

2018 Corn & Sorghum Market Outlook

Leoti, Kansas

February 26, 2018

DANIEL O'BRIEN

EXTENSION AGRICULTURAL ECONOMIST

KANSAS STATE
UNIVERSITY

Department of Agricultural Economics



Topics to be discussed.....

- 1) Financial Market Trends & Their Impact on U.S. Crop Prices
- 2) Weather Trends & Prospects for 2018
- 3) 2018 Corn & Grain Sorghum Markets

Dow Jones Industrial Index Weekly, October 2015 – February 23, 2018

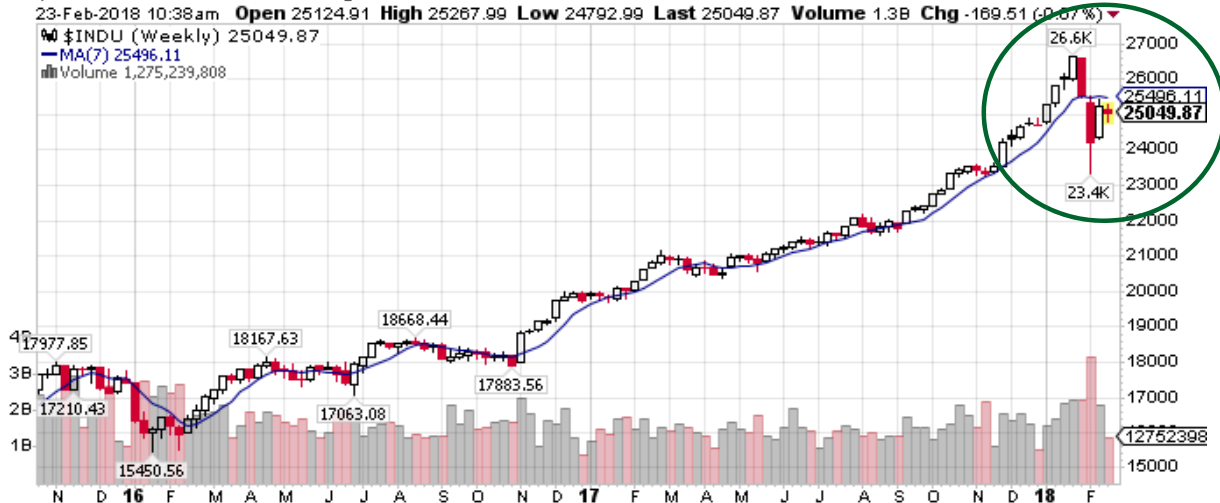
\$INDU Dow Jones Industrial Average INDX

23-Feb-2018 10:38am **Open** 25124.91 **High** 25267.99 **Low** 24792.99 **Last** 25049.87 **Volume** 1.3B **Chg** -169.51 (-0.67%)

\$INDU (Weekly) 25049.87

MA(7) 25496.11

Volume 1,275,239,808



U.S. Dollar Index

Weekly, August 2015 – February 12, 2018

\$USD US Dollar Index - Cash Settle (EOD) ICE

© StockCharts.com

22-Feb-2018

Open 89.17 High 90.17 Low 89.15 Close 89.66 Chg +0.64 (+0.72%) ▲

\$USD (Weekly) 89.66 (22 Feb)

MA(7) 89.72

Volume undef

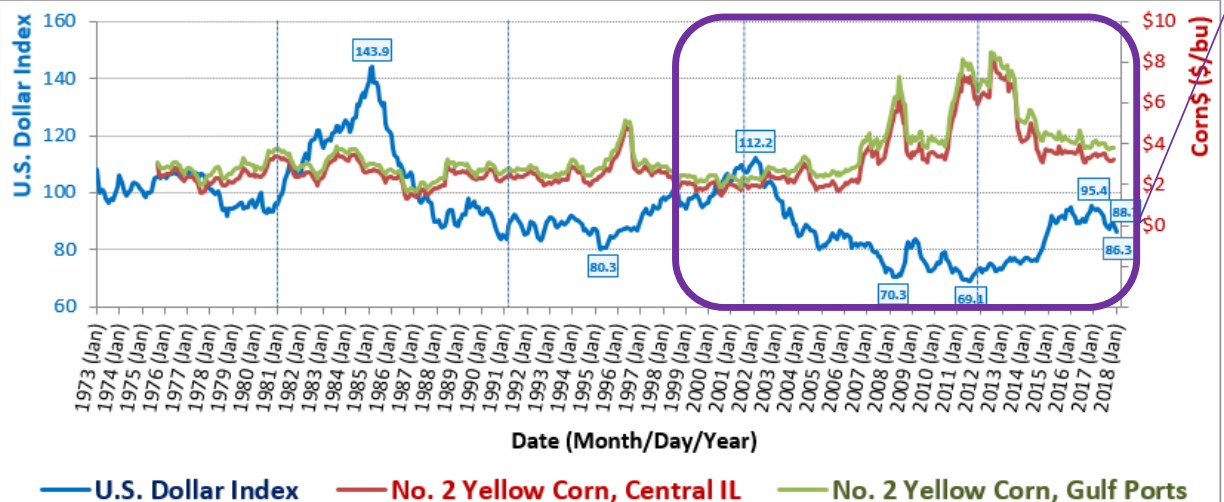


U.S. Dollar Index & Cash Corn Prices

Monthly Chart: January 1973 through February 16, 2018

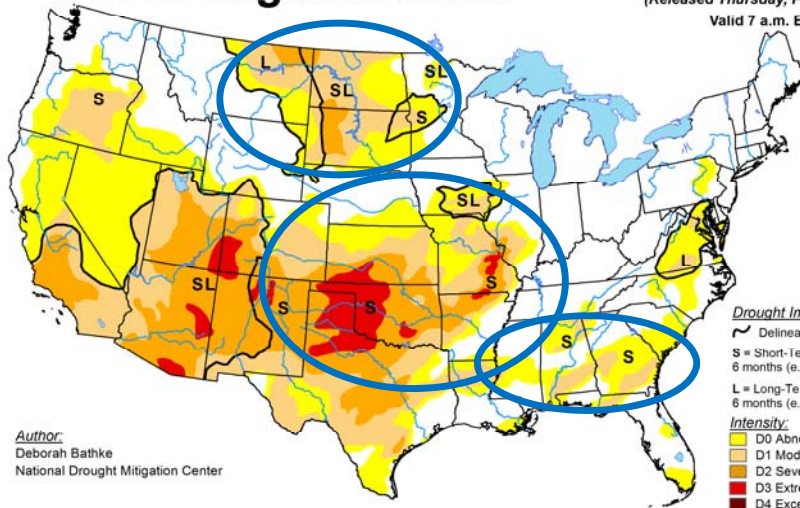
89.77

Avg. Index #
February 23, 2018



U.S. Drought Monitor

February 20, 2018
 (Released Thursday, Feb. 22, 2018)
 Valid 7 a.m. EST

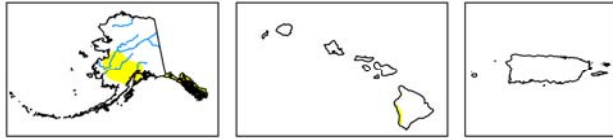


Author:
 Deborah Bathke
 National Drought Mitigation Center

Drought Impact Types:
 ~ Delineates dominant impacts
 S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
 L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

