

Weekly Newsletter

January 2, 2019

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Market Summary

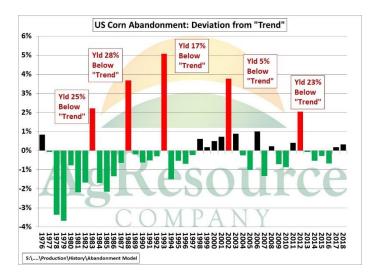
World corn prices were slightly lower over the holidays with US Gulf offers at \$167.50/MT for February, with Argentine offers at \$171/MT and the Ukraine at \$174/MT. US corn is back to being the cheapest in the world which is likely to aid US corn sales/shipments in coming months. South American corm production looks to be threatened in coming weeks with ongoing dryness across NC Brazil and flooding rains through the northern 1/3 of Argentina. The extended range EU weekly model forecasts that the current weather pattern will persist into late January. A 10% crop loss would drop South American corn production by 14 MMTs and place world corn stock/use ratios into an extremely tight level.

Wheat futures are down slightly this week. The US Gulf market is well positioned to boost its share of world trade into early summer, but any new demand won't be reported as the US government stays shut down. Macro markets have been volatile and mostly very weak, which has given the grain bulls pause. We maintain a longer term bullish outlook, but recognize macro and political headwinds exist. However, world cash markets have either found new seasonal highs or are flirting with recent highs. This includes interior Russian wheat and flour, which will gather more attention by Russia's livestock sector. And even lesser-followed markets, such as in India, are rising. We're buyers of breaks in wheat, and a bearish outlook cannot be advised until spring/summer weather is better known.

Although soybean fundamentals are still very bearish, abnormal dryness in Brazil is getting more attention. Chart pattern also look somewhat positive. Our advice in the soy complex is to continue to use rallies to sell forward. End user purchasing should await decent breaks. China's "spot" soybean crush margin dropped below breakeven this week, and China's 25% tariff on US beans remain in place. Unless China buys 10+ MMT of old-crop US soybeans (to be locked away in state reserves), record global stocks will limit gains in soybean prices.

Final Corn Crop Expected To Be Lower Than Nov Crop Estimate.

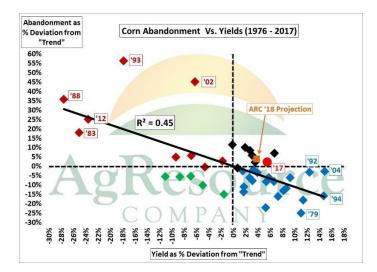
ARC Adopts USDA's Nov Estimate For Harvested Area. In their last crop survey of the season (conducted in December), the USDA surveys over 80,000 farmers and, for the first time, asked them how much of their corn area was harvested for silage. The chart below shows the history of corn abandonment expressed as a deviation from the moving 20-year trend of abandonment. For example, in 1988 the "trend" abandonment was 10.3% but actual abandonment was14%, so abandonment was 3.6 points higher than trend.



Several years have been highlighted in red: 1983, 1988, 1993, 2002 and 2012. Next to each we have noted that year's yield expressed as a percent deviation from the "continuous" 20-year trend in yields. The data suggests that abandonment goes up (relative to its trend) in years when yields go down (relative to its trend). For 2018 we note the abandonment projected in the USDA Nov Crop Report (last column on the right in orange).

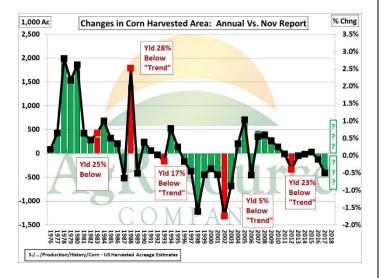
ARC is using a yield of 177 Bu (vs the USDA's Nov yield of 178.9 Bu). This is 3.8% above the "continuous" 20-year trend yield. We are using USDA's Nov estimate which projects that abandonment will be 8.27%. That is just a fraction above the 20-year trend of 7.9%.

The chart below plots the deviation in the corn abandonment rate against the deviation in corn yields. The first chart displayed the deviation in corn abandonment from trend in "*absolute terms*". We have transformed the abandonment data and now express it a "<u>percent</u> deviation" from the 20-year trend.

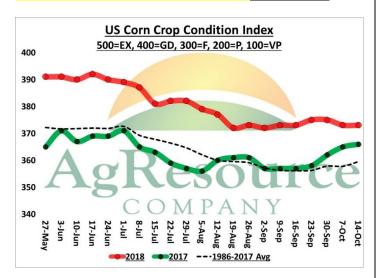


The chart shows that there is a moderate relationship between yields and abandonment. Abandonment tends to rise in years when yields are below trend (see red diamonds). Conversely, abandonment tends to fall in years when yields are above trend (see blue diamonds). The orange square shows ARC's projection of yield (177.0 Bu/Ac) is 3.8% above the 20-year trend of 170.6 Bu. The 3.8% increase in yields (over the 20-year trend) suggests that abandonment could be lower than the Nov Crop Report estimated. Consequently, if we are wrong in our acreage estimate, it is that harvested area is too low by about 375,000 Mil Ac or more.

The chart on the following page provides the history of changes USDA made to its estimate of corn harvested area in the Annual Crop Report vs. the Nov Crop Report. The changes are expressed in acres and in percent. ARC is projecting final harvested area will be unchanged from the Nov estimate. There were years when there were large declines in harvested area. They were: 1998= -1.6% and 2002=-1.7%. There were also several years with low yields but in which final harvested area actually went up (e.g. 1983 and 1988). A cursory examination of the chart suggests that there is no pattern that we can see that explains changes in the USDA's final estimate of corn harvested area vs. the Nov estimate.

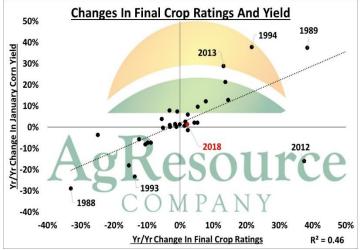


<u>Bottom Line:</u> Research has found that corn abandonment is low in years when yields are above trend. We are using USDA's Nov acreage estimate but we acknowledge that, USDA's annual harvested acreage may be a bit higher.

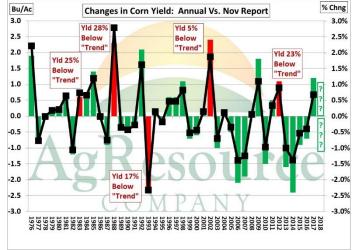


ARC Projects Final Yield of 177 BU, Below USDA's Nov Estimate of 178.9 Bu. Significant delays in the harvest and anecdotal reports from firms that compile thousands of harvest results (or from yield models based on weather and/or

satellite images), suggest that 2018 final corn yield could be lower than the Nov estimate of 178.9 Bu. The preceding chart plots the weekly values for the 2018 corn crop's weekly condition index relative to last year and its "seasonal".



ARC's crop condition models project the percentage change in yields (relative to last year) based on the percentage change in the crop condition index (relative to last year). The chart above plots the percentage change in the USDA's Annual Crop Report's yields vs. the percentage change in the final week's crop condition index. USDA's Nov projection of 178.9 BPA (see red square) is slightly below the model's projection for Annual yield.



