



LEARN MORE AT MARGINMANAGER.COM

MARGIN MANAGER



JANUARY 2018

Your resource for understanding the margin management approach

Dear Ag industry associate:

This winter has brought a mixed bag of margin opportunities in the livestock sectors. Dairy margins are hovering at below the 30th percentile as demand, especially export demand, struggles to keep up with supply. Beef cattle margins have rallied since October, but remain quite volatile. In contrast, hog margins improved steadily through the fall and early winter despite increased production and higher supplies, thanks in large part to steady demand, and remain at around the 85th percentile of the previous ten years for Q2.

While the primary goal of margin management is to reduce the risk of loss, the same types of strategies are also valuable when margins are strong and rising. Our feature article this month, “Make the Most of Strong Margins” presents three examples of flexible strategies a hog finisher might use to protect today’s attractive hog margins without eliminating the possibility for further gains.

In addition, our latest Margin Watch installments review the current profitability projections for the dairy, crop and beef cattle industries, with updates on recent market reports and developments that are impacting forward margins.

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

Chip Whalen
Managing Editor

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
Omaha | Feb 27-28

Hog Margin Management
Indianapolis | Mar 1-2

IN THIS ISSUE

pg. 2-4
Feature Article
Make the Most of Strong Margins

pg. 5-11
Margin Watch Reports

Hog	5
Dairy	6
Beef	7
Corn	9
Soybean	10
Wheat	11

Make the Most of Strong Margins

Hog producers are starting off the year with much better prospects than many had expected as recently as a few months ago, and there are reasons to be optimistic that margins could rise further.



But agriculture producers know all too well that any number of variables could also turn markets quickly in the other direction. The good news is that you can use simple, flexible hedging strategies to both protect today’s attractive margin opportunities and leave open the possibility of benefitting if margins do continue to improve.

Pulls from Supply and Demand

Hog finishing margins improved steadily through the fall into the winter despite increased production, as both exports and domestic disappearance have been able to absorb the larger supply. The opening of two new hog processing plants in Sioux City, Iowa and Coldwater, Michigan has helped support cash hog prices, as better indicative demand leads processors to bid up supplies on the open market. In addition, the stronger-than-expected margin profile for hog finishers has been aided by a continued backdrop of historically low feed costs. Corn prices in particular have been languishing near the bottom decile of the past decade.

Risks Remain Despite Optimistic Outlook

There are certainly reasons for optimism about the margin outlook, including a weak dollar that may continue to bolster purchasing power for buyers of U.S. pork in the global export market. Yet, risk factors remain that could erode profitability over the medium to longer term. As an example, the sixth round of NAFTA negotiations recently concluded in Montreal, with two new rounds scheduled later this winter and spring in both Mexico and the U.S. It remains to be seen if Mexican and Canadian negotiators will eventually acquiesce to U.S. demands. Some in the Canadian government have voiced concern that the U.S. may declare an intention to withdraw from the treaty. Even if such a tactic is employed primarily for negotiating leverage, any move that disrupts cross-border trade between the U.S. and its neighbors could negatively impact the export demand structure currently in place.

In addition, while feed costs have remained subdued, we are moving into a time of year when increased uncertainty may begin to have more impact on prices. Today’s negative crop margins could lead to significantly reduced corn plantings in the spring, and South American crops are not yet

harvested. Poor spring weather could augment the impact of reduced acreage if planting falls behind. And commodity funds, which are holding a near-record short position in the market, could move to cover those positions at some point in time as a result of one or more of these crop market factors.

Flexible Solutions for Uncertain Markets

Given the strong projected profitability, hog producers may be tempted to lock in their margins, but they would give up on any further improvement should hog prices continue to rise. Alternatively, they could remain open to the market so they don't miss out on additional hog market strength, but they would carry the full risk of losses if the margin picture deteriorates. An alternative would be to establish a flexible position to address both objectives.

