year losses in milk output, which are supporting global markets. Meanwhile, USDA's latest Cold Storage report reflected a large month-over-month decline in butter stocks with cheese stocks also showing a seasonal decline during October. Butter inventories for October 31 totaled 227.7 million pounds, down 41.1 million, or 15.4%, from September. That figure significantly exceeded the five-year average monthly draw between September and October of 27.1 million pounds. Cheese stocks totaled 1.216 billion pounds at the end of October, down 19.9 million, or 1.6%, from September, but less than the 2.13% average draw. Both butter and cheese stocks remain above year-ago levels. Feed costs held relatively steady over the past two weeks. Export demand remains strong for corn, although the market will face headwinds from a number of factors, including South American production this coming spring, recent strength in the U.S. dollar and uncertainty regarding Trump administration trade policies. Our dairy producer clients have been adding new coverage with renewed margin strength along with adjusting existing strategies. Strengthening milk hedges has been a particular focus to take advantage of higher prices.









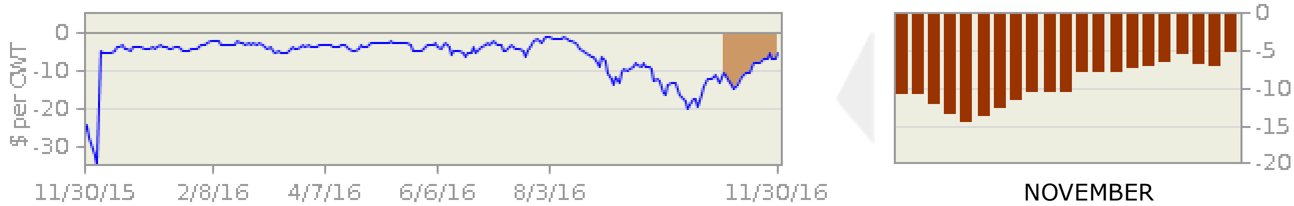
The Dairy Margin calculation assumes, using a feed price correlation model, that for a typical dairy 62.4 lbs of corn (or equivalent) and 7.34 lbs of meal (or equivalent) are required to produce 100 lbs of milk (includes dry cows, excludes heifers not yet fresh). Additional assumed costs include $0.90/cwt for other, non-correlating feeds, $2.65/cwt for corn and meal basis, and $8.00/cwt for non-feed expenses. Milk basis is $0.75/cwt and non-milk revenue is $1.00/cwt.

Beef Margin Watch: November

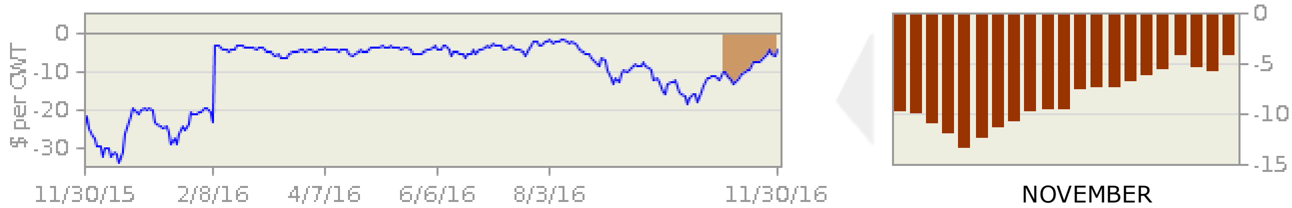
Beef margins continued to gain over the second half of November as cattle prices rose and feed costs held steady. Cattle prices have been firm recently due to strength in cash trade as well as from indications of strong beef demand. The Fed Cattle auction this week hit $115/cwt. following increased packer interest with strong processing margins. Beef muscle cut exports over the past two weeks have averaged 16,808 metric tons, the highest for any two-week period in the past two years. Beef exports in the past four weeks have averaged 15,750 MT, up 28% from the same period last year, driven in large part by extremely strong demand from Asian markets this fall. USDA's latest report meanwhile showed total beef in cold storage as of October 31 at 532.3 million pounds, up 2.56% from September, compared to the average monthly build of 0.81% over the past 10 years. The figure was also up 23.2 million pounds, or 4.56%, over October 2015. Feed costs have trended mostly steady over the past two weeks with limited movement in the corn market. Export demand remains strong and the U.S. will have a competitive advantage until Argentina and Brazil harvest their crops next spring. However, concerns over recent strength in the U.S. dollar index, as well as the incoming Trump administration's trade policies, hang over both the corn and beef markets. Following recent higher trade in the cattle market, our beef producer clients have been focused on strengthening hedges against recent cattle placements for the April marketing period, where margins are now positive.