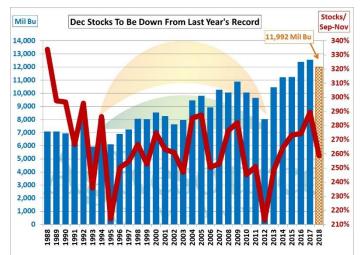
The chart above provides the history of changes USDA made to its estimate of corn yield in the Annual Crop Report vs. the Nov Crop Report.

The changes are expressed in bushels and in percent. A cursory examination of the chart suggests that there is no pattern that we can see that conclusively explains the observed changes in the USDA's Annual estimate of corn yield vs. the Nov estimate. ARC is projecting final yield area will be less than the Nov estimate.

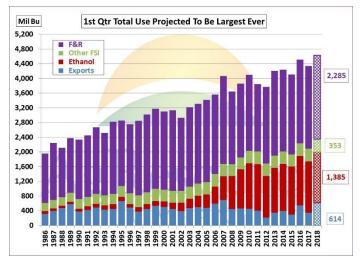
Bottom Line: Since USDA's Nov yield projection is slightly below our "crop condition based" model projection for Annual yield, we note that there is a risk that our yield projection could be too low. However, NASS reports documenting significant harvest delays, published estimates by some analytical firms, and other anecdotal reports lead us to believe that 2018 was a year in which harvest losses were substantial.

1st Qtr. Corn Use Up 6.7%. Dec Corn Stocks to Be 11,992 Mil Bu, Down 575 Mil Bu (4.6%) From Year Ago.

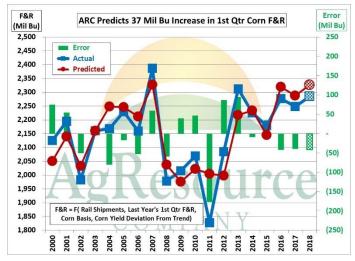
ARC projects Dec 1 corn stocks to be 11,992 Mil Bu, down 575 Mil Bu (4.6%) from last year (see chart below). Dec stocks will be 259% of Sep-Nov use; down from last year's 289% and the smallest Dec stocks/use ratio in the last 6 years (see red line in the chart).



As we have already presented, ARC projects corn production to be down 124 Mil Bu (0.8%) from last year. Total corn use in the first quarter is projected to be up 295 Mil Bu (6.8%). Sep-Nov exports are pegged at 614 Mil Bu - up sharply from last year's 314 Mil Bu. Industrial use is projected to be down 6 Mil Bu (0.3%) with ethanol grind down 6 Mil Bu (0.5%). Lastly, feed and residual (F&R) is estimated to be up 37 Mil Bu (1.6%) and the 2^{nd} largest on record. The chart below illustrates the first quarter's components of corn use.

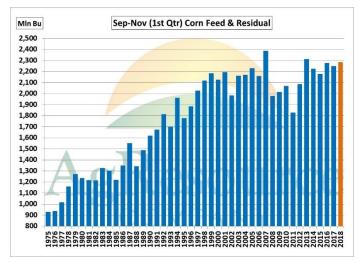


ARC has developed fundamental models which are useful in forecasting first quarter F&R. The chart below depicts the output of one of these models. The model is based on data for the years 2000-2017 and uses variables that include: last year's 1st quarter F&R, rail shipments, corn basis, exports, time, and 2018's corn yield deviation from trend.

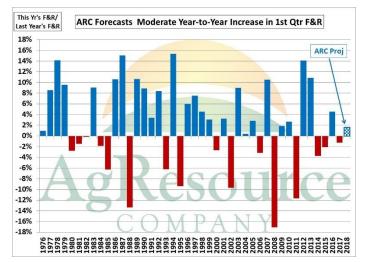


The model has an R-Square of .72. However, the model's predictions have suffered from large errors in recent years. Such large errors weaken our confidence in blindly accepting this

model's projection (but for now we don't have anything better). The following chart shows what the ARC's estimate is for the 1st quarter F&R relative to past years.

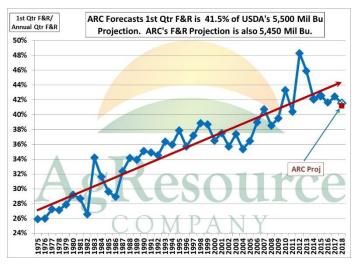


The "mean" estimate of ARC's model for Sep-Nov F&R is 2,327 Mil Bu (see chart above). This is 79 Mil Bu more than F&R in the 1st quarter of 2017/18. Based on other market factors (e.g. livestock numbers, lower grain prices, ample feed supplies) we have subtracted 0.45 standard errors from the mean forecast. Therefore, our projection for 1st quarter F&R is 2,285 Mil Bu (42 Mil Bu below the model's mean projection).

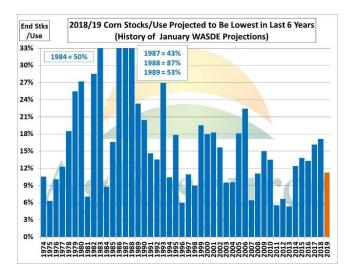


The chart above depicts the year-to-year changes in the 1^{st} quarter's F&R. It should be noted that there has been relatively modest volatility in the F&R over the last few years. More importantly, this year's projected 1.6% increase in 1^{st} quarter F&R (compared to last

year) is certainly not a very large year-to-year increase (compared to others that have occurred).



The chart above depicts the ratio of the 1st quarter's F&R versus annual F&R. Since 1975, there has been a well-defined trend for 1st quarter F&R to rise relative to annual F&R. We have plotted our 2018 projection of 1st quarter F&R relative to: (1) USDA's projection of annual F&R (5,500 Mil Bu), and (2) our projection (5,475 Mil Bu), which is 25 Mil less than USDA's.



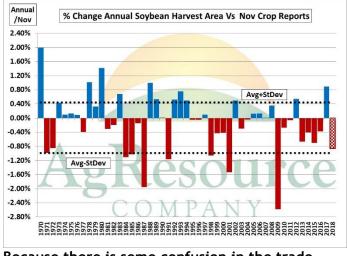
Based on ARC's projections of US supply and demand, we expect the Jan WASDE to project the ratio of 2018/19 ending stocks/use at 11.3% (see chart above). That would be the smallest Jan WASDE projection since 2013 and well

below last year's Jan WASDE projection of 17.1%.

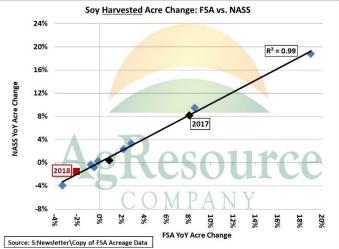
Bottom Line: ARC expects that the US corn stocks/use will fall slightly with the January Reports. We are projecting a cut in production. F&R use will not be higher than last year but not by enough to cause concern that feed demand is growing excessively. The combination of a reduction in supply and robust export demand result a Jan WASDE projection for stocks/use or 11.3%, down slightly from the Dec WASDE projection of 11.8%.

ARC Projects Annual Soybean Crop To Be 30 Mil Bu Less Than USDA's Nov Estimate. Slight Reductions in Harvested Area and Yield Expected.