Strategy Example 1: Forward Sale Plus Call Options

One flexible strategy might entail a forward sale of hogs to the packer in combination with a purchase of call options. If hog prices rise after the sale, the value of the options would also rise. That means the producer could sell them and effectively increase his net sale price. For instance, the operation might establish a packer sale on June hogs at around the current market price of \$82.50 and subsequently buy call options at a strike price of \$84.00 for a cost of about \$3.00. If hog prices rise to \$90, the producer would still receive \$82.50 from the packer, but he could sell the call options for more than he paid for them. In this way, the producer will participate in all higher prices above \$87, while maintaining a firm sale with the packer.

Strategy Example 2: Incremental Futures Sales

Another flexible strategy, independent of a packer, could consist of selling futures contracts on the exchange. The producer could sell a set amount initially, then scale up to incrementally higher levels as prices rise. For example, they could make an initial sale on 25% of expected production at current price levels, with a plan to initiate additional sales at two pre-determined trigger points. They may, for instance, set targets at \$4 above their initial sale, and \$4 above that subsequent sale, thus eventually locking into around 75% coverage on this forward production period.

Strategy Example 3: Put Options

A third flexible strategy might be establishing a floor on production by purchasing put options. For example, again assuming a market price of \$82.50, the producer might buy June puts at a strike price of \$82. Similar to strategy example 1, above, these put options might cost around \$3.00-\$4.00, but would provide a minimum price on the expected production while allowing the hog operation to participate in all higher prices.

However, for this strategy to be effective, the producer should establish a plan to eventually convert those put options to fixed sales at higher prices if the hog market continues to rise. Given a historical tendency for June hog futures prices to rise into the middle of March, the producer might set a target to gradually scale out of the puts in 25% increments every \$2 higher starting at \$84 and ending at \$90, for example, with the intention of converting all of their puts to fixed sales by mid-March. Alternatively, they could establish these sales with the packer, and capture any remaining time value in the option ahead of expiration.

Don't Forget the Feed Side

As some of the current strong margin profile can be attributed to historically cheap corn, a producer may want to protect this risk exposure by purchasing call options on their anticipated forward feed purchases.

An example might be to buy a July \$3.80 call option for a cost of around 15 cents. This would assure a maximum price of corn and protect the producer against a potential increase in price later this spring if market conditions change. Similar to strategy example 3, the producer would want to scale out of the call options as they purchase physical corn in their local cash market to salvage the residual time value of the options prior to expiration.

These are all relatively simple strategies that are flexible and help balance the dual priorities of mitigating risk exposure while retaining opportunity for margins to improve. The key to success with any strategy is to determine a plan that is based on a tangible goal or objective – such as protecting a minimum level of profitability – which makes sense for your operation. *And then stick with it.* While it's human nature to try to maximize gains as margins are improving, no one knows what the markets will do, so it's important to have the discipline to carry out a well-conceived plan.

If you have questions or would like to discuss how to implement a margin management plan for your operation, please call 1.866.299.9333.