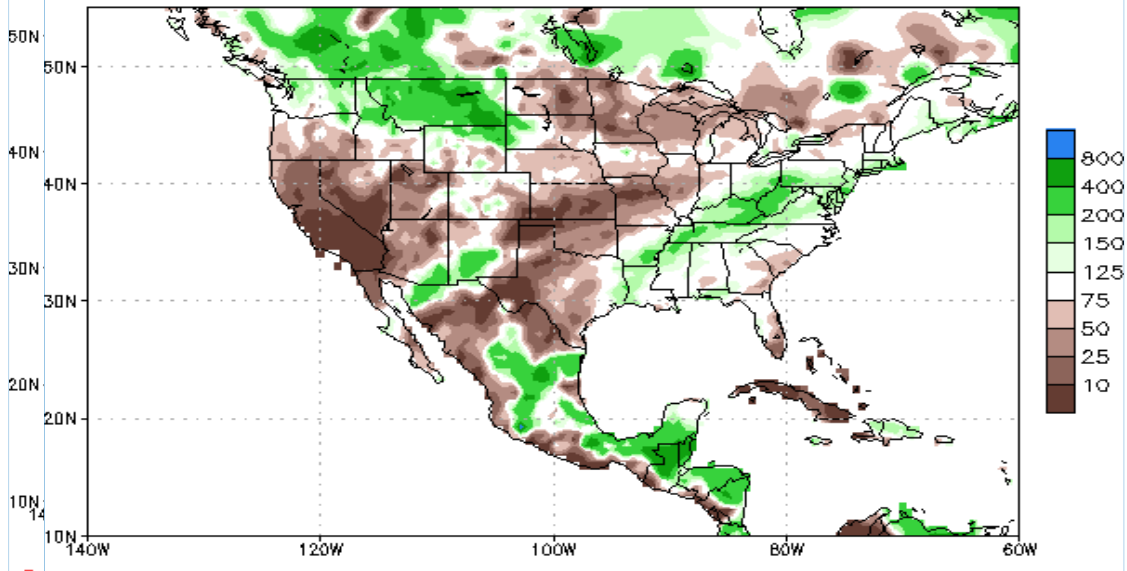
Intensity:
 D0 Abnormally Dry
 D1 Moderate Drought
 D2 Severe Drought
 D3 Extreme Drought
 D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



USDA NDMC NOAA
<http://droughtmonitor.unl.edu/>

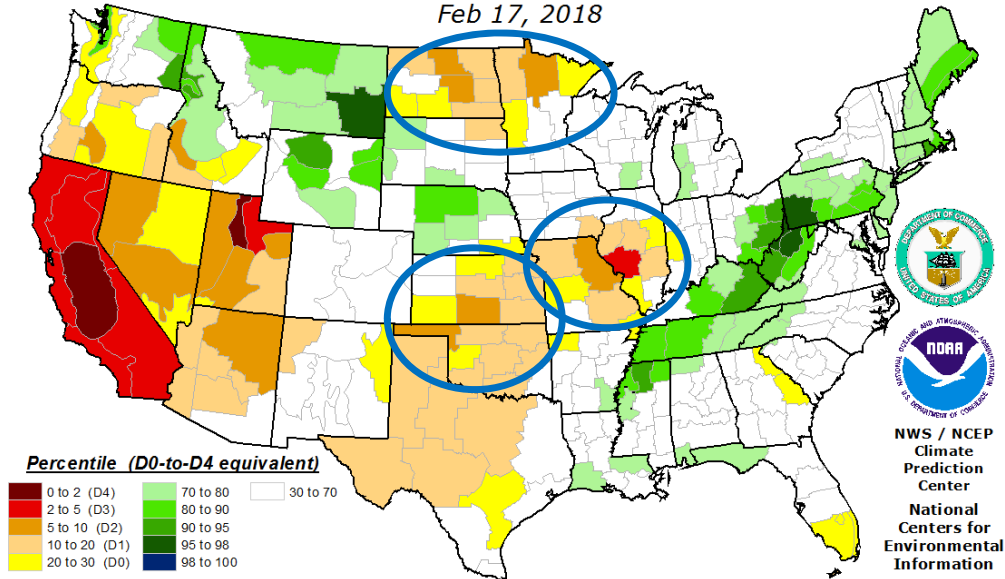
90-day Accumulated Prcp % of Normal 25NOV2017-22FEB2018
 30-day Accumulated Prcp % of Normal 24JAN2018-22FEB2018



Data Source: CPC Unified (gauge-based & 0.5x0.5 deg resolution) Precipitation Analysis Climatology (1981-2010)

Objective Short-Term Drought Indicator Blend Percentiles

Feb 17, 2018



This map approximates impacts that respond to precipitation over several days to a few months, such as agriculture, topsoil moisture, unregulated streamflows, and most aspects of wildfire danger. The relationship between indicators and impacts can vary significantly with location and season. Do not interpret this map too literally.

This map is based on preliminary climate division data. Local conditions and/or final data may differ. See the detailed product suite description for more details.

Corn & Sorghum Markets



**KANSAS STATE
 UNIVERSITY**

Department of Agricultural Economics

U.S. Corn Supply-Use

- Large U.S. Supplies & Stocks are limiting Corn Price\$'s
- "*LARGE*" 2017 U.S. Crop = 14.6 billion bu (vs 15.2 mb in 2016)
- Low Price\$'s ARE supporting U.S. Corn Use
 - Livestock Feed 2017/18 = 5.550 bln bu (10 year high – vs 5.858 bb in 2007/08)
 - Ethanol 2017/18 = 5.525 bln bu (Record high – vs 5.439 bb last year)
 - Other FSI 2017/18 = 1.470 bln bu (Record high – vs 1.452 bb in 2016/17)
 - Exports 2017/18 = 2.050 bln bu (vs 2.293 bb in '16/17 & 1.901 in '15/16)

U.S. Sorghum Supply-Use

- U.S. Export disturbances have lowered Sorghum Price\$'s
- "*Lower*" 2017 U.S. Crop = 364 million bu (vs 480 mb in 2016)
- Sorghum Exports cause "*shifts*" in Livestock & Feed Use
 - Exports 2017/18 = 260 mln bu (vs 241 & 340 mb last 2 years)
 - Food-Seed-Indust 2017/18 = 50 mln bu (vs 115 & 137 mb last 2 years)
 - Feed 2017/18 = 65 mln bu (vs 130 & 107 mb last 2 years)

U.S. Corn & Grain Sorghum Stocks.....