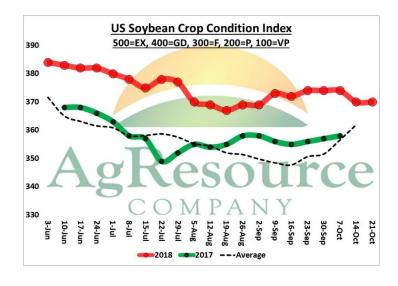
ARC Anticipates a Slight Reduction in US Soybean Harvested Area From The USDA's Nov Estimate. The following chart shows the history of changes that the USDA made their estimate of soybean harvested area in the Annual Crop Report vs. the estimates published in the Nov Crop Report. Two-thirds of the time, Annual harvested area was within 0.67% of the Nov estimate. However, there were several years when substantial changes were made. Except for 1970, most of the time, when large changes were made to harvested area, they were reductions (e.g. 2009 = down 2.6%).



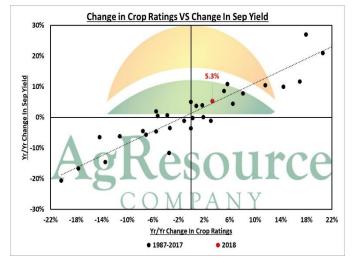
Because there is some confusion in the trade regarding the FSA data on prevented planting and farmer certification of acres, ARC checked to see if year-to-year changes in the amount of "final" FSA certified soybean acres was correlated to year-to-year changes in USDA's Annual soybean "harvested" acres. The red square in the chart below represents the yearto-year percentage change in USDA's last estimate of 2018 crop soybean harvested area and data from the FSA's December report. Note that, using the percentage change in FSA data to predict the percent change in NASS data, the 2018 projection using USDA's current NASS data nearly matches the "predicted" change.



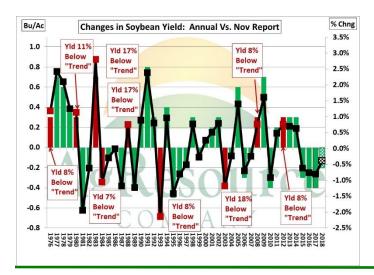
NASS reports have documented significant harvest delays. Also, estimates by some analytical firms, and other anecdotal reports lead us to believe that 2018 was a year in which some area was not harvested. Our estimate of harvested area is 200,000 acres below USDA's.



ARC Projects National Average Soybean Yield to Be 51.9 VS USDA's Nov Estimate of 52.1 Bu. The preceding chart plots the weekly values for the 2018 crop condition index relative to its last year and average. Anecdotal reports from firms that compile thousands of harvest results or from yield models based on weather and/or satellite images, suggest that 2018 final soybean yield could be a bit lower than USDA's 52.1 BU.



ARC's crop condition models project the *percentage change in yields (relative to last year)* based on the *percentage change in the crop condition index (relative to last year)*. The chart above plots the percentage change in the USDA's Annual Crop Report's yields vs. the percentage change in the final week's crop condition index. ARC's projection of 51.9 is just at the mean estimate (see red square) that is projected by our crop condition model.

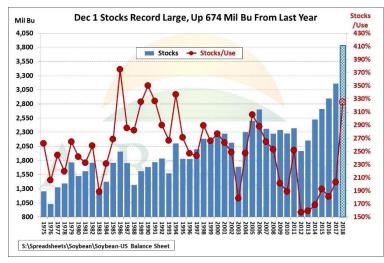


The chart above plots the changes USDA made to its estimate of soybean yield in the Annual Crop Report vs. the Nov Crop Report. The changes are expressed in bushels and in percent. ARC is projecting Annual yield will be unchanged from the Nov estimate 52.5 BU.

Bottom Line: Harvest delays and other unfavorable conditions, have prompted us to project soybean's final yield will be 0.2 Bu less than USDA's Nov estimate.

1st Qtr. Soybean Crush + Exports Near-Record. December Soybean Stocks to Be <u>Record</u> 3,835 Mil Bu, Up 21%.

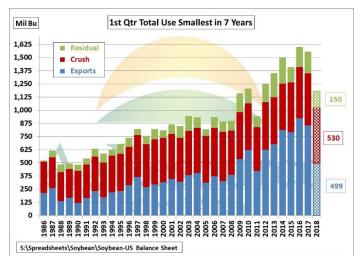
ARC projects Dec 1 soybean stocks to be 3,835 Mil Bu, up 674 Mil Bu (21%) from last year (see chart below). Dec stocks will be a record 373% of Sep-Nov use, up from last year's 234% (see red line). In recent years, the largest ratio was 397% in 1990.



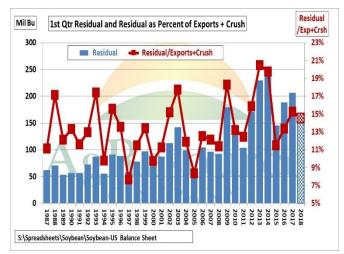
As we have already presented, ARC projects 2018 soybean production to be up 159 Mil Bu (3.6%) from last year. Exacerbating the increase in production, combined crush + export use in the 1st quarter is projected to be down 321 Mil Bu (24%) from last year.

Sep-Nov exports are pegged at 499 Mil Bu, down 357 Mil Bu (42%) from last year. Crush is projected to be a record 530 Mil Bu, up 36 Mil Bu (7%) from last year. Lastly, residual is

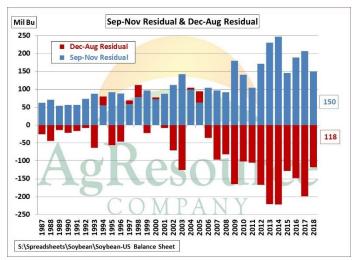
estimated to be 150 Mil Bu, down 56 Mil Bu from last year. The chart below illustrates the components of first quarter soybean use.



Estimating soybean exports and crush is a straightforward process. With respect to projecting residual use, ARC's approach is to assume that residual use in the first quarter was equal to the 5-year average of the ratio of 1st quarter residual/exports + crush (chart below).

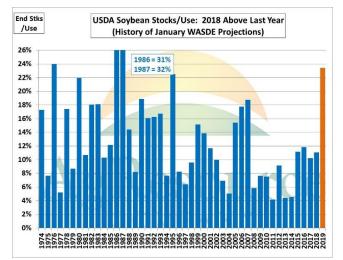


The following chart depicts the 1st quarter's residual versus the residual for the remainder of the crop marketing year. In most years, total marketing year residual is LESS THAN THE residual in the first quarter. For example, residual in Sep-Nov 2014 was 248 Mil Bu but Dec-Aug residual was -201 Mil Bu, resulting in total marketing year residual of just 48 Mil Bu. ARC expects that something similar will occur in 2018/19 and that final annual marketing year residual will be just 32 Mil Bu.



Since we are projecting 1st quarter F&R at the high end of the history for the ratios of 1st quarter residual/1st quarter use: (1) if ARC's projection of 2018 production is correct; and (2) if actual 1st quarter residual is higher than ARC's projection of 150 Mil Bu; than that would imply that ARC's projection of ending stocks is too high (or that our projection of imports is too low).

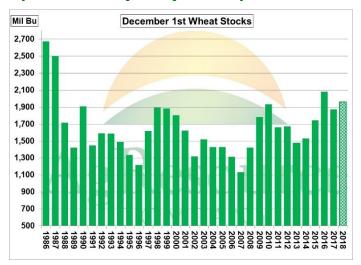
If analysis is correct, and USDA's January WASDE falls in line with our projections, the January WASDE's projection of ending stocks/use will be 23.4%, more than twice as much as last year's Jan WASDE proj of 11.2% (see chart below).