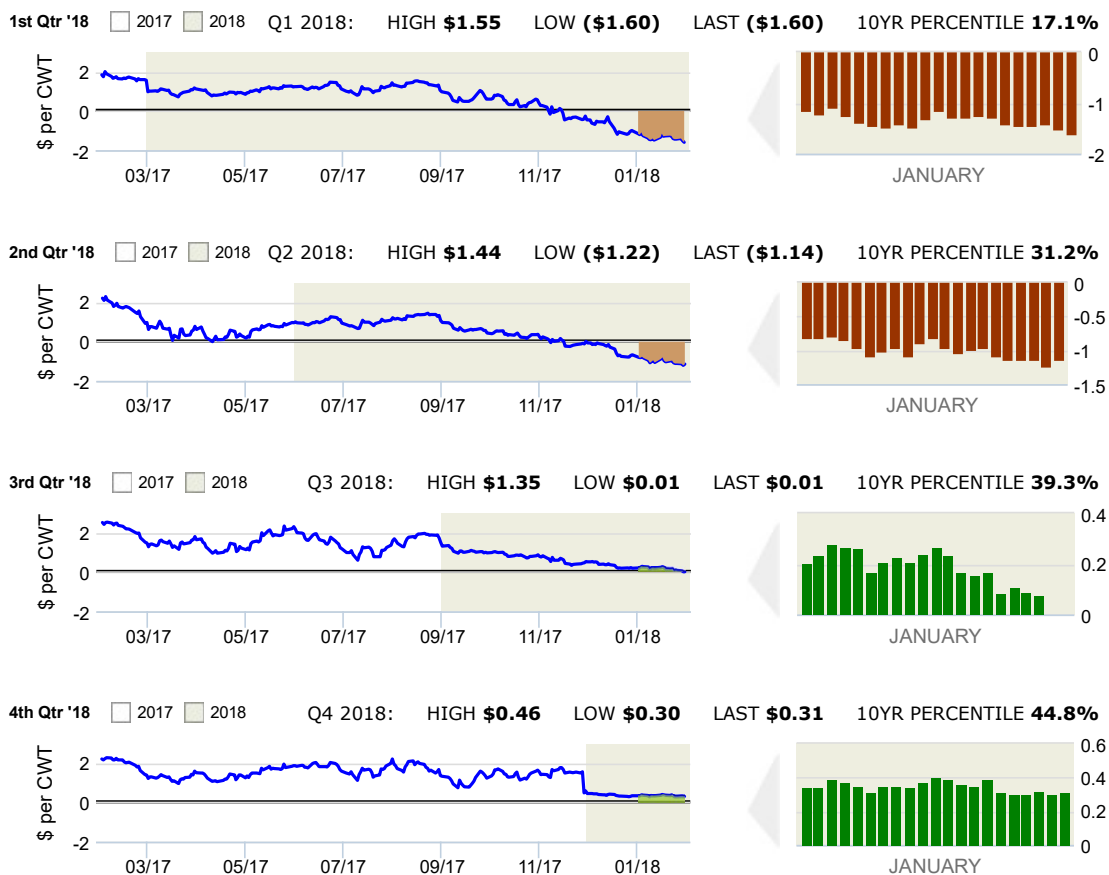
Margins deteriorated over the second half of January due to a combination of lower hog prices and higher feed costs. Hog prices have retreated recently despite strength in the pork cutout and January slaughter levels that have trailed what was expected based on the USDA's December Hogs and Pigs report. Hog slaughter for the first four weeks of the year has been up 1% from 2017, compared to the forecast for a 2% increase in slaughter supply based on the quarterly inventory data. It appears that many hogs may have been pulled forward in December, and weather disruptions during January may also have limited hog slaughter in early 2018. Meanwhile, the pork cutout value during January remained higher than a year ago despite increased production, indicating strong demand. Much of the strength in the pork cutout appears to be tied to the performance of the pork butt, which is a key export item to some Asian markets. Continued U.S. dollar weakness and accelerating growth in the global economy bodes well for U.S. pork exports over the near to medium term. Pork stocks in Cold Storage at the end of December totaled 491 million pounds, up 3.2% from last year, but around 6.7% below the five-year average. Stocks declined 2.3% from November compared to the five-year average decline between those two months of 1.7%. Feed costs have been rising recently due to weather concerns in Argentina, which have trimmed crop estimates from earlier forecasts. This likewise has pressured hog finishing margins. Given recent margin deterioration, our hog producer clients have been focused mainly on adding flexibility to existing hog and feed hedges following the recent price action in those markets.



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 margins weakened over the second half of January following a combination of slightly lower milk prices and higher projected feed costs. Margins remain negative and well below average from a historical perspective in both Q1 and Q2, while above breakeven, but still below average in Q3 and Q4. Milk prices continue to struggle with bearish market sentiment. USDA reported December U.S. milk production at 18.043 billion pounds, up 1.1% from 2016, with the milking cow herd at 9.401 million head, up 47,000 on the year. Productivity in the milking herd also increased, with output per cow reported at 1,919 lbs., up 5% from November's 1,835 lbs. The Cold Storage figures were relatively neutral last month, as stocks builds followed seasonal tendencies. Butter stocks in cold storage on December 31 totaled 169.1 million pounds, up 9.8 million, or 6.2%, from November and right in line with the average November to December build over the past 10 years. All natural cheese in cold storage totaled 1.281 billion pounds at the end of December, up 22 million pounds or 1.7% from November versus the average monthly build of 1.9% from November to December over the past 10 years. In other news, the EU approved migrating the SMP intervention program from a guaranteed purchase price of €1,698/metric ton for up to 109,000 MT, to a tender-based program for the same initial quantity. The move was widely expected, but should put more SMP on the world market and keep prices depressed. Feed costs have increased recently as both corn and soybean meal prices responded to drought in Argentina. Our dairy producer clients continue to adjust existing milk hedges in order to benefit from higher prices over time, while also evaluating opportunities to add downside flexibility to feed hedges.