- Corn: "*Large*" Stocks & % Stx/Use

- End Stocks 2017/18 ⇒ 2.352 bln bu (*2nd highest since 1987/88*)
- % Stocks/Use 2017/18 ⇒ 16.1% S/U (*Highest since 2005/06*)

- Grain Sorghum: "*Tighter*" Stocks & % Stx/Use than Corn

- End Stocks 2017/18 ⇒ 24 Mln bu (*15 - 55 mb since 2008/09*)
- % Stocks/Use 2017/18 ⇒ 6.4% S/U (*Historically "tight"*)



CME Corn Futures

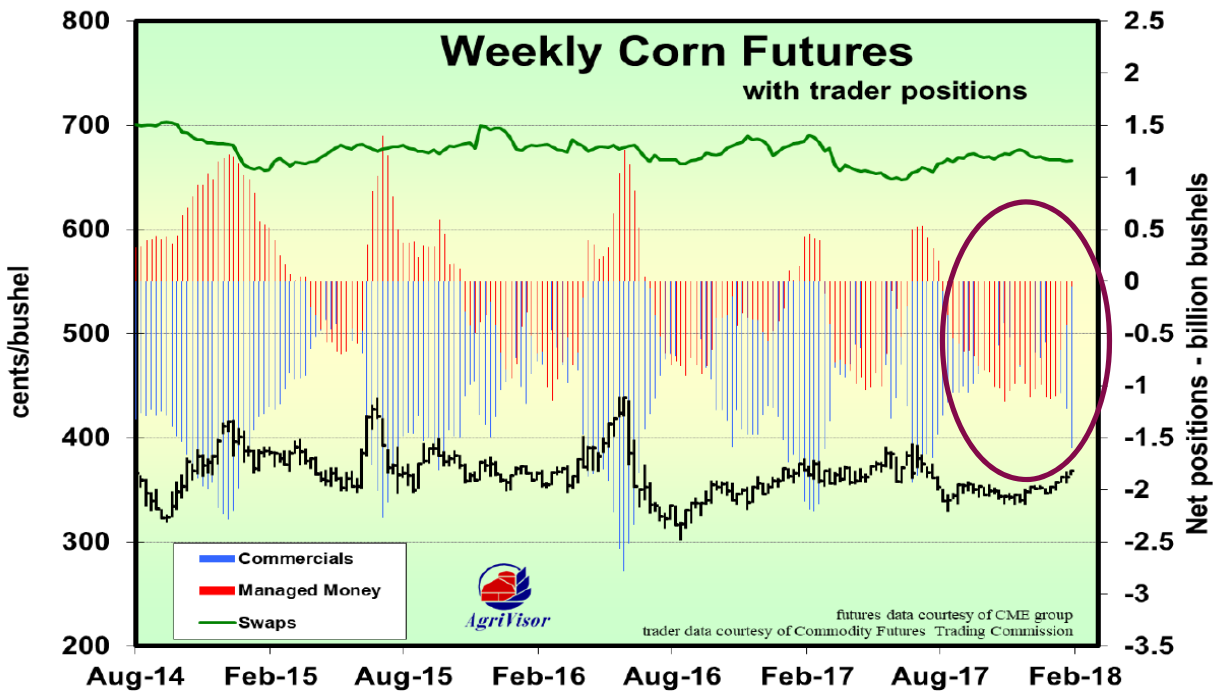
Weekly Chart: December 2008 – January 2018 + 2/23/2018

