

This Issue

Feature Article

Pages 2-5

The Limitations of Seasonality Data 2

Margin Watch Reports

Pages 6-12

Hog 6
Dairy 7
Beef 8
Corn 10
Soybean 11
Wheat 12

Dear Ag industry associate:

Among the many tools agriculture producers deploy in their arsenal of analysis to manage forward margins and commodity prices, seasonality is one of the most popular. Agricultural commodities such as corn display recurring seasonal price trends around production cycles, and these are well-known and studied. While seasonality can be a helpful guide in an operation's margin management plan, care should be taken in how it's used as there are pitfalls to avoid.

Our feature article this month, "The Limitations of Seasonality," discusses some of these pitfalls and explores how a producer may want to think about using seasonality in their analysis. Because the market is dynamic, seasonality is in constant flux and it is important to understand this when analyzing seasonal patterns. Putting too much emphasis on seasonality can lead one astray, and the article looks at this from the perspective of the recent corn market.

June has been a busy month with several key government reports released. In addition to the normal WASDE, Milk Production, Cattle on Feed and Cold Storage reports, USDA also released updated Quarterly inventory figures for Hogs and Grain Stocks. In addition, revised acreage numbers were also released following the preliminary Planting Intentions reported in March. Our regular Margin Watch reports review the impact of these reports as well as other seasonal developments such as weather on the projected returns for the hog, beef, dairy and crop sectors.

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

Respectfully,



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

**Beef Margin Management Seminar
Denver**

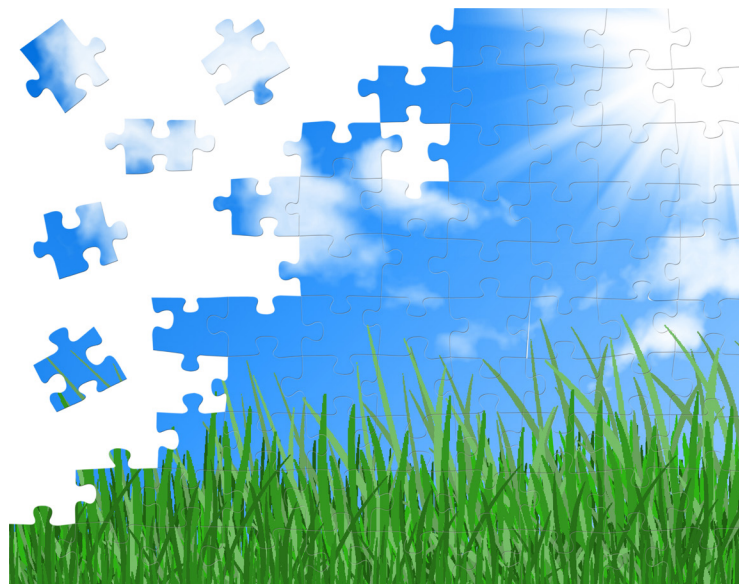
Aug 16-17

**Crop Margin Management Seminar
Chicago**

Aug 30-31

The Limitations of Seasonality Data

With summer now in full swing, it is a good time to revisit the topic of seasonality. Many agriculture producers look to seasonal price trends for guidance with their margin management. While seasonality considerations can be an important part of a thoughtful margin management policy, the value of seasonality data has its limits and producers should be aware that it is just one of many factors that influence forward margins. Here we take a closer look at some of the reasons not to place too much weight on seasonality data when making margin management decisions.