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.

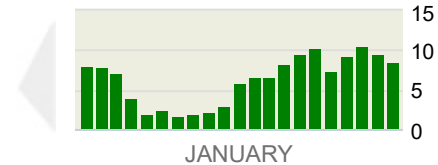
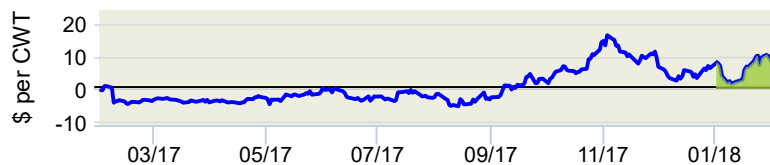
Beef Margin Watch: January



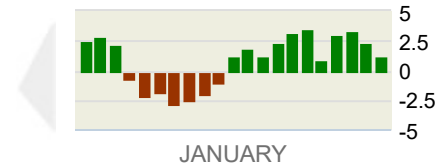
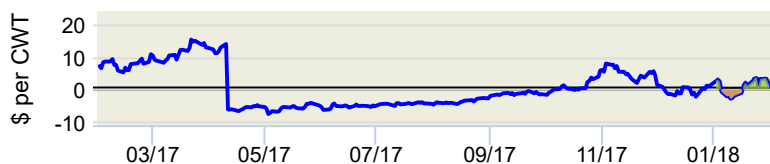
Beef margins have improved since the middle of the month as higher cattle prices more than offset the impact of rising corn costs. The USDA released their annual Cattle Inventory report at the end of the month, reflecting the breakdown of all cattle and calves on January 1 along with the 2017 calf crop. Overall, the figures were in line with pre-report estimates, though on the lower end of the range. The total cattle and calf count of 94.4 million head was up 0.7% from a year ago compared to the average trade guess of a 1.0% increase from 2017. Total cows and heifers that calved were 41.1 million head, up 1.4% from last year, with beef cows that calved representing 31.7 million of that total, up 1.6% year over year. Heifers over 500 lbs. identified as beef cow replacements were 6.1 million head, down 3.7% from 2017 and the lowest since 2015. The 2017 calf crop totaled 35.8 million head, up 2% year over year, but revised down 491,800 head from the July 1, 2017 NASS estimate. Overall, the report reflects continued growth in the national cow herd, though at a reduced pace compared to recent years. USDA also reported 11.489 million cattle on feed as of January 1, up 8% from last year and on the higher end of the range of estimates. December placements were up 1% from the previous year at 1.799 million head, while cattle marketings during the month totaled 1.752 million head, down 1% from 2016. Total beef supplies in Cold Storage on December 31 were reported at 489.5 million pounds, up 4.4 million or 0.9% from November compared to an average build of 3.4% between November and December over the past 10 years. Corn prices have been moving higher recently in response to drought conditions in Argentina, with private forecasters reducing their production estimates. Following the recent increase in corn prices, our beef producer clients are looking to add downside flexibility to feed hedges.

Live Cattle Marketing Periods:

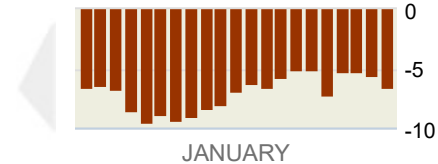
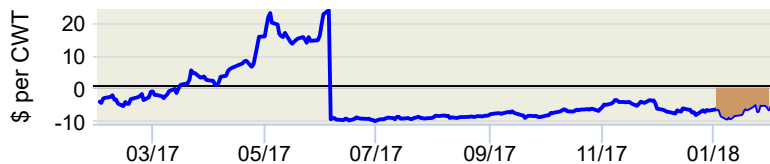
Feb '18 2017 2018 Feb 2018: HIGH **\$16.41** LOW **(\$5.29)** LAST **\$8.65** 10YR PERCENTILE **90.1%**