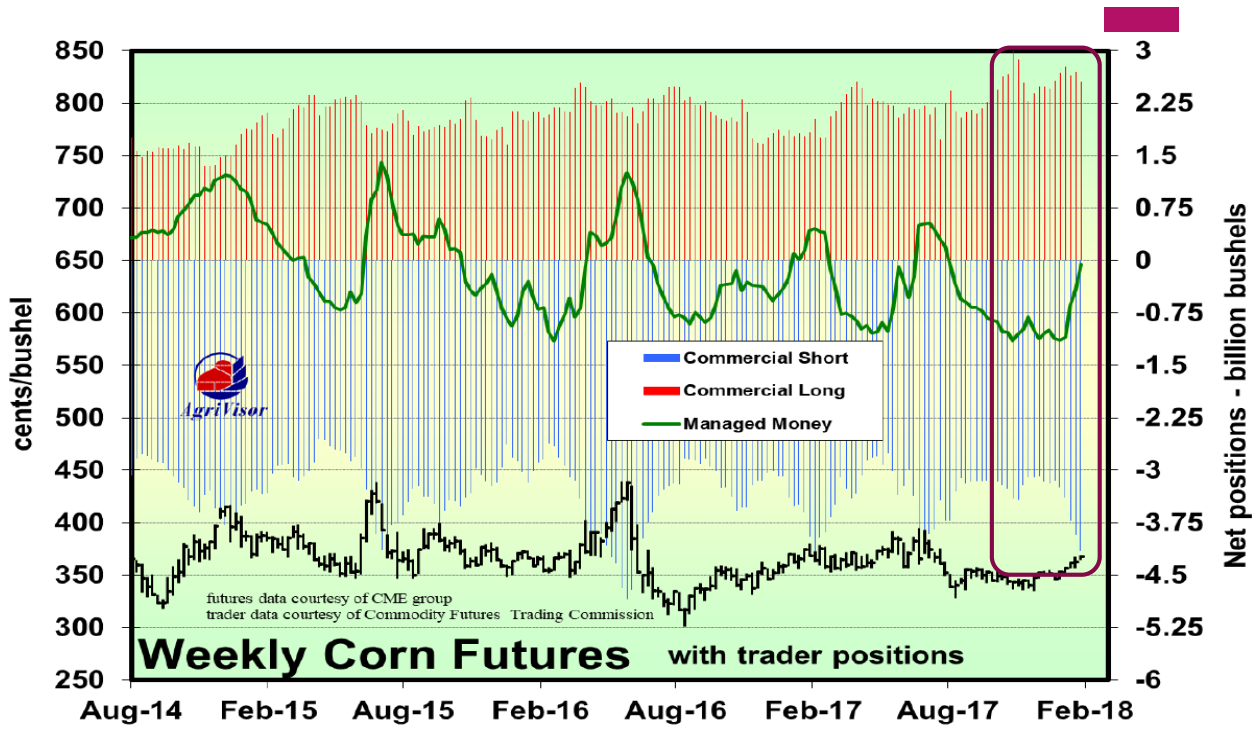


CME Corn Futures



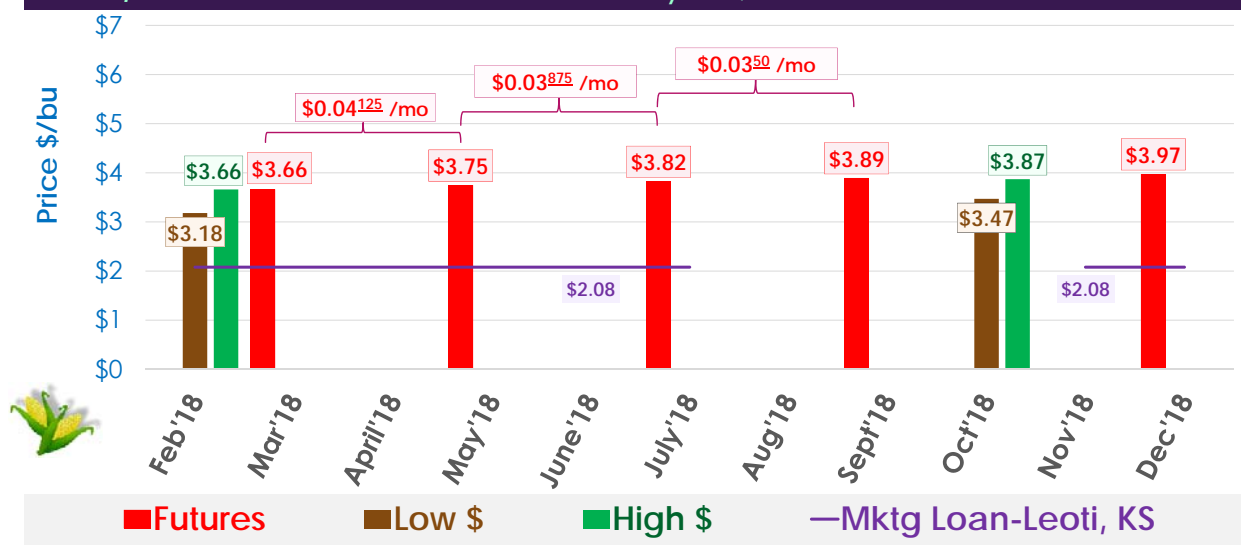
Weekly Chart: December 2008 – January 2018 + 2/23/2018





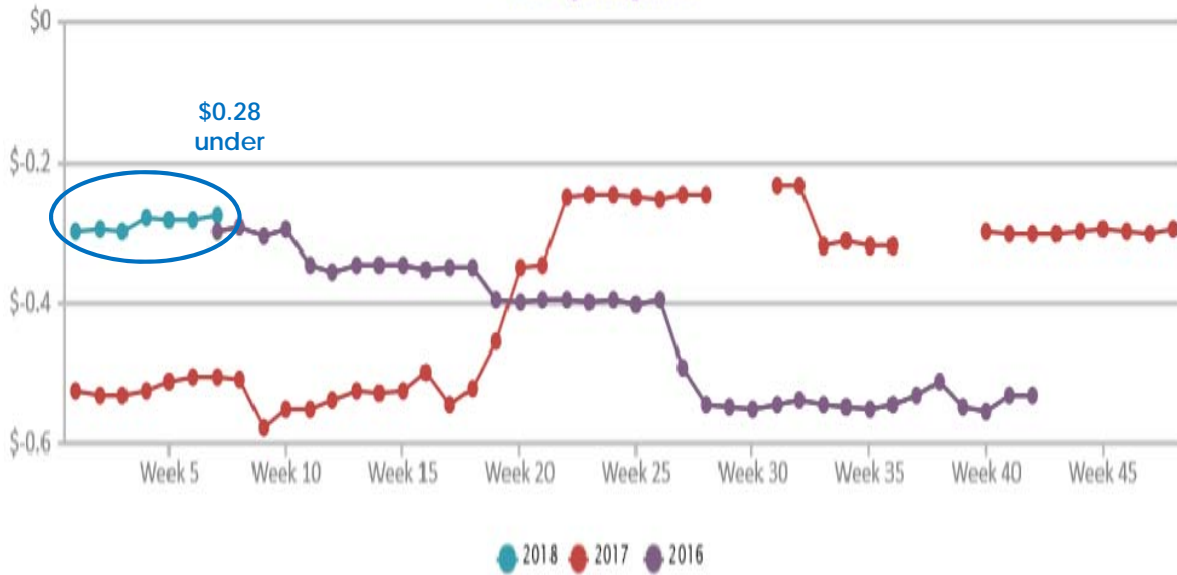
Corn Cash & Futures Prices (\$/bu)