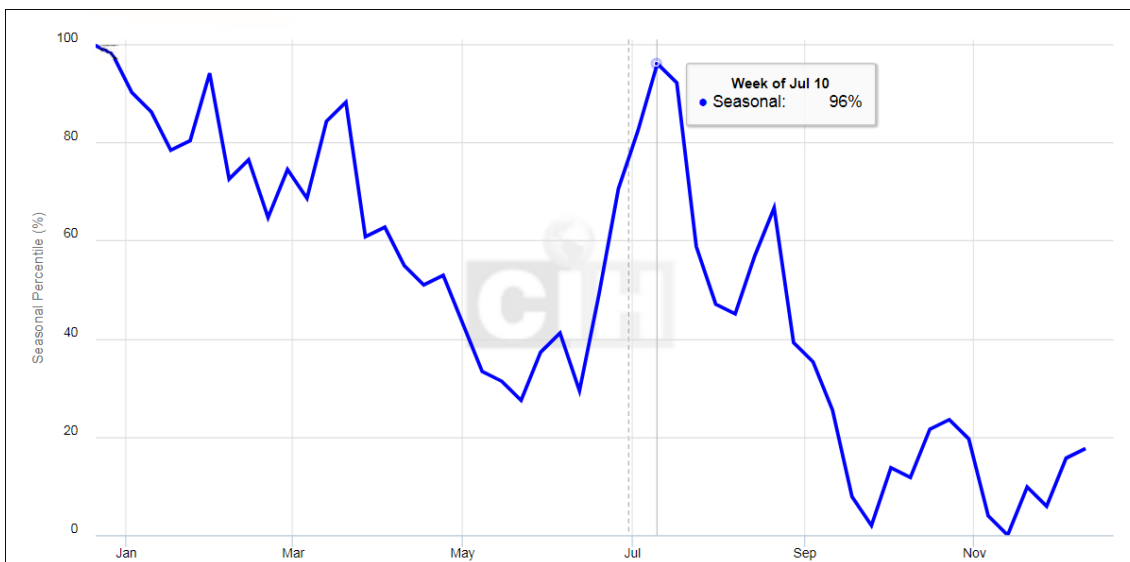
History Doesn't Always Repeat

First, seasonal price tendencies are based on historical patterns and this history is constantly being written. As time passes, these seasonal patterns can change, as new history is recorded and influences the seasonal trend line. In any given year, the expected tendencies for prices to rise or fall at certain times of year may not occur at all. Also, recent history may show that prices are behaving differently than what the longer-term history would indicate.

Second, because seasonality is based on historical price movements, the amount of history used in analyzing a seasonal pattern also makes a difference. Many producers will look more closely at a five-year than a 10-year seasonal pattern, believing that recent history should be given greater emphasis in their analysis. For example, the advent of the ethanol era in the past decade created a new source of demand for corn, which altered long-established historical price tendencies.

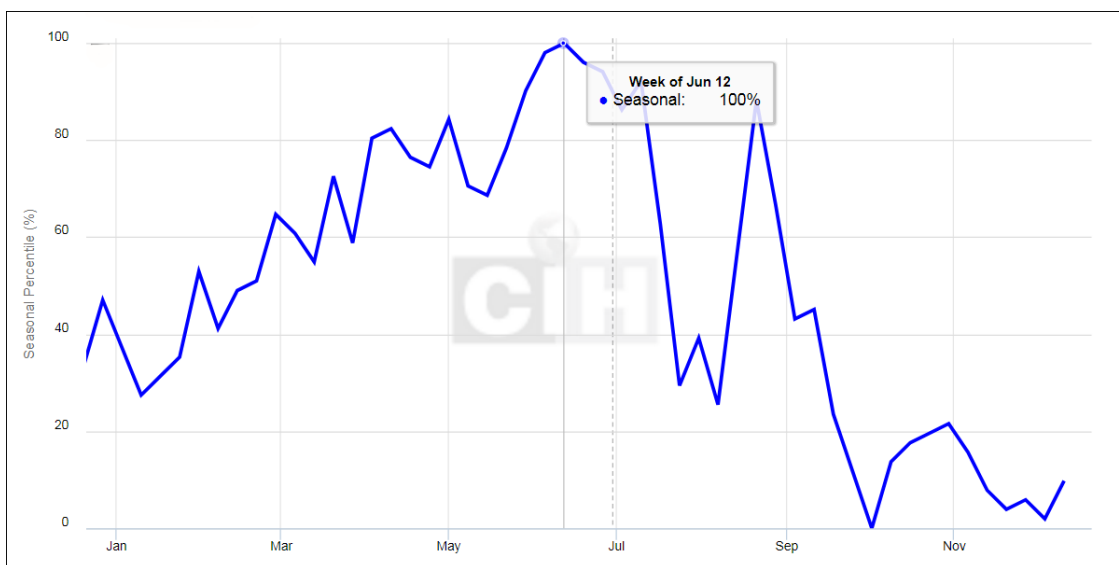
While this makes sense at face value, looking at longer-term history might reveal something different. To illustrate this point, let's compare the five-year and 10-year seasonal tendencies for the December Corn futures contract. Figure 1 shows that when looking at a five-year historical tendency of the December Corn futures contract, prices tend to seasonally peak around the week of July 10 before gradually declining into and through harvest during the fall. A corn producer contemplating their marketing strategy for new-crop corn production who relied exclusively on the five-year pattern might therefore conclude that in the absence of a favorable return over cost of production, it might be prudent to wait until the mid-July time period before establishing or extending coverage on their corn price risk exposure.