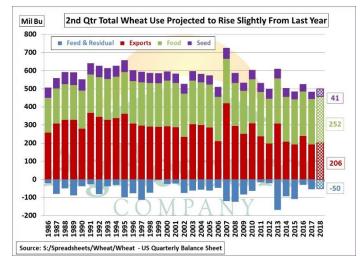
<u>Bottom Line</u>: ARC expects that the US Dec 1 soybean stocks will be record large and up sharply from last year. When record US stocks

are added to expectations for a record S. American crop, the resulting record global supplies should weigh on the market placing further pressure on prices.

Dec Wheat Stocks to Be 1,961 Mil Bu, Up 87 Mil Bu (4.7%). Use Up 4.7%.



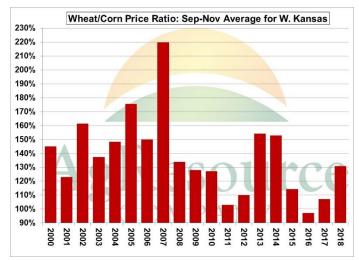
ARC projects Dec 1 wheat stocks to be 1,961 Mil Bu, up 87 Mil Bu (4.7%) from last year (see chart above).



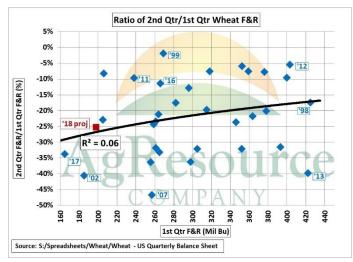
The chart above illustrates the second quarter components of wheat use. Sep-Nov exports are pegged at 206 Mil Bu, up 12 Mil Bu (4.7%) from last year. Food use is 252 Mil Bu, up only 1 Mil Bu (0.6%) from last year. Seed use is pegged at 41 Mil Bu (down 1 from last year). Lastly, feed

and residual (F&R) is estimated to be $\frac{-50}{-50}$ Mil Bu compared to $\frac{-56}{-56}$ Mil Bu last year.

This year's 1^{st} quarter F&R was a 198 Mil Bu (34 Mil Bu more than last year). The wheat/corn price ratio in the Southern Plains indicates that feeding wheat was NOT cost-efficient for the 2^{nd} quarter. Sep-Nov wheat prices in W. Kansas averaged \$4.55 while corn prices averaged \$3.45 making the ratio of wheat/corn prices 132% (see chart below). That is above last year's 107% (which was the 3^{rd} lowest for the 18 years for which we have price history).



Even when the cost of soymeal in cattle rations is considered, wheat was too expensive relative to a ration based on corn and soymeal. Wheat was competitive at prices that were below \$4.16 Bu. However, during Sep-Nov, wheat prices averaged \$4.55 (see following table).



Estimating wheat exports, food and seed use is a straight-forward process. With respect to projecting F&R use, ARC's approach is to assume that F&R in the second quarter was about the average ratio of 2^{nd} quarter residual/1st quarter (see red square in the preceding chart). With

2nd quarter F&R of -50, the projection for annual F&R is 110 Mil Bu. That is more than double last year's 50 Mil Bu, and agrees with USDA's Dec WASDE projection of 110 Mil Bu.

			Prices for Which Wheat Could be Substituted for Shelled Corn and Soybean Meal for Feeding Catt									
er ton		Corn price \$ per bushel										
\$ per		\$2.85	\$3.05	\$3.25	\$3.45	\$3.65	\$3.85	\$4.05	\$4.25			
price				Wh	eat price,	e, \$ per bushel						
eal p	\$274	\$3.47	\$3.67	\$3.86	\$4.06	\$4.26	\$4.45	\$4.65	\$4.85			
Ē u	\$294	\$3.52	\$3.71	\$3.91	\$4.11	\$4.30	\$4.50	\$4.70	\$4.90			
Soybean meal	\$314	\$3.56	\$3.76	\$3.96	\$4.16	\$4.35	\$4.55	\$4.75	\$4.94			
So	\$334	\$3.61	\$3.81	\$4.01	\$4.20	\$4.40	\$4.60	\$4.79	\$4.99			
	\$354	\$3.66	\$3.86	\$4.05	\$4.25	\$4.45	\$4.65	\$4.84	\$5.04			

Table compares the cost of 100 pounds of wheat containing equal protein and energy to 92 pounds of shelled corn and 8 pounds of 48% soybean meal.

Calculation based on price only

Source: Greg Highfill Area Extension Livestock Specialist, Oklahoma Extension Service

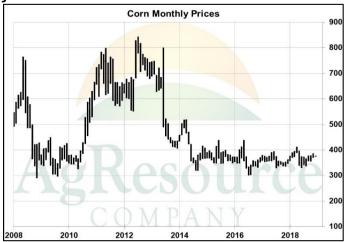
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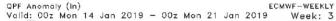
AgResource Corn Outlook

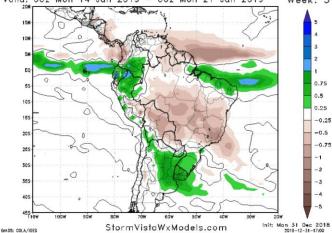
World corn prices were slightly lower over the holidays with US Gulf offers at \$167.50/MT for February, with Argentine offers at \$171/MT and the Ukraine at \$174/MT. US corn is back to being the cheapest in the world which is likely to aid US corn sales/shipments in coming months. The discount of US corn to Argentina is resting at \$3.50/MT - the widest since Q1 2018. And Ukraine has shipped record corn tonnages to Europe through December.

The problem is defining US corn sales with the US Gov't closed for the past 12 days. The odds are high that the US Gov't could stay shuttered into mid-January - which could push back the USDA January crop report until late month. ARC looks for the January report to hold a bullish surprise amid a further decline in the 2018 US corn yield. ARC looks for a yield of 177 BPA or down another 1.9 BPA from November.

South American corm production looks to be threatened in coming weeks with ongoing dryness across NC Brazil and flooding rains through the northern 1/3 of Argentina. The extended range EU weekly model forecasts that the current weather pattern will persist into late January. WASDE forecast the Brazilian corn crop at 94.50 MMTs and Argentina at 42.50 MMTs for combined production of 137.0 MMTs. A 10% crop loss would drop South American corn production by 14 MMTs and place world corn stock/use ratios into an extremely tight level of just 85-90 MMTs.

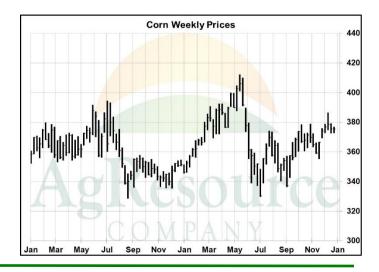






The extended January 14-21 weather forecast shows no change in the South American weather pattern! The Argentine crop will be fighting flooding rains and a leaching of nitrogen while soil moisture for the Brazilian winter corn crop is short. If the Central Brazilian dryness persists into mid-February, the odds are high that the winter corn crop will suffer from below trend yields. Its time to pay close attention to weather

Amid adverse Southern Hemisphere weather, the outlook for US corn is brightening. Add back a possible 2-3 BPA decline in US corn yield, and March corn futures should reach key resistance at \$3.90-4.00 for a seasonal high. Prices above \$4.00 would require a drop in US corn seeding expectations or threatening spring weather. ARC advises end users and speculators to use breaks to \$3.70 or under basis spot futures for purchases. The downside risk appears limited.