Leoti, KS Local Elevators – February 23, 2018



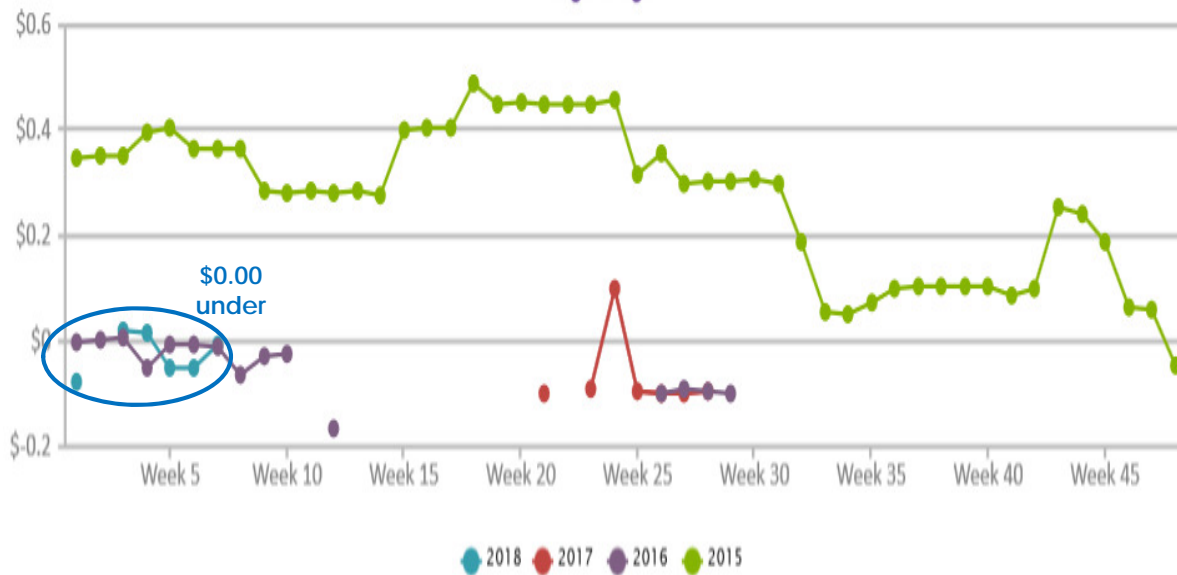
LEOTI, KS: Corn Basis - ADM GRAIN

www.AgManager.info



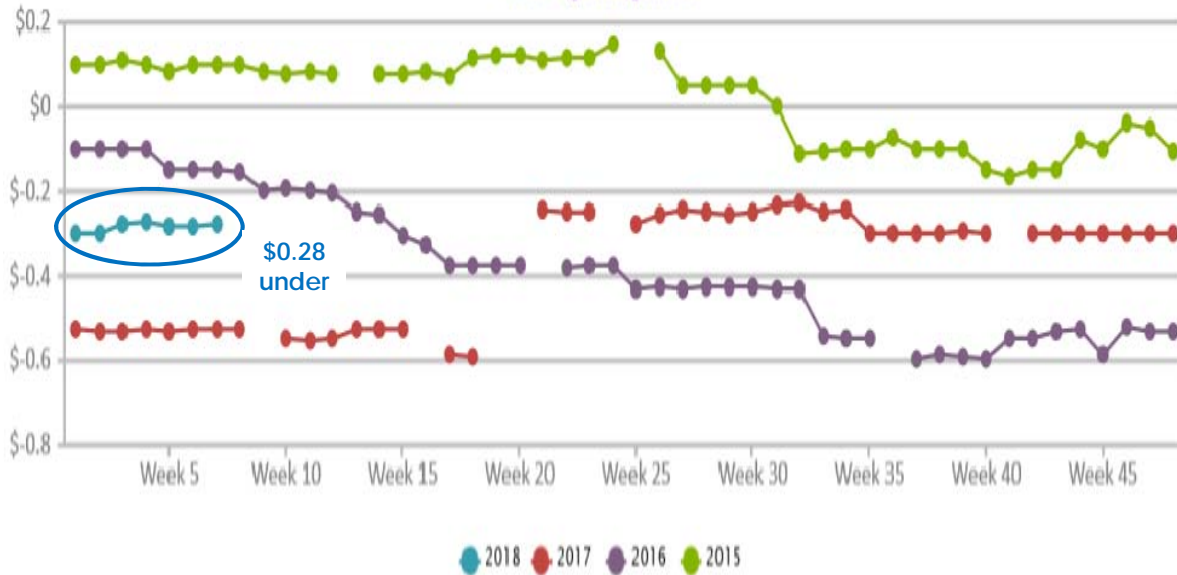
LEOTI, KS: Corn Basis - SEABOARD FOODS

www.AgManager.info



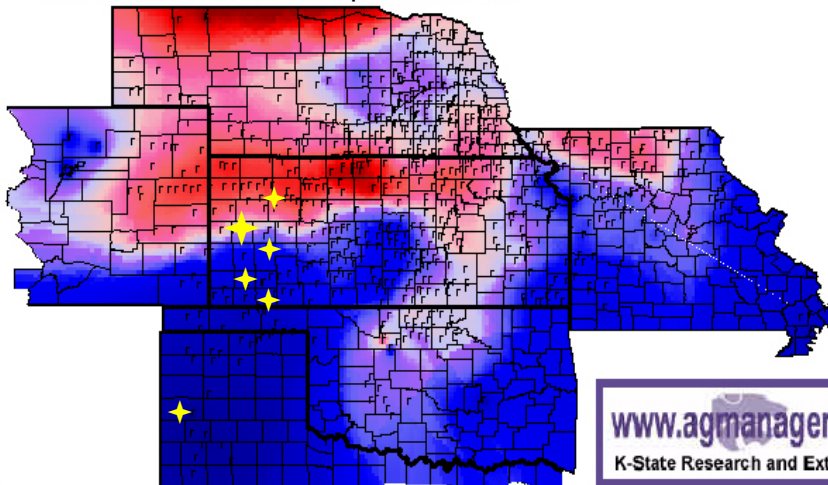
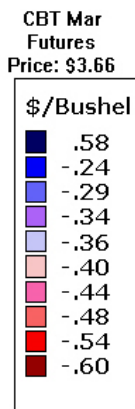
SCOTT CITY, KS: Corn Basis - SCOTT COOP ASSOCIATION

www.AgManager.info



Corn Basis, 02-21-2018

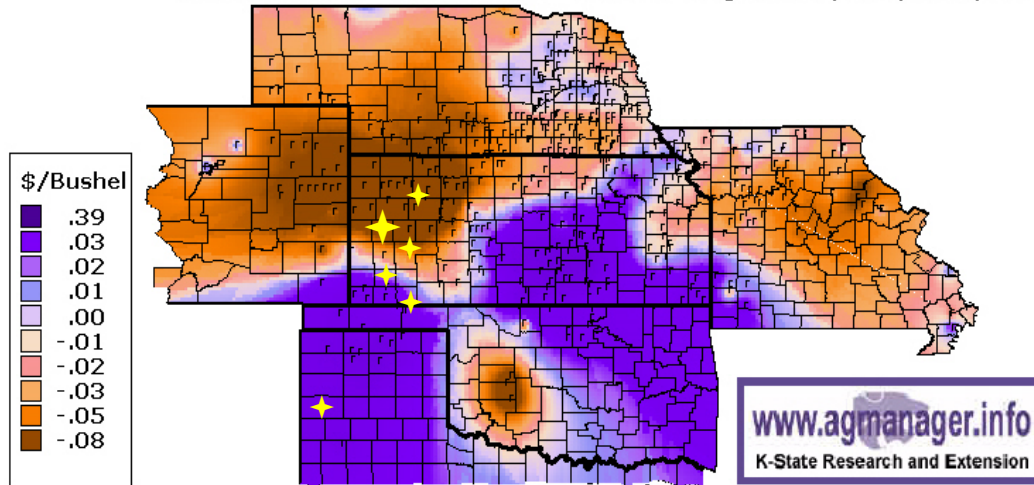
Basis = Cash Price - Nearby Futures Price



www.agmanager.info
K-State Research and Extension

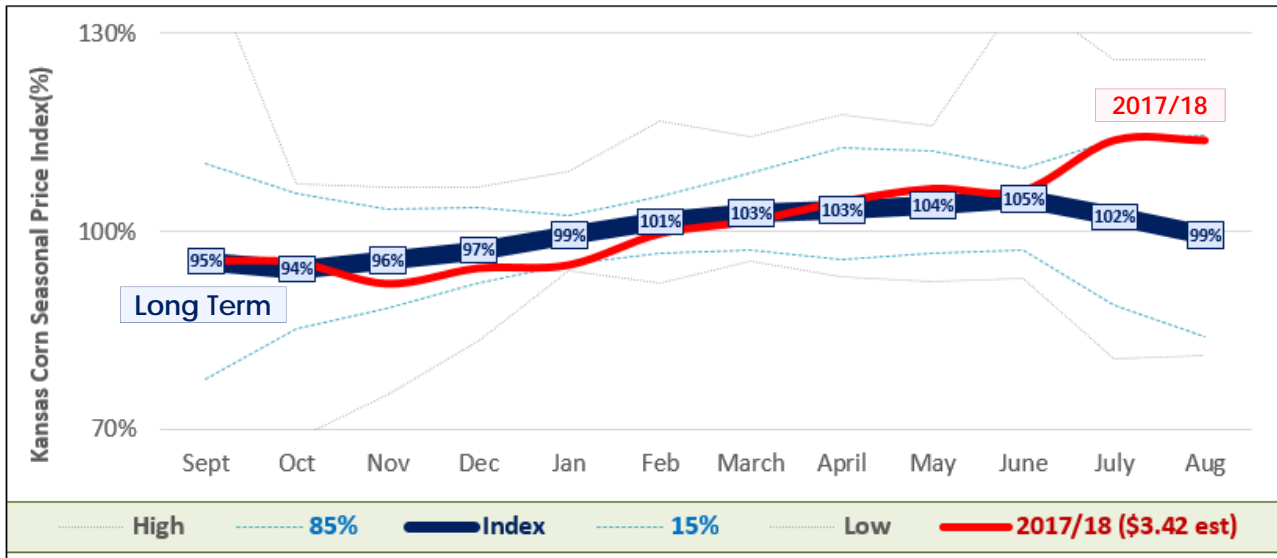
Corn Basis Deviation, 02-21-2018

Basis Deviation = Current Basis - 3 Year Average Basis (2015, 2016, 2017)