Live Cattle Marketing Periods:

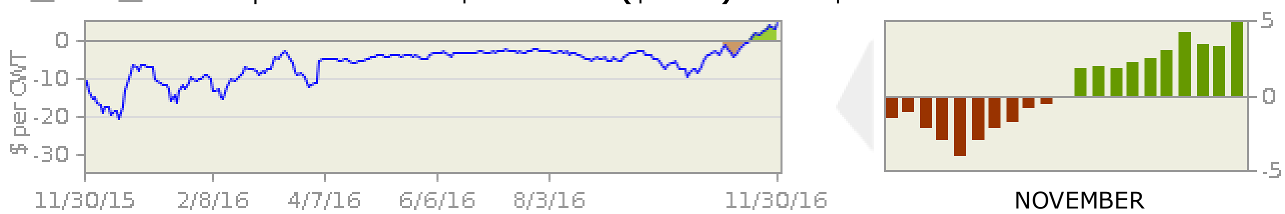
Dec '16 2015 2016 Dec 2016: HIGH **($1.19)** LOW **($34.83)** LAST **($5.22)** 10YR PERCENTILE **23.6%**



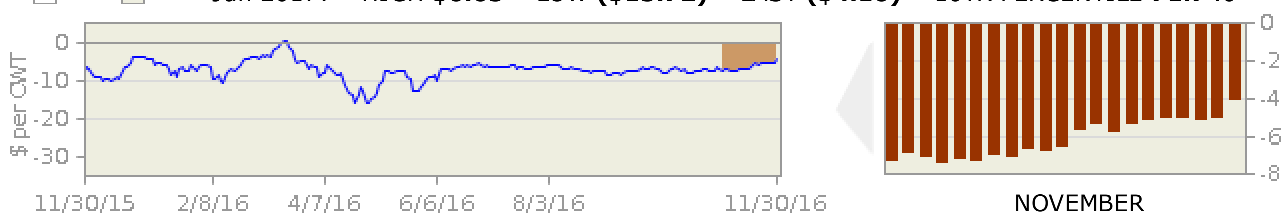
Feb '17 2016 2017 Feb 2017: HIGH **($1.65)** LOW **($33.93)** LAST **($4.02)** 10YR PERCENTILE **31.4%**



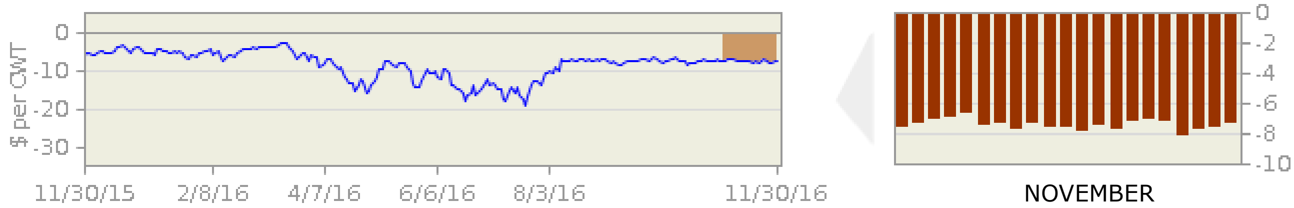
Apr '17 2016 2017 Apr 2017: HIGH **$4.93** LOW **($20.55)** LAST **$4.93** 10YR PERCENTILE **94.3%**