**Figure 1: Seasonality Dec Corn Five Years
2012-2016**



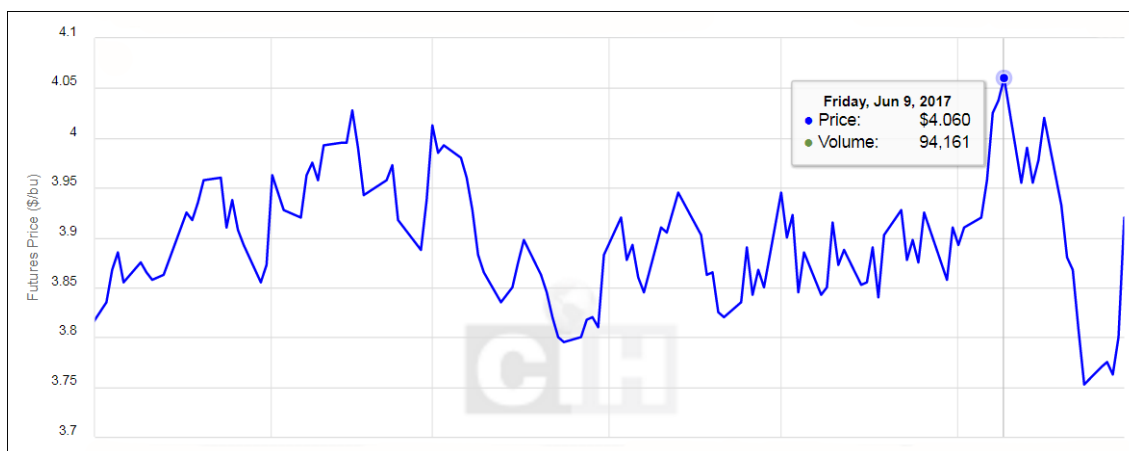
However, Figure 2 shows the 10-year historical price tendency for the same December Corn futures contract. This view suggests that the seasonal summer peak for the contract occurs almost four weeks sooner, i.e. during the week of June 12.

**Figure 2: Seasonality Dec Corn 10 Years
2007-2016**



As shown in Figure 3, this year, corn prices reached a peak on June 9, then declined by 9% as weather concerns abated. They recovered recently on the back of a blistering rally in spring wheat futures, but remain about 20 cents below the June 9 high. While corn producer margins have been and remain negative, a producer nonetheless may have elected to establish or extend coverage to protect against increasing losses from declining prices – particularly at 12-month highs.

**Figure 3: Dec Corn Prices for the Year to Date
January 1, 2017 - June 30, 2017**



Take the Short and the Long View

So, which is the better time period is to use when measuring seasonality – is a five-year period better than a 10-year? Should we also consider a longer range, such as 15, 20 or even 30 years? The answer is that there is no single time period that is better than another. What is important is to take into account multiple time periods to gain a more comprehensive picture of how seasonality has changed over time. While it may make sense to give one range more weight based on what is going on in the market, a single timeframe should not form the sole basis of a hedging or margin management decision. For example, consider how the PEDv outbreak in 2014 skewed the shorter-term history of the hog market by pushing prices sharply higher than would otherwise have been expected. In the three years since that episode, hog producers would have been well served to take a longer-term view of the seasonal tendencies of hog prices and margins.

Seasonality Should Guide How, Not When, to Hedge

Another common mistake is using seasonality as a filter to determine whether or not to take a hedge position at all. Seasonality is more helpful in determining what type of strategy to use, rather than if a strategy decision should be made. A number of different factors will impact any hedging or margin management strategy decision, and seasonality is only one of those factors. In a previous article, we

discussed the issue of looking at [how much risk exposure is prudent](#) to carry at any given time. The best starting point is to think about where you want your operation to be on the scale that weighs the tradeoff between offsetting risk and retaining opportunity. From there, seasonality can help to refine strategies that might make sense for that point in the year.

In our corn example, a grower facing negative margins in early June might determine that they would like to prevent against further losses because seasonally the market is at a high point based on the 10-year history. However, the five-year seasonal pattern points to the possibility that the high may not yet have been reached. And, in fact, prices are not high from a historical perspective. Again looking at seasonality data, they may also conclude that corn option volatility is very low from both a historical and seasonal perspective, which indicates that corn options may be relatively cheap. For that reason, a corn grower might opt to simply buy puts to protect against the risk of lower prices.

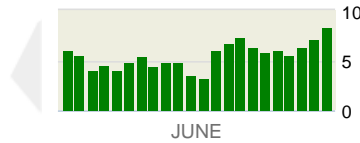
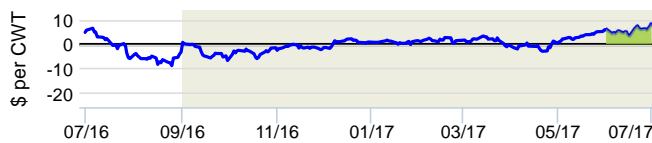
If you have questions or would like help incorporating seasonality into your margin management decisions, please contact CIH at 1.866.299.9333 or mail@cihedging.com.

Hog Margin Watch: June

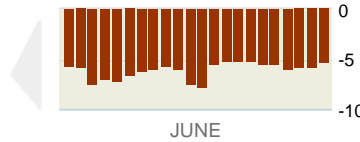
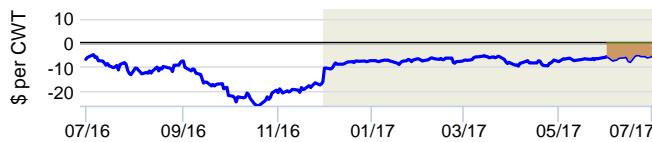