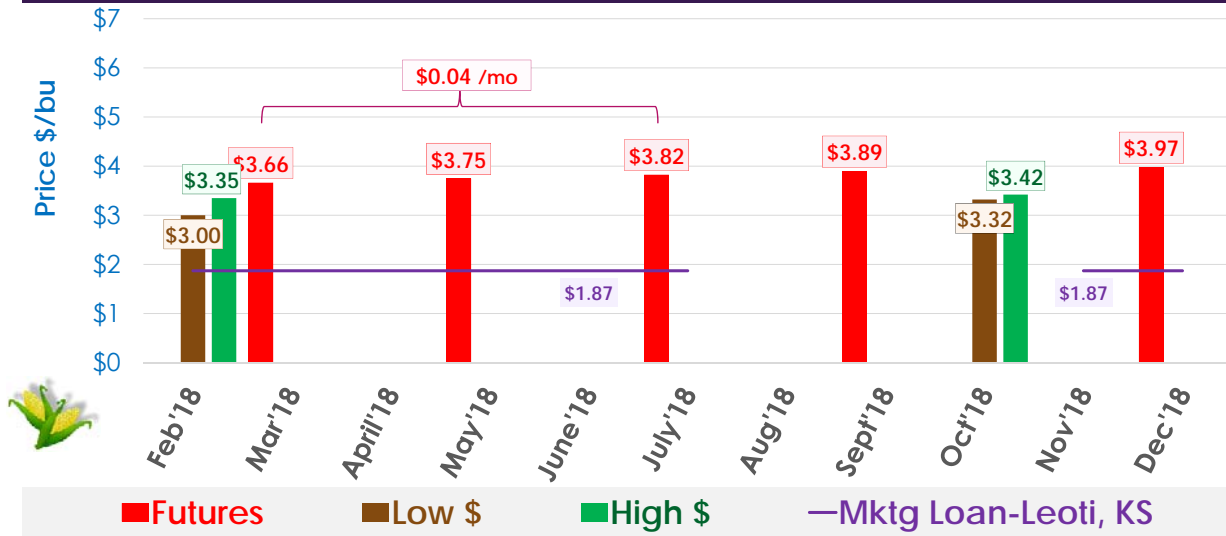
Kansas Corn Seasonal Cash \$ Index

Monthly: Long Term Average & "New Crop" MY 2017/18 Forecast



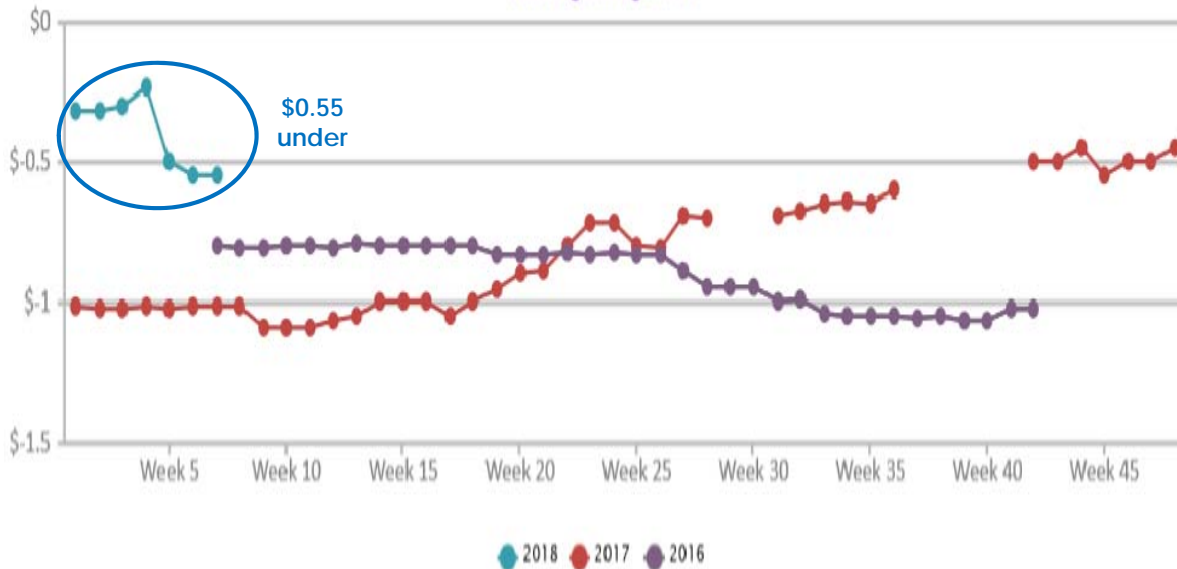
Grain Sorghum Cash & Corn Futures (\$/bu)

Home, KS Local Elevators – February 23, 2018



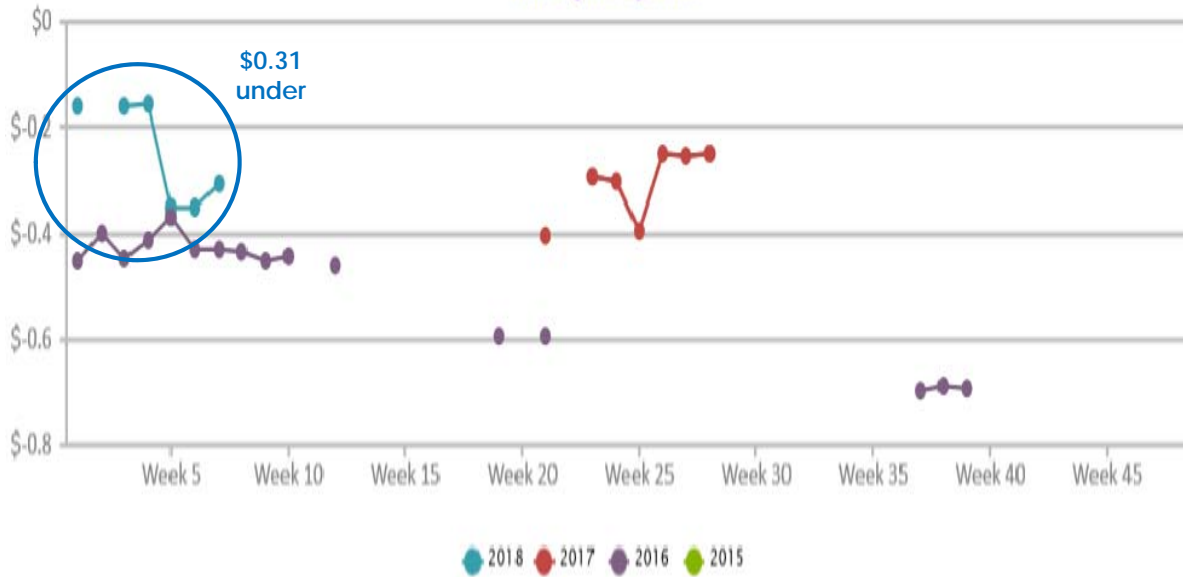
LEOTI, KS: Grain Sorghum Basis - ADM GRAIN