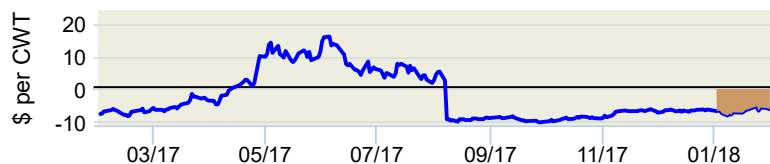
Apr '18 2017 2018 Apr 2018: HIGH **\$15.25** LOW **(\$7.54)** LAST **\$1.16** 10YR PERCENTILE **76.2%**



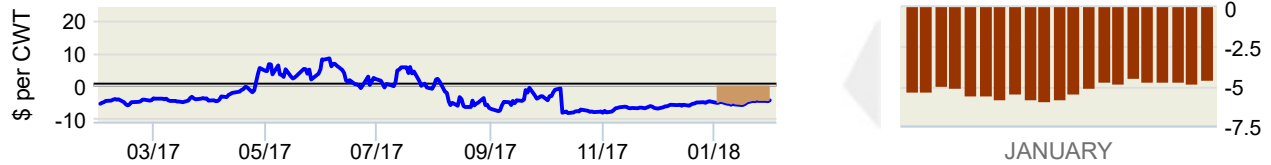
Jun '18 2017 2018 Jun 2018: HIGH **\$23.69** LOW **(\$10.24)** LAST **(\$6.58)** 10YR PERCENTILE **39.7%**



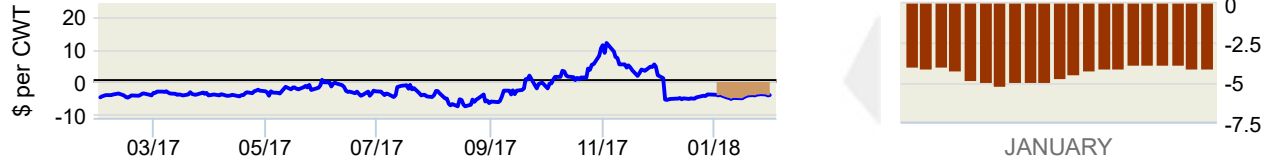
Aug '18 2017 2018 Aug 2018: HIGH **\$16.06** LOW **(\$10.15)** LAST **(\$6.14)** 10YR PERCENTILE **47.7%**



Oct '18 2017 2018 Oct 2018: HIGH **\$8.37** LOW **(\$8.36)** LAST **(\$4.51)** 10YR PERCENTILE **37.0%**



Dec '18 2017 2018 Dec 2018: HIGH **\$11.96** LOW **(\$7.49)** LAST **(\$4.05)** 10YR PERCENTILE **36.6%**

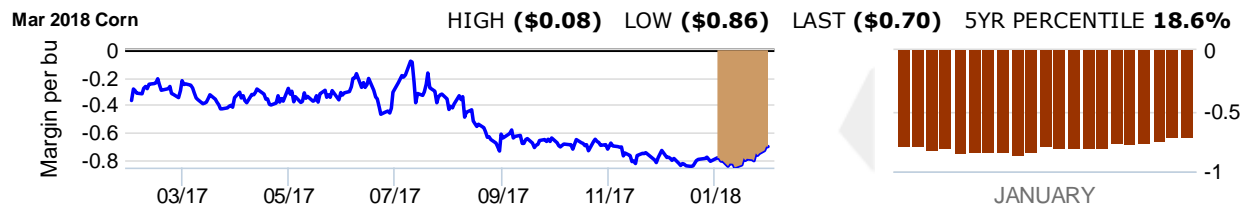


The Beef Margin calculation uses Feeder Cattle futures to price inbound animals and assumes each will consume 55 bushels of corn and cost approximately \$250 per head (for other feed and non-feed expenses) to gain 550 pounds and reach a market weight of 1,250 pounds.