With the exception of the spot Q3 marketing period, hog margins deteriorated further in the second half of June, following a rally in feed costs that more than offset higher hog prices during the period. USDA released a few key reports at the end of the month, including the Quarterly Hogs and Pigs, the updated corn and soybean acreage, and June 1 Quarterly Grain Stocks. The updated hog inventory data was seen as relatively neutral, with most figures in line with pre-report expectations. All Hogs and Pigs as of June 1 were pegged at 71.65 million head, up 3.42% from last year and a new record. The kept-for-breeding inventory at 6.069 million head was 1.51% above 2016, while the kept-for-marketing figure of 65.581 million was 3.6% higher than last year. Overall, the report points to a continued supply increase through the fall and winter months, highlighting the need for ongoing strength in pork demand. Meanwhile, corn acreage of 90.886 million was up 890,000 from the March planting intentions and above the range of market expectations. Also, June 1 corn stocks of 5,225 million bushels were likewise higher than expected, although the acreage and stocks figures for soybeans were below expectations and leaned bullish. Reaction from the soybean market coupled with ongoing drought concerns in the Northern Plains that has rallied spring wheat to over \$8.00/bushel is now fueling a sympathy rally in corn with concerns that hot, dry weather may expand to the heart of the Corn Belt during July. Our hog producer clients have benefited from recent adjustments to strengthen feed hedges following price weakness earlier this month, while likewise benefiting from previous adjustments to add flexibility to hog positions and take advantage of further potential upside in hog prices.

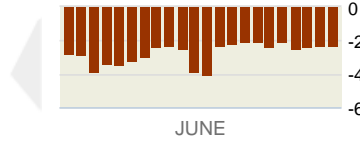
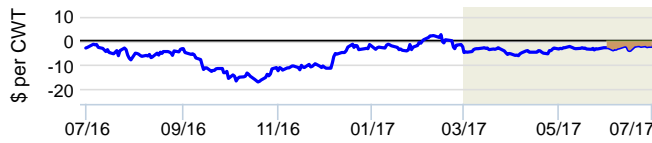
3rd Qtr '17 2016 2017 Q3 2017: HIGH **\$8.41** LOW **(\$6.86)** LAST **\$8.41** 10YR PERCENTILE **72.8%**



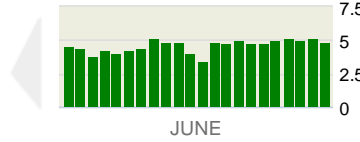
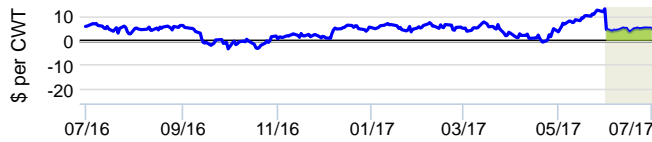
4th Qtr '17 2016 2017 Q4 2017: HIGH **(\$5.03)** LOW **(\$10.78)** LAST **(\$5.31)** 10YR PERCENTILE **37.1%**



1st Qtr '18 2017 2018 Q1 2018: HIGH **(\$2.06)** LOW **(\$6.22)** LAST **(\$2.27)** 10YR PERCENTILE **38.5%**



2nd Qtr '18 2017 2018 Q2 2018: HIGH **\$5.19** LOW **\$3.48** LAST **\$4.86** 10YR PERCENTILE **33.7%**



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.

The information contained in this publication is taken from sources believed to be reliable, but is not guaranteed by Commodity & Ingredient Hedging, LLC, nor any affiliates, as to accuracy or completeness, and is intended for purposes of information and education only. Nothing therein should be considered as a solicitation to trade commodities or a trade recommendation by Commodity & Ingredient Hedging, LLC. All references to market conditions are current as of the date of the presentation. Futures and options trading involves the risk of loss. Past performance is not indicative of future results. Please visit www.cihmarginwatch.com to subscribe to the CIH Margin Watch report.

Dairy Margin Watch: June



Dairy margins have deteriorated since the middle of June due to a combination of lower milk prices and higher projected feed costs. Despite the decrease, margins remain strong from a historical perspective, near or above the 70th percentile of the previous 10 years through Q1 of 2018 and above the 80th percentile in Q2. Milk prices have been pressured by continued growth in U.S. milk production, along with building stocks of dairy products, particularly cheese. USDA reported May milk production totaled 18.9 billion pounds, up 1.8% from last year with a 2,000 build in milking cows from April to 9.393 million head. USDA also revised its estimate for April milk production up 2.2% from 2016, in contrast to the preliminary estimate of a 2% increase. Meanwhile, inventory of all natural cheese stocks in Cold Storage as of May 31 totaled 1.34 billion pounds, up 7.6 million pounds from both April and May of 2016, and the highest level since record-keeping began back in 1917 according to USDA. On the feed side, revised corn acreage of 90.886 million was up 890,000 from the March planting intentions report and also over 1 million acres above the average estimate, as well as outside the range of pre-report expectations. June 1 corn stocks of 5.225 billion bushels were likewise higher than expected; however, bullish soybean figures combined with ongoing drought conditions in the U.S. Northern Plains that has sparked a significant wheat rally appear to be taking corn along for the ride. Revised forecasts for warmer, drier weather during the first half of July are also leading to concerns of declining crop condition ratings. Our dairy producer clients have primarily focused on adjustments to existing positions, looking to take equity out of milk hedges in particular.