www.AgManager.info



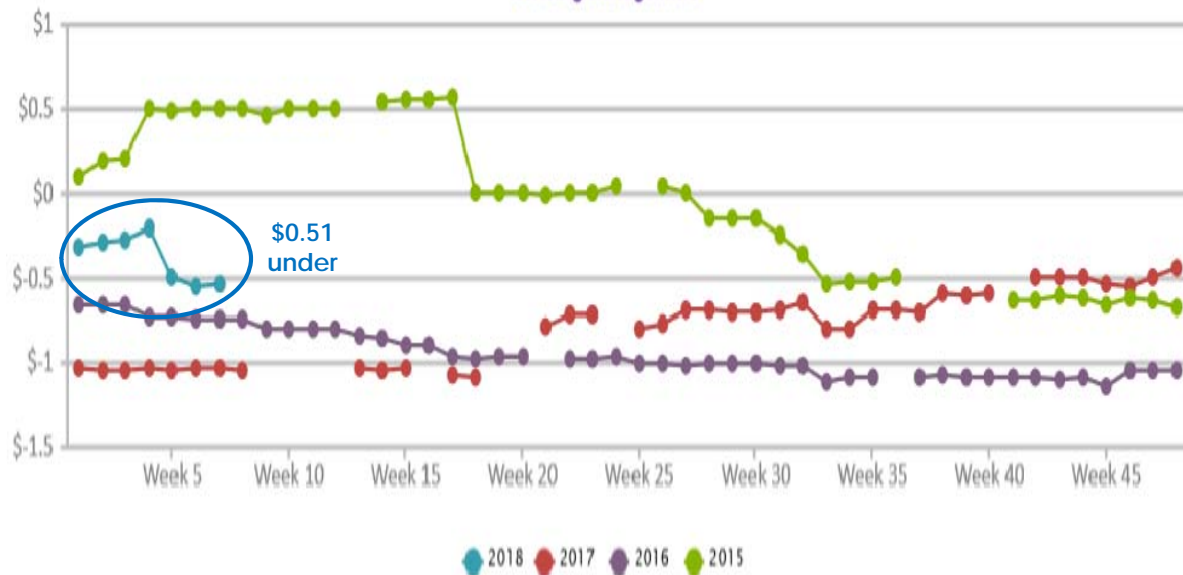
LEOTI, KS: Grain Sorghum Basis - SEABOARD FOODS

www.AgManager.info



SCOTT CITY, KS: Grain Sorghum Basis - SCOTT COOP ASSOCIATION

www.AgManager.info

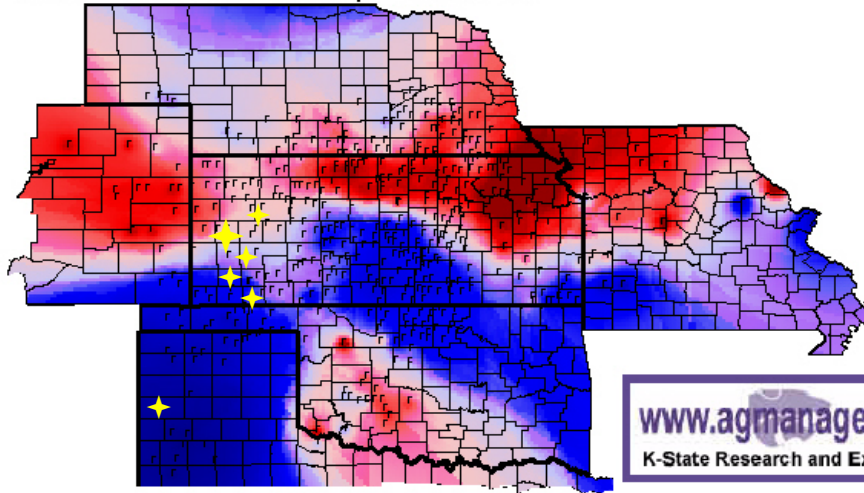
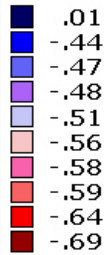


Grain Sorghum Basis, 02-21-2018

Basis = Cash Price - Nearby Futures Price

CBT Corn
Mar Futures
Price: \$3.66

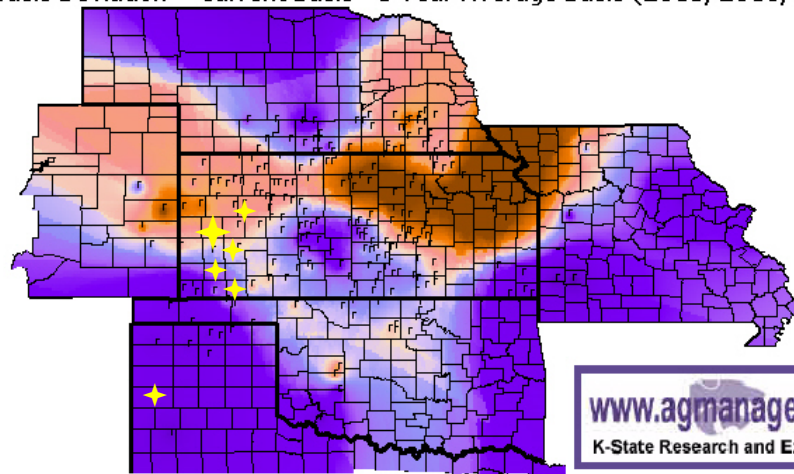
\$/Bushel



Grain Sorghum Basis Deviation, 02-21-2018

Basis Deviation = Current Basis - 3 Year Average Basis (2015, 2016, 2017)

\$/Bushel



U.S. Corn Supply

	2015/16	2016/17	2017/18	2018/19	
Area Planted (mln. ac.)	88.0 _{ma}	94.0 _{ma}	90.2 _{ma}	90.0 _{ma}	Little change in 2018 Acres
Area Harvested (mln. ac.)	80.8 _{ma}	86.7 _{ma}	82.7 _{ma}	82.7 _{ma}	
Yield (bu/ac)	168.4	174.6	176.6	174.0	"Lower" 2018 Yields, Production, & Total Supply
Production (million bu.)	13,602	15,148	14,604	14,390	
Beginning Stocks (mln bu.)	1,731	1,737	2,293	2,352	
Imports	<u>68</u>	<u>57</u>	<u>50</u>	<u>50</u>	
Total Supply	15,401	16,942	16,947	16,792	