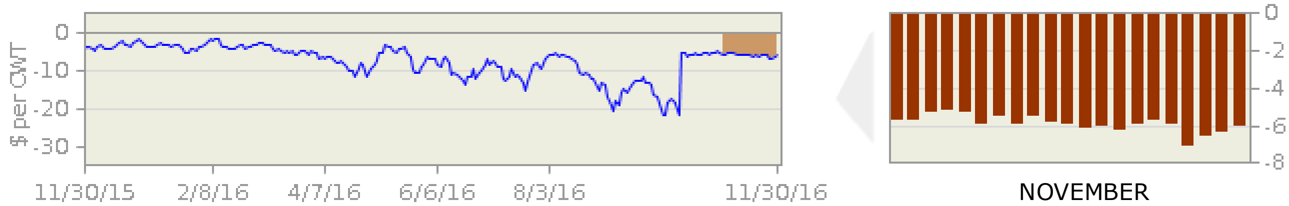
Jun '17 2016 2017 Jun 2017: HIGH **$0.65** LOW **($15.72)** LAST **($4.10)** 10YR PERCENTILE **71.7%**



Aug '17 2016 2017 Aug 2017: HIGH **($2.49)** LOW **($19.19)** LAST **($7.28)** 10YR PERCENTILE **28.0%**



Oct '17 2016 2017 Oct 2017: HIGH **($1.60)** LOW **($21.47)** LAST **($6.00)** 10YR PERCENTILE **22.3%**



The Beef Margin calculation uses Feeder Cattle futures to price inbound animals and assumes each will consume 55 bushels of corn and cost approximately $250 per head (for other feed and non-feed expenses) to gain 550 pounds and reach a market weight of 1,250 pounds.

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Corn Margin Watch: November

Corn prices and margins continued to trade in a fairly tight range, finishing virtually unchanged from mid-month levels. The USDA released long-term agricultural projections; these baseline estimates, used largely by Congress for budgetary purposes, extend out ten years and are adjusted annually at the completion of the crop year. The projections for 2017/18 corn crop are 90.0 million acres planted, producing a crop of 14.060 billion bushels. This planted acreage estimate is down from 94.5 this year, but right in line with many private projections. The EPA released the 2017 renewable volume obligations (RVO's) under the 2007 Renewable Fuel Standard Act of 2007 (RFS). Conventional RVO targets were in line with expectations at 15.00 billion gallons. The conventional RVO is primarily corn based, but is not required to be so. This target is now set at the statutory requirement level of the 2007 act; given the blend wall, any further growth will come from increased total transportation fuel use or exports. Actual corn exports continue to show strength and are on pace to meet this year's aggressive total expectation of 2,225 million bushels of corn shipped. Corn producers are continuing to monitor the corn market and are ready to capitalize on any volatility.

The estimated yield for the 2016 crop is 182 bushels per acre and the non-land operating cost is $595 per acre. Land cost for 2016 is estimated at $238 per acre [1]. Basis for the 2016 crop is estimated at $-0.1 per bushel.

The estimated yield for the 2017 crop is 184 bushels per acre and the estimated operating cost is $547 per acre. Land cost for 2017 is estimated at $228 per acre [1]. Basis for the 2017 crop is estimated at $-0.3 per bushel.

[1] The Corn Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University of Illinois.

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Soybeans Margin Watch: November

Soybean prices and margins increased over the past two weeks, as strong export sales and shipments drove demand. The latest weekly soybean shipments totaled 87 million bushels, breaking a five-week string of inspections over 100 million bushels. Current shipment levels are running 8% over the average pace to meet the 2,050 million bushel USDA expectation. The USDA released agricultural baseline projections for the next ten years, with 2017/18 soybean acreage estimated at 85.5 million acres planted, producing a crop of 4.050 billion bushels. The acreage figure is above last year's levels by 1.8 billion, but is shy of many private expectations closer to 88 million acres seeded. Also pertinent to the soybean complex was news from the EPA setting 2017 renewable volume obligations (RVO's). The advanced biofuel RVO was set at 4.28 billion gallons, up from the 4.00 level proposed this past May, and well above the 2016 level of 3.61 billion gallons. The 2007 Renewable Fuel Standards Act (RFS) had set the statutory requirement for the advanced category at 9.00 billion gallons. The 2017 target sits just shy of 50% of the initial goal, and if realized, has potential to increase demand for bean oil. Globally, new crop soybean planting in South America is progressing, with Brazil nearing completion and Argentina running behind average, at near 50% seeded. Given the move higher in the soybean complex, many soybean producers are considering additional coverage.