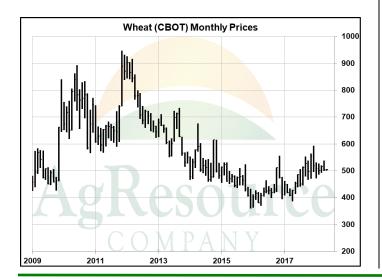
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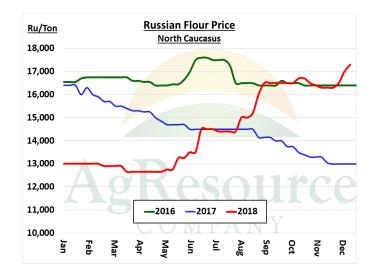
AgResource Wheat Outlook

Wheat futures are down slightly this week. The US Gulf market is well positioned to boost its share of world trade into early summer, but any new demand won't be reported as the US government stays shut down. Macro markets have been volatile and mostly very weak, which has given the grain bulls pause. We maintain a longer term bullish outlook, but recognize macro and political headwinds exist.

Fundamental wheat data is supportive. World cash markets have either found new seasonal highs or are flirting with recent highs. The following graphic shows interior Russian flour prices since 2016. The Black Sea grain market has entered a more bullish trend in recent weeks, with spot flour now testing 2016's high. Recall the rally in Black Sea cash prices in 2016 pushed final US wheat exports to 1,050 Mil Bu. The USDA's current 2018/19 forecast is 1,000 Mil. This is viewed as too low.

Even lesser-followed markets are rising. Indian cash prices have quietly hit new multi-year highs. Aussie futures remain near \$8.50/Bu. EU fob offers have been unwilling to drop below \$240/MT (vs. Gulf HRW at \$227) as the domestic feed market is paying equal or higher values than export terminals. Europe will be a net grain importer this year, which is important.





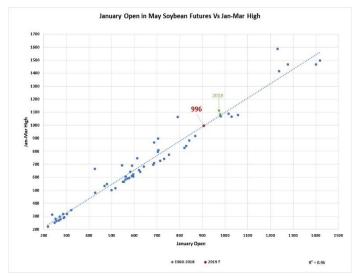
It's unknown whether NASS's January data will be released. The report is scheduled for Jan 11th (next Friday). US wheat stocks data won't be bullish amid weak Jul-Nov exports. However, most important is whether winter wheat acreage expanded last fall amid adverse weather? There was sizable acreage unplanted as of late November, and anecdotal reports from the Central Plains suggest HRW acreage, in fact, will be lower in 2019/20.

As such, it's left almost solely to the Black Sea to boost major exporter seedings. Expansion is expected there, but the lack of expansion elsewhere places an even heavier burden on Mother Nature over the next 6-7 months. We're buyers of breaks, and a bearish outlook cannot be advised until spring/summer weather is better known.



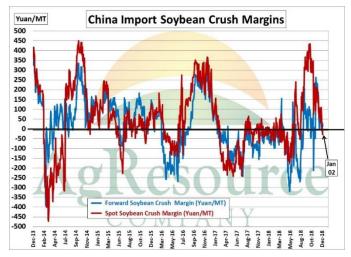
AgResource Soybean Outlook

Mar soybeans closed at \$9.07, up 12 cents for the day, and 24 cents less than a week ago. In late Sep, the contract set a LOC low of \$8.40. Mar meal futures was \$314.70, up \$4.80 for the day and \$6.80 above a week ago. In late Sep, the contract set a 15-month low at \$303.40. Mar soy oil closed at 27.90 cents, up 0.39 of a cent for the day and half-a-cent higher than a week ago. Five weeks ago, the contract set it's LOC low at 27.42 cents.



Although soybean fundamentals are extremely bearish, the start of trading in 2019 suggests that there is still about a \$1 upside potential from current prices. The chart above plots the Jan open for May futures vs the Jan-Mar high for 2019. The Jan-Mar high could be \$9.96.





China's "spot" soybean crush margin dropped below breakeven this week. The "forward" margin, however, rose to \$0.05/Bu after hitting breakeven. With the US government shutdown, we don't know how much more soybeans China has purchased. However, the 25% tariff that China has levied on the import of US soybeans remains in effect. US and Chinese officials are preparing for upcoming trade talks in Beijing that start next week. As in the past, news articles swing from optimistic to pessimistic depending on statements made by major figures in the negotiations.

Drought in Brazil and too much rain in parts of Argentina have prompted analysts to lower their S. AM crop estimates about 3-4 MMT in recent weeks. However, unless China buys 10+ MMT of old-crop US soybeans (to be locked away in state reserves), record global stocks will limit gains in soybean prices.



US Corn Balance Sheet

1			-	-		
	2017/18	2018/19	2018/19	2018/19	2019/20	2019/20
CORN	USDA	USDA	USDA	ARC	USDA	ARC
	Dec	Nov	Dec	Jan	Baseline	Jan
Mln Acres or Bushels						
Area Planted	90.2	89.1	89.1	89.1	92.0	93.0
Abandonment	8.3%	8.2%	8.2%	8.2%	8.0%	8.3%
Area Harvested	82.7	81.8	81.8	81.8	84.6	85.3
Yield	176.6	178.9	178.9	177.0	176.5	176.5
Production	14,604	14,626	14,626	14,480	14,930	15,065
Beginning Stocks	2,293	2,140	2,140	2,140	1,813	1,690
Imports	36	50	45	50	50	50
Supply, Total	16,934	16,816	16,811	16,670	16,793	16,805
Feed and Residual	5,298	5,500	5,500	5,450	5,575	5,525
Food, Seed, Industrial	7,058	7,130	7,080	7,055	7,190	7,115
Ethanol & By-Products 1/	5,605	5,650	5,600	5,575	5,700	5,625
Food, Other Industrial 2/	1,423	1,450	1,450	1,450	1,460	1,460
Seed	30	30	30	30	30	30
Domestic, Total	12,355	12,630	12,580	12,505	12,765	12,640
Exports	2,438	2,450	2,450	2,475	2,425	2,300
Use, Total	14,793	15,080	15,030	14,980	15,190	14,940
Ending Stocks	2,140	1,736	1,781	1,690	1,603	1,865
Ending Stocks/Use	14.5%	11.5%	11.8%	11.3%	10.6%	12.5%
Crop Insurance Price (\$/Bu)	3.96	3.96	3.96	3.96		
Avg. Farm Price (\$/Bu) 3/	3.36	3.20-4.00	3.25-3.95	3.25-3.95	3.90	2.35-4.85
Fut-Based Forecast (\$/Bu) 4/		3.50	3.50	3.50	3.95	3.95
Price Ratio: Corn/Soy (%)	36%	42%	42%	44%	45%	42%

Note: Totals may not add due to rounding

Marketing year beginning September 1

- 1/ Corn used to produce ethanol and by-products
- 2/ Mostly for the production of sweeteners and starch
- 3/ Marketing-year weighted average prices received by farmers
- 4/ 2018/19 price is based on cash price Sep-Nov and deferred CBOT futures prices on <u>Jan 02</u>; 2019/20 price is based on deferred CBOT futures prices on <u>Jan 02</u>.

Changes in ARC's S&D's from last week:

- ARC's 2018/19 S&D is unchanged.
- ARC's 2019/20 S&D is unchanged.
- ARC's 2018/19 price forecast is unchanged.
- ARC's 2019/20 price forecast is unchanged.
- "Futures-Based Price Forecast" 2018/19 is <u>down</u>; 5 cents; 2019/20 is <u>down</u> 5 cents.