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.

The information contained in this publication is taken from sources believed to be reliable, but is not guaranteed by Commodity & Ingredient Hedging, LLC, nor any affiliates, as to accuracy or completeness, and is intended for purposes of information and education only. Nothing therein should be considered as a solicitation to trade commodities or a trade recommendation by Commodity & Ingredient Hedging, LLC. All references to market conditions are current as of the date of the presentation. Futures and options trading involves the risk of loss. Past performance is not indicative of future results. Please visit www.cihmarginwatch.com to subscribe to the CIH Margin Watch report.

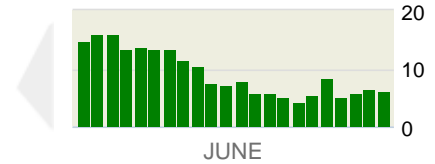
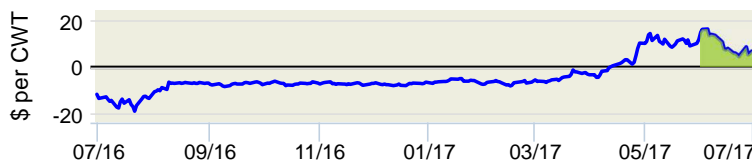
Beef Margin Watch: June



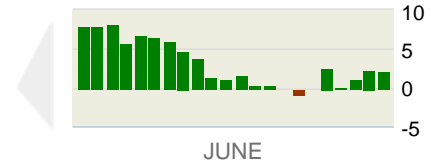
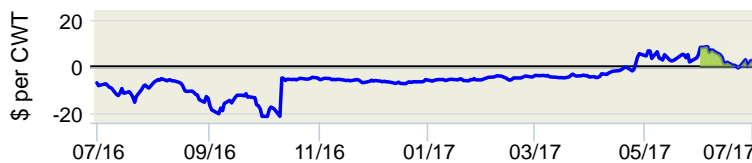
Beef margins have been mixed since the middle of the month, improving in nearby periods against existing placements while deteriorating slightly in deferred slots against projected forward crushes. Overall, there wasn't a whole lot of price movement over the past two weeks, with slight increases in both cattle prices and feed costs largely offsetting one another. Cattle finishers remain concerned about recent price weakness in the fat market since prices topped out in early June, with the latest feedlot inventory report leaning a bit bearish. USDA reported Cattle on Feed as of June 1 at 11.096 million head, up 3% from last year when the market was expecting a 2.3% average increase. May placements of 2.119 million head were 12% higher than 2016 when the market was expecting an average build of 10.4%. On a positive note, USDA reported total beef in Cold Storage on May 31 at 412.9 million pounds, a decrease of 45.5 million, or 9.94%, from April and much larger than the average draw of 2.28% between April and May over the past 10 years. Demand remains robust for beef in both the export market and U.S. domestic channels, with the Fourth of July representing one of the biggest grilling days of the year. While the USDA's corn acreage and stocks reports were considered bearish, the market has nonetheless been rallying in sympathy with spring wheat, which has gained 40% since the beginning of June. There is concern that drought may extend out of the U.S. Northern Plains further into the Midwest Corn Belt during July when corn pollinates, with recent forecasts trending warmer and drier. USDA reported updated corn acreage at 90.886 million, up 890,000 from March and over 1 million acres higher than expected. June 1 corn stocks were likewise above expectations at 5,225 million bushels. Our beef producer clients have benefited from recent adjustments to existing positions, particularly strengthening feed coverage following the drop in corn prices during the middle of June.

Live Cattle Marketing Periods:

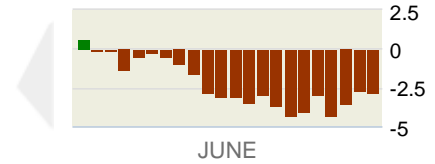
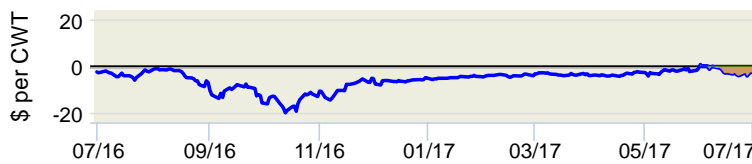
Aug '17 2016 2017 Aug 2017: HIGH **\$16.06** LOW (**\$19.19**) LAST **\$6.22** 10YR PERCENTILE **97.1%**