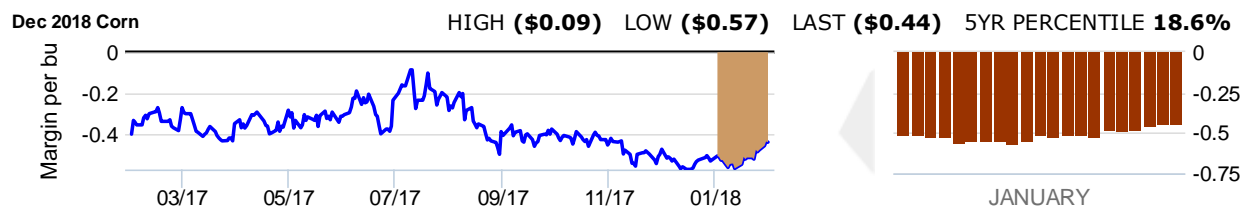
The information contained in this publication is taken from sources believed to be reliable, but is not guaranteed by Commodity & Ingredient Hedging, LLC, nor any affiliates, as to accuracy or completeness, and is intended for purposes of information and education only. Nothing therein should be considered 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 La Salle St, Suite 2200 Chicago, IL 60603 1.866.299.9333

Corn prices and margins have gained steam the past two weeks as weather premiums have been added to the heretofore lethargic corn market. Extreme dryness in Argentina has many crop watchers there concerned about reduced yields. Conversely, also adding fuel to the market, are potentially excessive rains in Brazil, which would hold up soybean harvest activity, therefore delaying second crop corn planting progress. The longer it takes to get the second crop corn in the ground, the greater the chance of exposing the critical pollination period to the possibility of less-than-desired moisture levels as the normal summer rainy season ends. Many private forecasters have started to trim South American corn production estimates over these concerns. The corn market, however, did come off of monthly highs with a welcomed wetter longer-range Argentinian forecast, yet many of these have disappointed in both volume and coverage so far this growing season. Demand for corn has picked up as U.S. corn export sales for two of the past three weeks scored the second- and third-highest weekly totals for this marketing year. Weekly ethanol production over the past two weeks has been steady and has recovered from the sizable month-ago dip. Brazilian premiums to U.S.-priced ethanol have sparked exports expectations and production gains. The corn market will stay driven by South American weather prospects and continued U.S. export demand.



The estimated yield for the 2018 crop is 186 bushels per acre and the non-land operating cost is \$544 per acre. Land cost for 2018 is estimated at \$222 per acre¹. Basis for the 2018 crop is estimated at \$-0.2 per bushel.



The estimated yield for the 2019 crop is 186 bushels per acre and the estimated operating cost is \$544 per acre. Land cost for 2019 is estimated at \$222 per acre¹. Basis for the 2019 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.

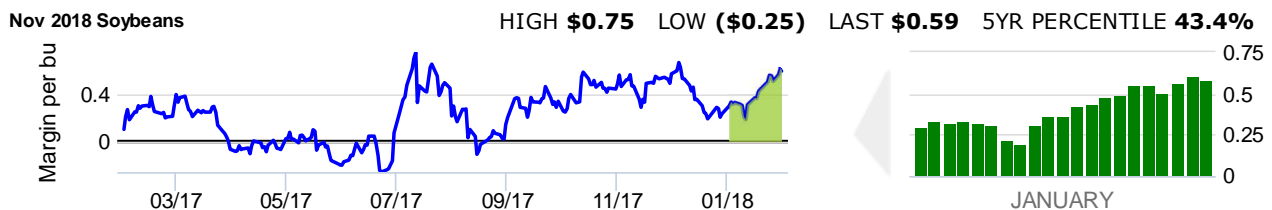
Soybeans Margin Watch: January



Soybean prices and margins were higher over the past two weeks driven by weather worries in South America. Extreme dryness in Argentina and potentially robust rains in Brazil have market participants bidding up beans. The forecasted wetness in Brazil is less concerning as it is simply delaying the start of harvest activity and may hamper bean movement to ports, but the moisture deficits in Argentina are driving the weather premium additions. The bean rally, however, ran out of steam at month-end on prospects of favorable long-term indications for rains in Argentina, but those have all disappointed so far this growing season, leaving sparse moisture and less-than-ideal coverage. Time will tell if the desired rains materialize. Perhaps benefiting from the world's largest exporter's weather woes, recent U.S. weekly soybean meal export sales scored the highest total this year. On the other hand, weekly U.S. soybean exports sales recorded the lowest total this marketing year, as is seasonally normal with South American beans beginning to come online. This year, however, expectations may be boosted depending on the duration of harvest delays. The soybean market will continue to be dominated by actual and forecasted South American weather.