US Wheat Balance Sheet

		-		-		_
	2017/18	2018/19	2018/19	2018/19	2019/20	2019/20
WHEAT	USDA	USDA	USDA	ARC	USDA	ARC
	Dec	Nov	Dec	Jan	Baseline	Jan
Mln Acres or Bushels		-				
Area Planted	46.0	47.8	47.8	47.8	51.0	48.6
Abandonment (%)	18.4%	17.2%	17.2%	17.3%	15.5%	13.5%
Area Harvested	37.5	39.6	39.6	39.6	43.1	41.1
Yield	46.3	47.6	47.6	47.6	47.8	47.8
Production	1,740	1,884	1,884	1,884	2,060	1,965
Beginning Stocks	1,181	1,099	1,099	1,099	956	910
Imports	157	140	140	140	130	130
Supply, Total	3,078	3,123	3,123	3,125	3,046	3,005
Food	964	970	970	965	975	965
Seed	64	69	69	65	685	65
Feed and Residual	50	110	110	110	120	120
Domestic, Total	1,078	1,149	1,149	1,140	1,150	1,150
Exports	901	1,025	1,000	1,075	1,050	1,100
Use, Total	1,979	2,174	2,149	2,215	2,213	2,250
Ending Stocks	1,099	949	974	910	933	755
Ending Stocks/Use (%)	55.5%	43.7%	45.3%	41.1%	38.0%	33.6%
HRW Crop Insure Price (\$/Bu)	4.54	4.87	4.87	4.87	5.56	5.56
HRS Crop Insure Price (\$/Bu)	5.65	6.31	6.31	6.31		
Avg. Farm Price (\$/Bu) 1/	4.72	4.90-5.30	5.05-5.25	4.95-5.45	5.20	3.75-6.75
Fut-Based Forecast (\$/Bu) 2/		5.05	5.05	5.05	5.30	5.30
Price Ratio: Wheat/Corn (%) 3/	141%	142%	143%	144%	133%	146%

Note: Totals may not add due to rounding

Marketing year beginning June 1

- 1/ Marketing-year weighted average prices received by farmers
- 2/ 2018/19 price is based on Jun-Nov cash prices and on deferred KC futures prices as of <u>Jan 02</u>. 2019/20 price is based on deferred KC futures prices as of <u>Jan 02</u>.
- 3/ Jun-May wheat season average price/Sep-Aug corn season average price.

Changes in ARC's S&D's from last week:

- ARC's 2018/19 S&D is unchanged.
- ARC's 2019/20 S&D is unchanged.
- ARC's 2018/19 price forecast is unchanged.
- ARC's 2019/20 price forecast is unchanged.
- Futures-Based Price Forecast" 2018/19 is <u>down</u> 10 cents; 2019/20 is <u>down</u> 25 cents.

US Soybean Balance Sheet

	2017/18	2018/19	2018/19	2018/19	2019/20	2019/20
SOYBEANS	USDA	USDA	USDA	2018/19 ARC	USDA	
SUTBEANS						ARC
	Dec	Nov	Dec	Jan	Baseline	Jan
Mln Acres or Bushels						
Area Planted	90.1	89.1	89.1	89.1	82.5	83.5
Abandonment (%)	0.7%	1.0%	1.1%	1.1%	0.9%	1.0%
Area Harvested	89.5	88.3	88.3	88.1	81.8	82.7
Yield	49.3	52.1	52.1	51.9	50.0	50.0
Production	4,411	4,600	4,600	4,570	4,090	4,135
Beginning Stocks	302	438	438	438	885	950
Imports	22	25	25	25	25	25
Supply, Total	4,734	5,163	5,063	5,035	5,000	5,110
Crushing	2,055	2,080	2,080	2,075	2,075	2,075
Exports	2,129	1,900	1,900	1,875	2,075	2,075
Seed	104	96	96	103	96	97
Residual	8	32	32	32	31	43
Use, Total	4,296	4,107	4,107	4,085	4,277	4,290
Ending Stocks	438	955	955	950	723	820
Ending Stocks/Use (%)	10.2%	23.3%	23.3%	23.3%	16.9 %	19.1%
Crop Insure Price (\$/Bu)	10.19	10.16	10.16	10.16		
Avg. Farm Price (\$/Bu) 1/	9.33	7.60-9.60	7.85-9.35	7.20-9.30	8.75	6.50-10.50
Fut-Based Forecast \$/Bu 2/		9.10	9.10	9.10	9.45	9.45
Price Ratio: Soy/Corn (%)	278 %	239%	239%	229%	224%	236%

Note: Totals may not add due to rounding

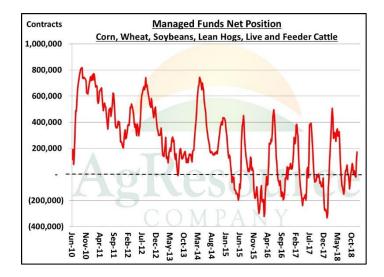
Marketing year beginning September 1

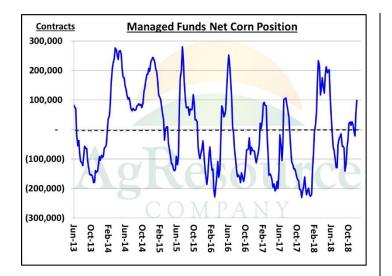
- 1/ Marketing-year weighted average prices received by farmers
- 2/ 2018/19 price is based on cash prices Sep-Nov and CBOT deferred futures prices as of <u>Jan 02</u>; 2019/20 price is based on deferred futures prices as of <u>Jan 02</u>.

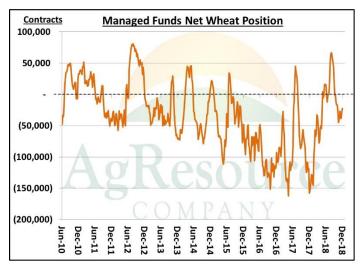
Changes in ARC's S&D's from last week:

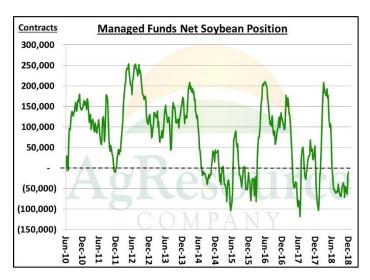
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- ARC's 2019/20 S&D is unchanged.
- ARC's 2018/19 price forecast is unchanged.
- ARC's 2019/20 price forecast is unchanged.
- "Futures-Based Price Forecast" 2018/19 is down 10 cents; 2019/20 price is down 10 cents.