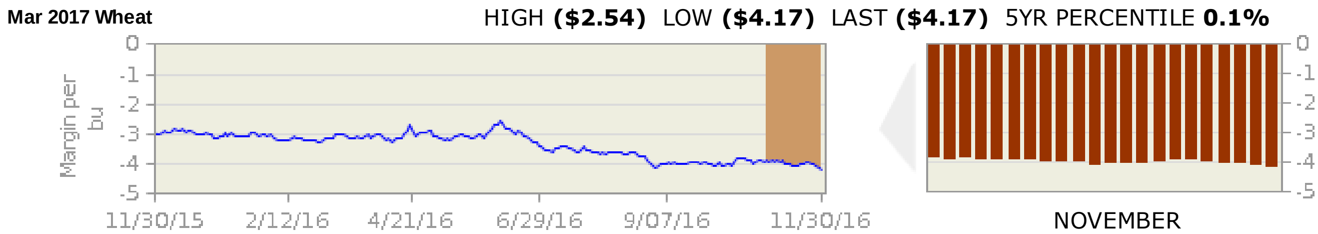
The estimated yield for the 2016 crop is 52 bushels per acre and the non-land operating cost is $365 per acre. Land cost for 2016 is estimated at $238 per acre [1]. Basis for the 2016 crop is estimated at $-0.3 per bushel.

The estimated yield for the 2017 crop is 53 bushels per acre and the estimated operating cost is $290 per acre. Land cost for 2017 is estimated at $228 per acre [1]. Basis for the 2017 crop is estimated at $-0.35 per bushel.

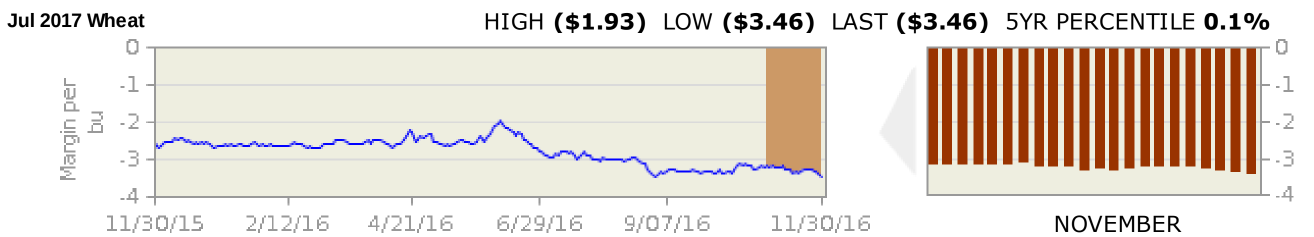
[1] The Soybeans Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University of Illinois.

Wheat Margin Watch: November

Wheat prices and margins were down again over the past two weeks, and wheat continues to trade in a fairly tight range. Large global wheat supplies were confirmed when the International Grain Council raised the world wheat production estimate to a new record 749 million metric tons. Contributing to the increase is an expected bump in Argentine production, as reported by the agricultural minister, from 11.3 to 14.9 million metric tons next year. The higher production is largely attributed to an export tax that affects soybeans, but not wheat. U.S. wheat exports have shown recent strength, with sales finally on the pace needed to meet the USDA expectation of 975 million bushels shipped. 58% of the U.S. winter wheat crop was last reported to be in the Good/Excellent condition category, which is 3% ahead of last year. Given the current price levels, wheat producers continue to favor flexible hedging strategies.



The estimated yield for the 2016 crop is 67 bushels per acre and the non-land operating cost is $358 per acre. Land cost for 2016 is estimated at $158 per acre [1]. Basis for the 2016 crop is estimated at $-0.5 per bushel.



The estimated yield for the 2017 crop is 68 bushels per acre and the estimated operating cost is $358 per acre. Land cost for 2017 is estimated at $150 per acre [1]. Basis for the 2017 crop is estimated at $-0.3 per bushel.

[1] The Wheat Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University of Illinois.

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