The estimated yield for the 2018 crop is 59 bushels per acre and the non-land operating cost is \$319 per acre. Land cost for 2018 is estimated at \$222 per acre ¹. Basis for the 2018 crop is estimated at \$-0.35 per bushel.



The estimated yield for the 2019 crop is 59 bushels per acre and the estimated operating cost is \$319 per acre. Land cost for 2019 is estimated at \$222 per acre ¹. Basis for the 2019 crop is estimated at \$-0.35 per bushel.

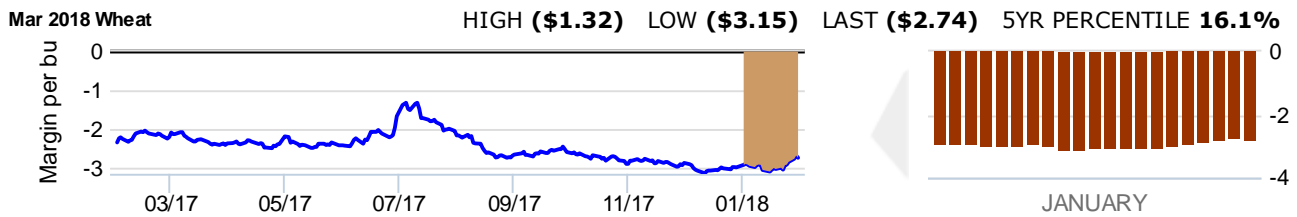
¹ The Soybeans Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University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

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.

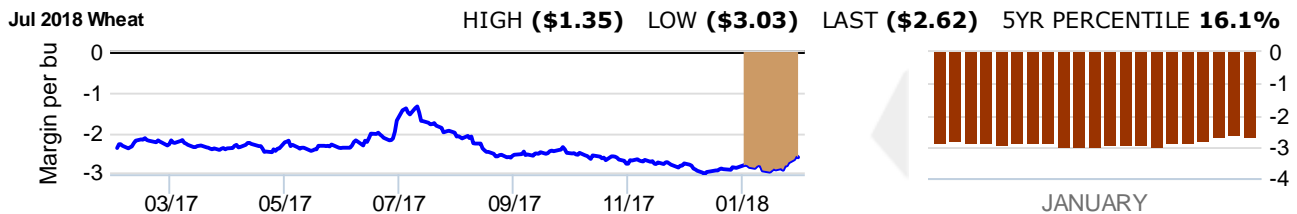
Wheat Margin Watch: January



Wheat prices and margins were sharply higher over the past two weeks as extended dryness has blanketed the U.S. Plains, inspiring insertions of weather premiums. While the winter wheat crop can recover from a drier-than-normal winter if adequate spring moisture aids its emergence from dormancy, the breath of severe and/or extreme drought conditions across Kansas, Oklahoma and Texas are growing, according to the most recent U.S. Drought Monitor. Winter wheat conditions across the Southern Plains, as reported by local state and extension offices, have deteriorated significantly since December, while the Northern Plains have fared slightly better, but are still indicated at well below last year's levels. U.S. weekly export sales and shipments are currently behind the average pace needed to meet the current USDA expectation, and the recent move up has diminished price competitiveness. The wheat market will continue to focus on the drought conditions in the U.S. and will be interested in the long-range spring moisture outlooks across the Plains.



The estimated yield for the 2018 crop is 71 bushels per acre and the non-land operating cost is \$344 per acre. Land cost for 2018 is estimated at \$157 per acre ¹. Basis for the 2018 crop is estimated at \$-0.2 per bushel.



The estimated yield for the 2019 crop is 71 bushels per acre and the estimated operating cost is \$344 per acre. Land cost for 2019 is estimated at \$157 per acre ¹. Basis for the 2019 crop is estimated at \$-0.35 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.