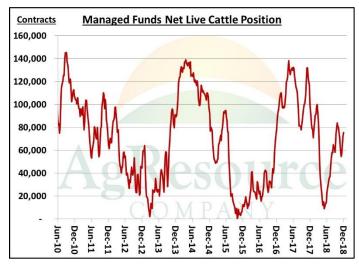
Managed Fund Positions



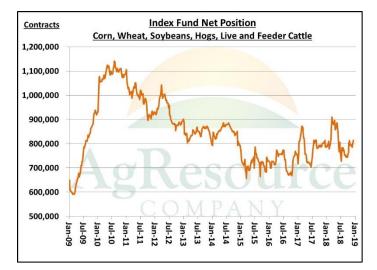


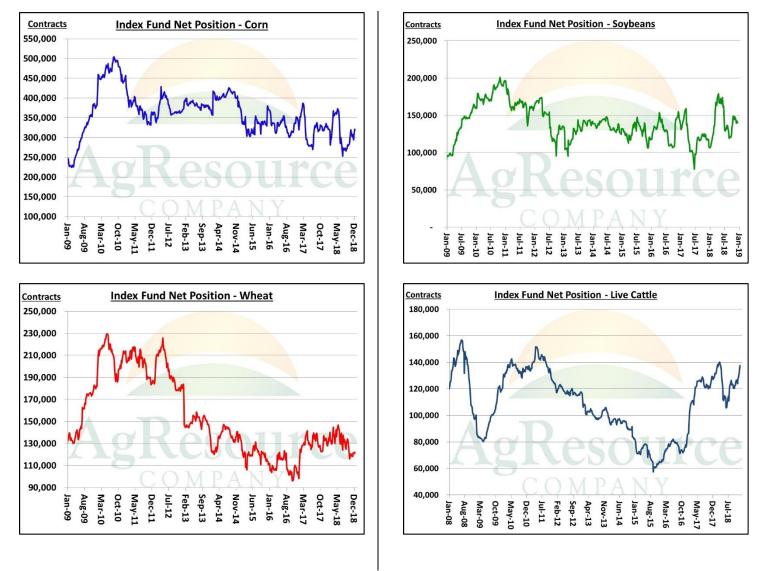




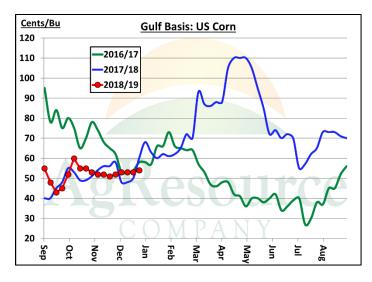


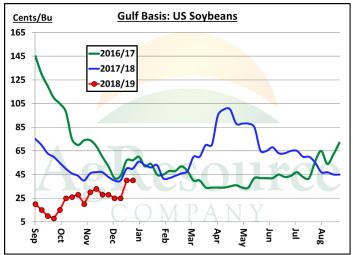
Index Fund Positions

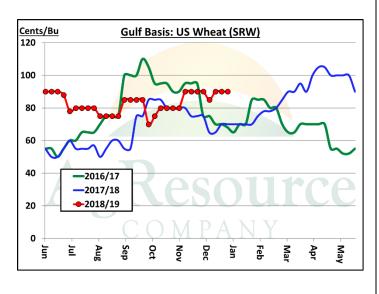


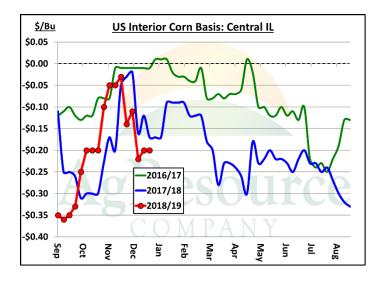


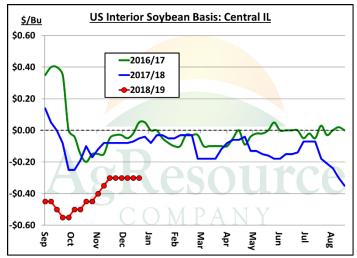
US Basis

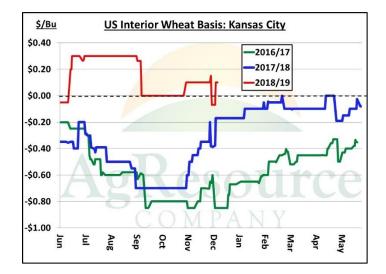




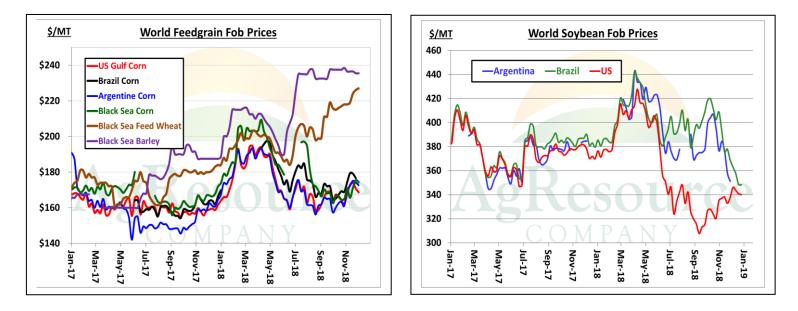


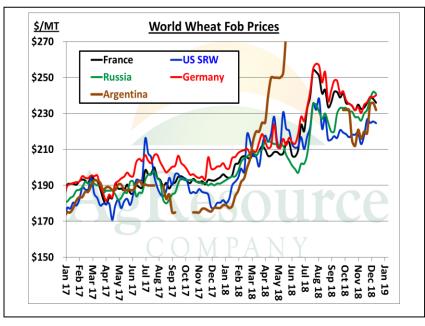




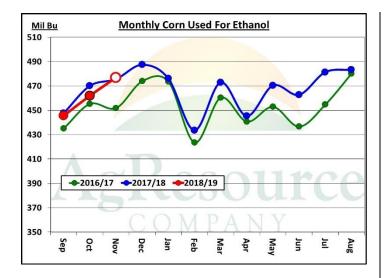


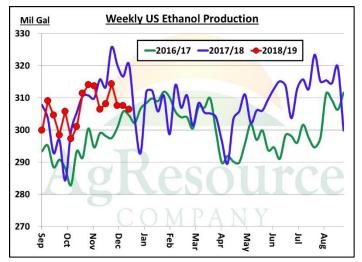
CHEAPEST FOB: US Corn at \$175/MT US Soybeans at \$340/MT US SRW Wheat at \$225/MT