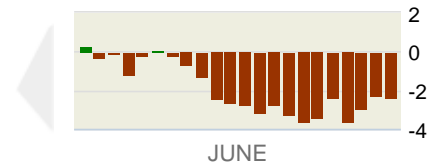
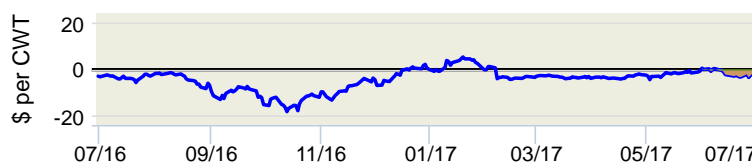
Oct '17 2016 2017 Oct 2017: HIGH **\$8.37** LOW (**\$21.47**) LAST **\$2.08** 10YR PERCENTILE **87.1%**



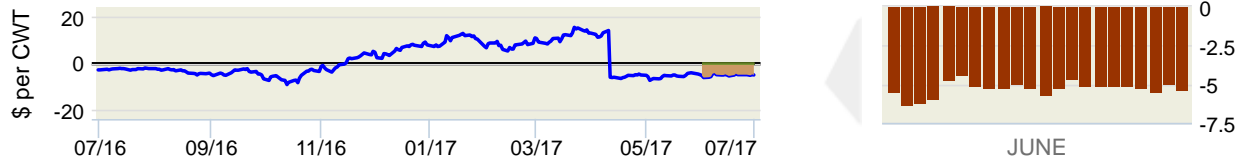
Dec '17 2016 2017 Dec 2017: HIGH **\$0.67** LOW (**\$20.08**) LAST (**\$2.81**) 10YR PERCENTILE **52.1%**



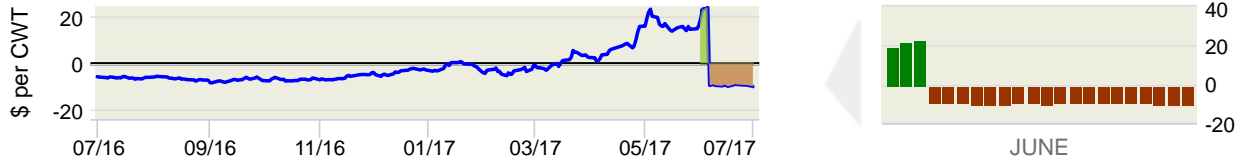
Feb '18 2017 2018 Feb 2018: HIGH **\$5.05** LOW (**\$18.31**) LAST (**\$2.34**) 10YR PERCENTILE **48.0%**



Apr '18 2017 2018 Apr 2018: HIGH \$15.25 LOW (\$9.28) LAST (\$5.24) 10YR PERCENTILE 20.1%



Jun '18 2017 2018 Jun 2018: HIGH \$23.69 LOW (\$10.24) LAST (\$10.24) 10YR PERCENTILE 16.0%



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.

The information contained in this publication is taken from sources believed to be reliable, but is not guaranteed by Commodity & Ingredient Hedging, LLC, nor any affiliates, as to accuracy or completeness, and is intended for purposes of information and education only. Nothing therein should be considered as a solicitation to trade commodities or a trade recommendation by Commodity & Ingredient Hedging, LLC. All references to market conditions are current as of the date of the presentation. Futures and options trading involves the risk of loss. Past performance is not indicative of future results. Please visit www.cihmarginwatch.com to subscribe to the CIH Margin Watch report.