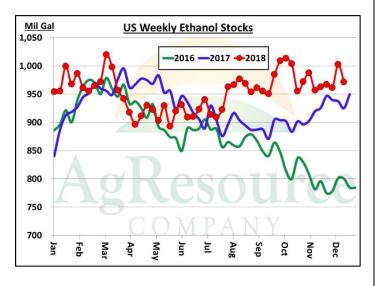


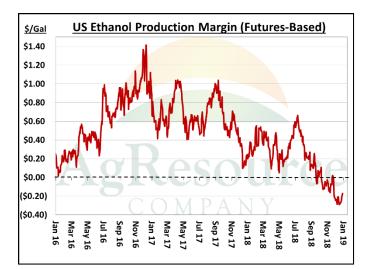


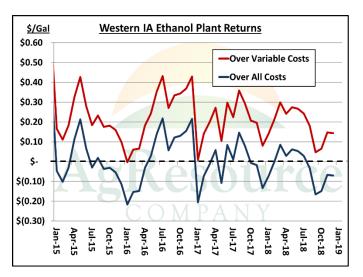
ETHANOL

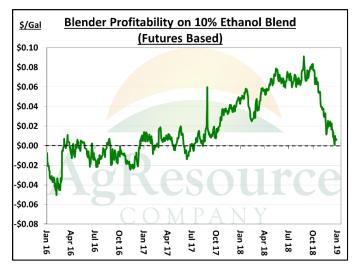




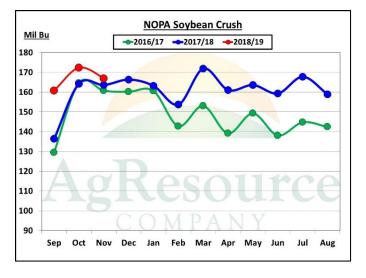


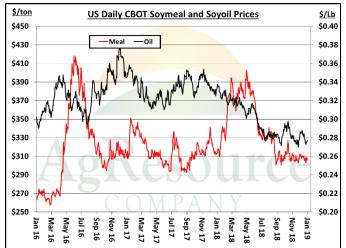


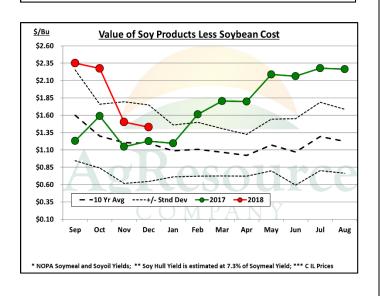


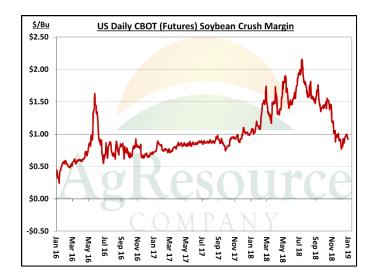


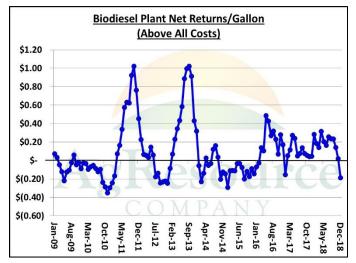
SOYBEAN CRUSH

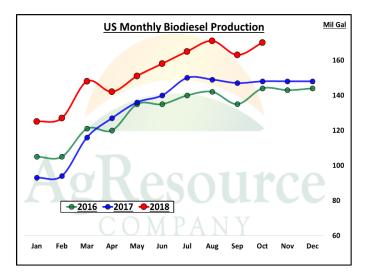




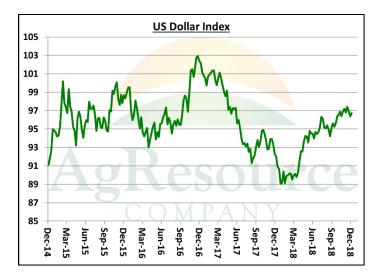




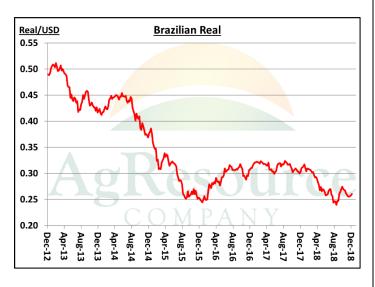


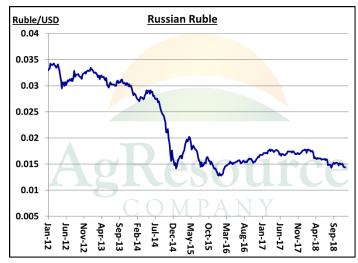


GLOBAL CURRENCIES





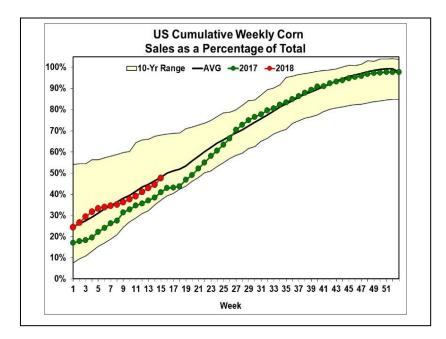


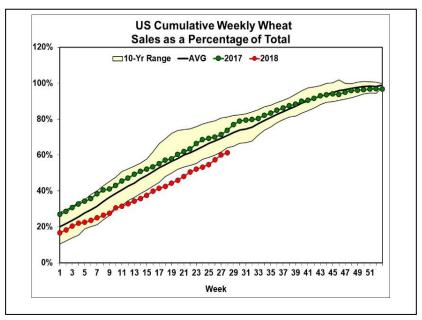




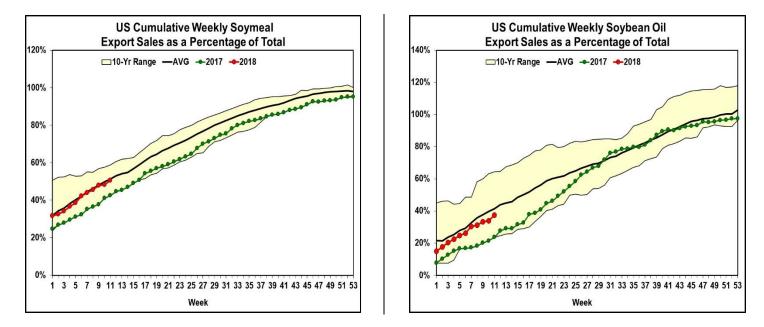
Page 24

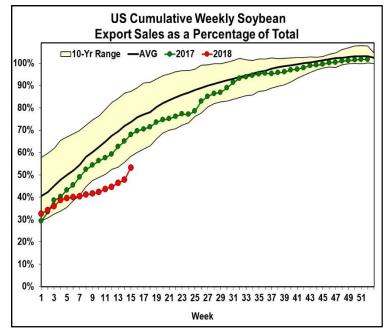
Cumulative Export Sales as of Dec 13th Corn: 1,166 Mil Bu (17% above last year; 48% of USDA forecast) Soybeans: 1,012 Mil Bu (34% below last year; 48% of USDA forecast) Wheat: 612 Mil Bu (12% below last year; 61% of USDA forecast)



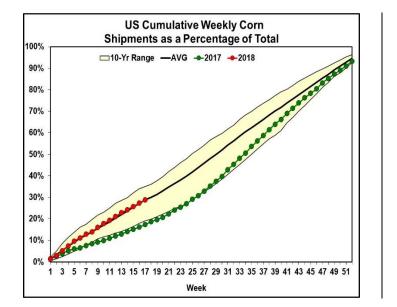


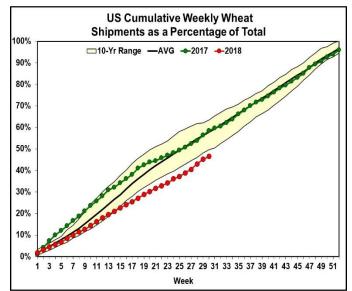
US Weekly Soybean, Soymeal, and Soyoil Export Sales Page 25

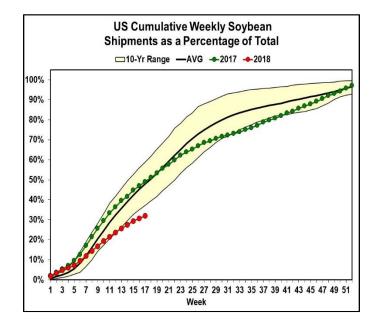




Cumulative Export Inspections as of Dec 20th Corn: 705 Mil Bu (69% above last year; 29% of USDA forecast) Soybeans: 607 Mil Bu (42% below last year; 32% of USDA forecast) Wheat: 466 Mil Bu (13% below last year; 47% of USDA forecast)







Spreads