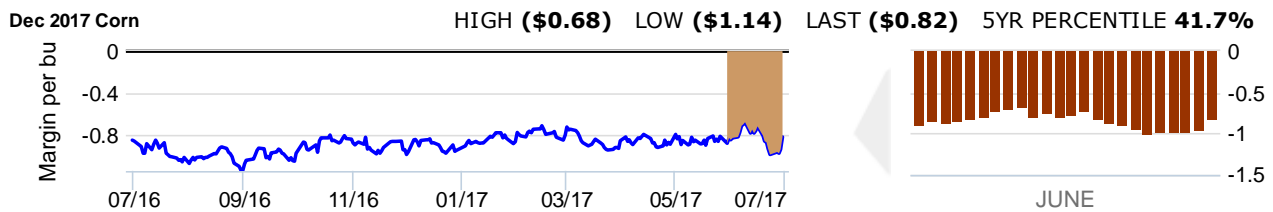
Commodity & Ingredient Hedging, LLC

120 South LaSalle St, Suite 2200 • Chicago, IL 60603 • 1.866.299.9333

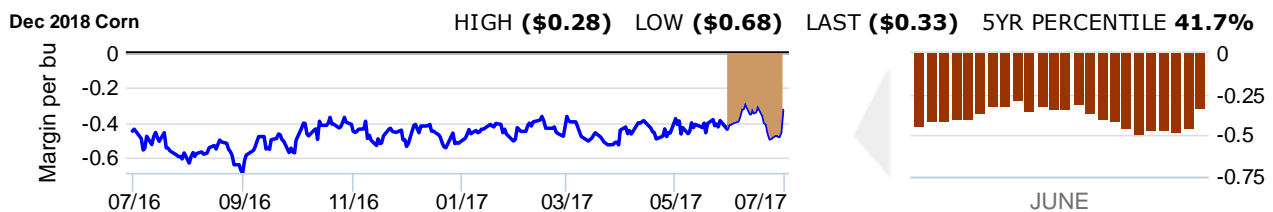
Corn Margin Watch: June



Corn prices and margins were quite volatile over the past two weeks, bleeding lower over most of the period, only to move sharply higher and quickly erase the losses. Early month weather worries were put aside, prompting the down move, but increasing dryness and heat in the High Plains, as well as a continued lack of moisture forecasted has the bulls out. The corn crop conditions have largely been consistent in the high 60% Good to Excellent categories, but are anticipated to diminish marginally in the next update, given the unfavorable moisture levels lately. The Quarterly Grain Stocks Report did offer greater stocks of corn than expectations at 5,225 million bushels, and compare to last June 1st stocks of 4,711 million. The Planted Acreage Report also offered bearish fundamentals that the market quickly shrugged off with planted acreage of one million over pre-report expectations and almost 900,000 over the number estimated in March. However, almost half of the additional corn acres were in North Dakota, where the current Drought Monitor blankets most of the state in either abnormally dry or in full drought status. Given the current weather dynamics, many corn producers are setting targets at higher levels in the event of continued extreme price gains.



The estimated yield for the 2017 crop is 182 bushels per acre and the non-land operating cost is \$595 per acre. Land cost for 2017 is estimated at \$238 per acre ¹. Basis for the 2017 crop is estimated at \$-0.16 per bushel.



The estimated yield for the 2018 crop is 184 bushels per acre and the estimated operating cost is \$547 per acre. Land cost for 2018 is estimated at \$228 per acre ¹. Basis for the 2018 crop is estimated at \$-0.25 per bushel.

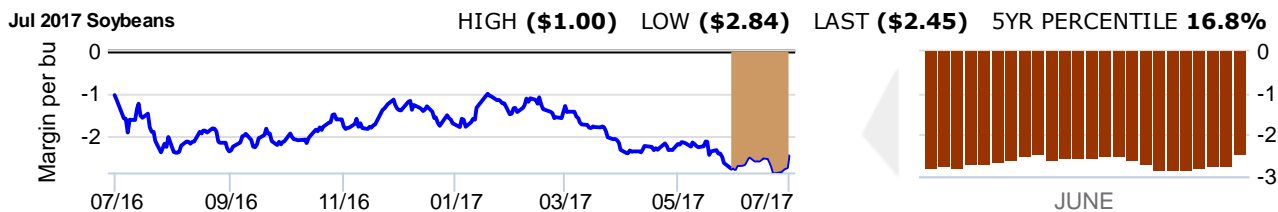
¹ The Corn Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University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

The information contained in this publication is taken from sources believed to be reliable, but is not guaranteed by Commodity & Ingredient Hedging, LLC, nor any affiliates, as to accuracy or completeness, and is intended for purposes of information and education only. Nothing therein should be considered as a solicitation to trade commodities or a trade recommendation by Commodity & Ingredient Hedging, LLC. All references to market conditions are current as of the date of the presentation. Futures and options trading involves the risk of loss. Past performance is not indicative of future results. Please visit www.cihmarginwatch.com to subscribe to the CIH Margin Watch report.

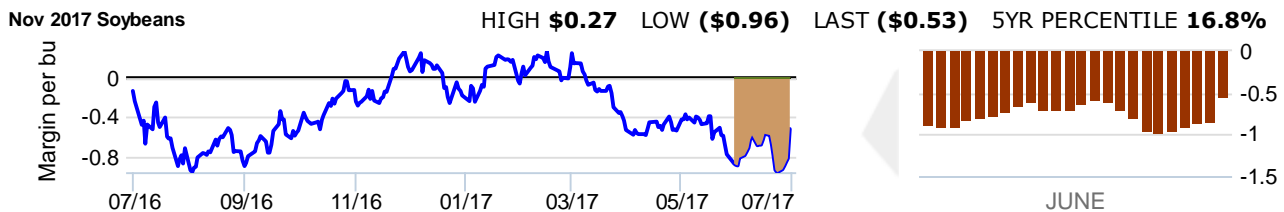
Soybeans Margin Watch: June



Soybean prices and margins moved higher over the past two weeks, and especially over the last few days. The Quarterly Grain Stocks Report revealed lower beans stocks than expectations at 963 million bushels, but were greater than last year's June 1 reading of 872 million. The Planted Acreage Report offered soybean seedings at 89.513 million acres, 400,000 below the average pre-report trade estimates, but slightly higher than the 89.482 March expectation. The initial March estimates that soybean acreage would outstrip corn this year for the first time since 1983 are no longer the case, as corn seeding estimates now approach 91 million acres. Soybean condition ratings so far have hovered in the mid-60% in the Good to Excellent categories, almost 10% behind last year. Ratings are expected to diminish in coming reports as the forecast is predicting heat and dryness into the near future, especially in areas like the High Plains that have already suffered from unfavorable moisture levels. Soybean producers are setting targets higher to establish new coverage, as well as to strengthen delta of existing coverage should the market continue to bound higher.



The estimated yield for the 2017 crop is 52 bushels per acre and the non-land operating cost is \$365 per acre. Land cost for 2017 is estimated at \$238 per acre ¹. Basis for the 2017 crop is estimated at \$-0.28 per bushel.



The estimated yield for the 2018 crop is 53 bushels per acre and the estimated operating cost is \$290 per acre. Land cost for 2018 is estimated at \$228 per acre ¹. Basis for the 2018 crop is estimated at \$-0.3 per bushel.

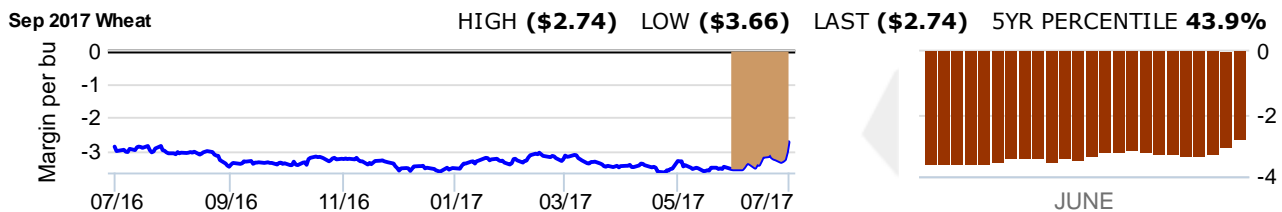
¹ The Soybeans Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University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

The information contained in this publication is taken from sources believed to be reliable, but is not guaranteed by Commodity & Ingredient Hedging, LLC, nor any affiliates, as to accuracy or completeness, and is intended for purposes of information and education only. Nothing therein should be considered as a solicitation to trade commodities or a trade recommendation by Commodity & Ingredient Hedging, LLC. All references to market conditions are current as of the date of the presentation. Futures and options trading involves the risk of loss. Past performance is not indicative of future results. Please visit www.cihmarginwatch.com to subscribe to the CIH Margin Watch report.

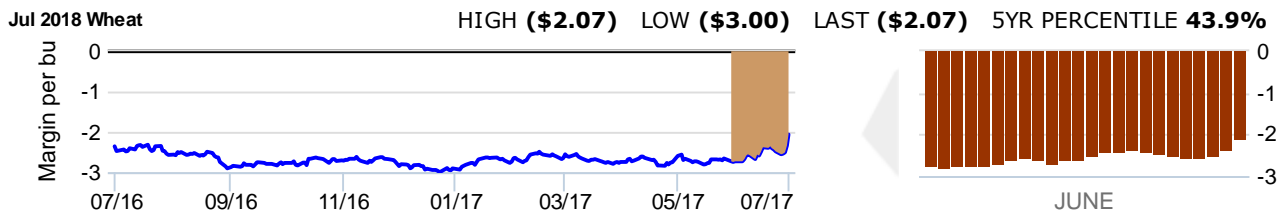
Wheat Margin Watch: June



Wheat prices and margins continued to rally over the past two weeks as the spring wheat crop in the Northern Plains has been stressed by lack of adequate moisture and a forecast that offers heat and little promise of rain. The conditions of the spring wheat crop are 40% in the Good to Excellent categories, 32 points behind last year. Also driving the market higher are reports of unsatisfactory protein levels in the winter wheat crop now estimated at around 50% harvested. Fundamentally, the Quarterly Grain Stocks Report did reveal greater than expected wheat stocks of 1,184 million bushels, which compares to 976 million last June 1, but the Planted Acres Report estimated fewer all wheat acres than anticipated at 45.657 million acres, down 400,000 from the March expectation. Spring Wheat acreage that was lower by 400,000 drove the decrease. Many producers are considering adjusting crop rotations to favor wheat next year and establishing coverage at current favorable margin levels, as well as strengthening delta on hedges that were already in place.



The estimated yield for the 2017 crop is 67 bushels per acre and the non-land operating cost is \$358 per acre. Land cost for 2017 is estimated at \$158 per acre¹. Basis for the 2017 crop is estimated at \$-0.3 per bushel.



The estimated yield for the 2018 crop is 68 bushels per acre and the estimated operating cost is \$358 per acre. Land cost for 2018 is estimated at \$150 per acre¹. Basis for the 2018 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.

The information contained in this publication is taken from sources believed to be reliable, but is not guaranteed by Commodity & Ingredient Hedging, LLC, nor any affiliates, as to accuracy or completeness, and is intended for purposes of information and education only. Nothing therein should be considered as a solicitation to trade commodities or a trade recommendation by Commodity & Ingredient Hedging, LLC. All references to market conditions are current as of the date of the presentation. Futures and options trading involves the risk of loss. Past performance is not indicative of future results. Please visit www.cihmarginwatch.com to subscribe to the CIH Margin Watch report.