U.S. Corn Use

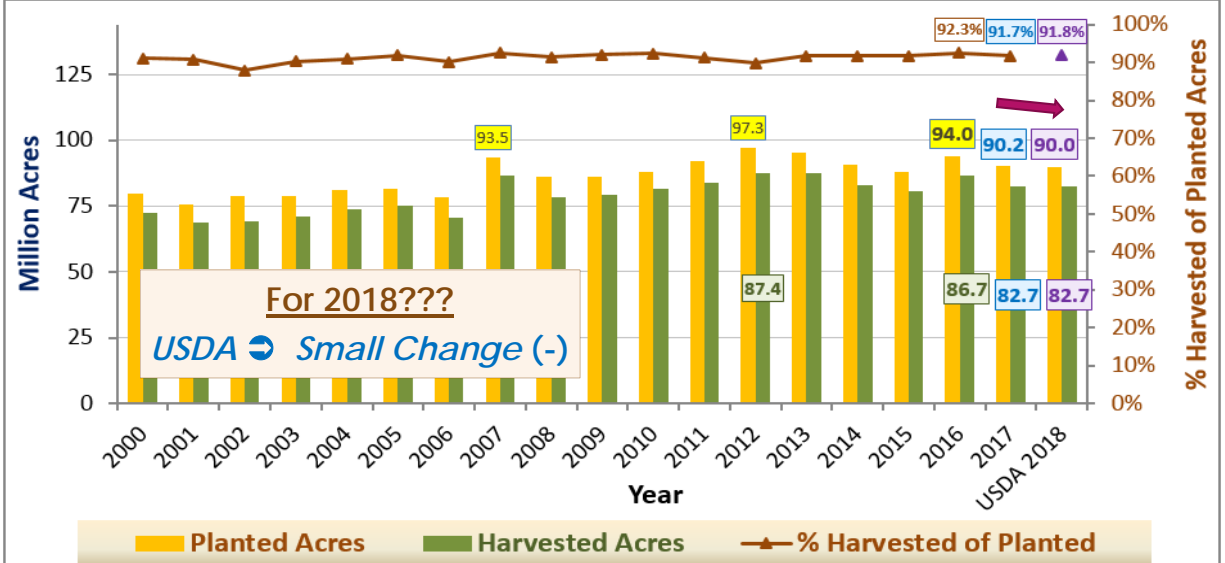
	2015/16	2016/17	2017/18	2018/19	
Production (million bu.)	13,602	15,148	14,604	14,390	
Total Supply	<u>15,401</u>	<u>16,942</u>	<u>16,947</u>	<u>16,792</u>	
Ethanol Use	5,224	5,439	5,525	5,650	↑ Ethanol
Other FSI	1,424	1,450	1,470	1,495	↑ Other FSI
Exports	1,901	2,293	2,050	1,900	↓ Exports
Feed & Residual	<u>5,114</u>	<u>5,467</u>	<u>5,550</u>	<u>4,475</u>	↓ Feed Use
Total Use	13,664	14,649	14,595	14,520	↓ Total Use

U.S. Corn Stocks, % S/U, \$Price/bu

	2015/16	2016/17	2017/18	2018/19	
Production (million bu.)	13,602	15,148	14,604	14,390	↓ Crop & Supplies
Total Use	13,664	14,649	14,595	14,520	
Ending Stocks	1,737	2,293	2,352	2,272	↓ End Stocks
% End Stocks/Use	12.7%	15.7%	16.1%	15.6%	↓ % Stks/Use
U.S. Avg Corn \$/bu	\$3.61	\$3.36	\$3.30	\$3.40	↑ Price (\$/bu)

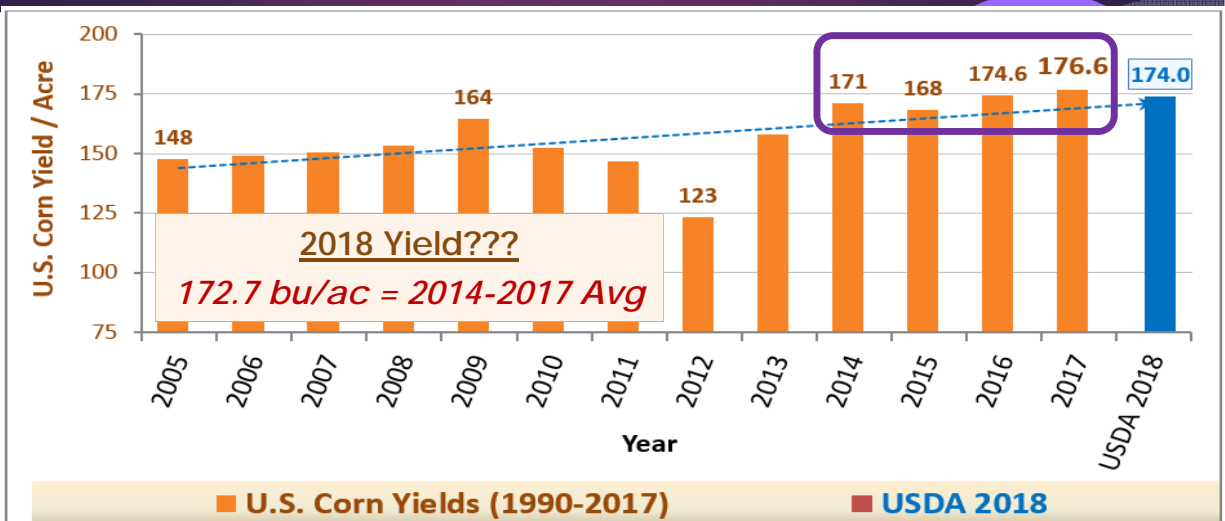


U.S. Corn Acreage

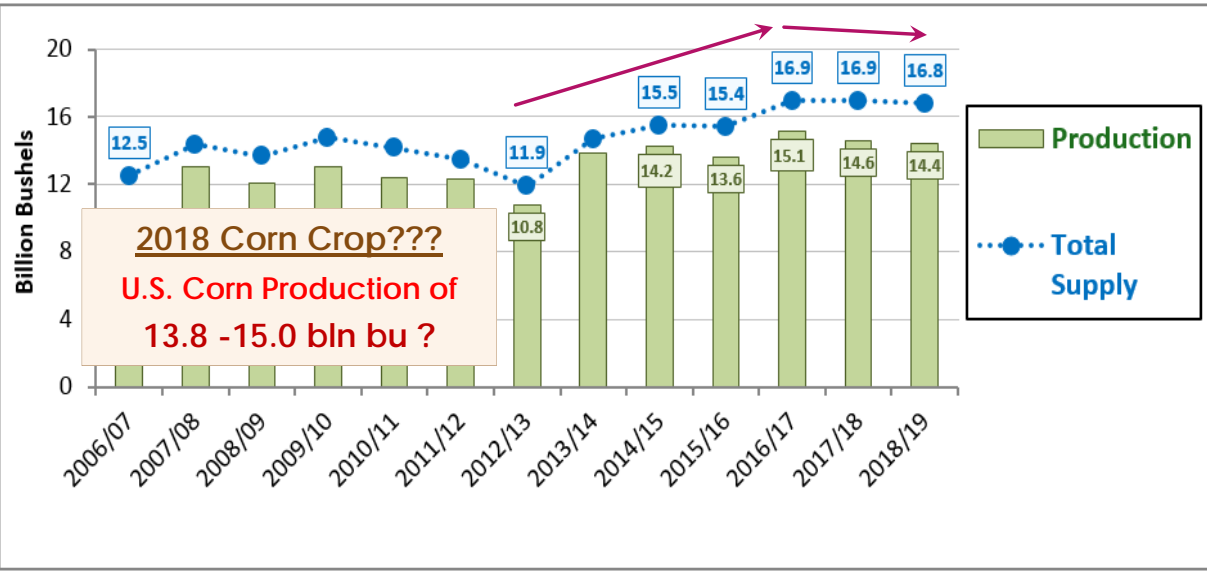


U.S. Corn Yields

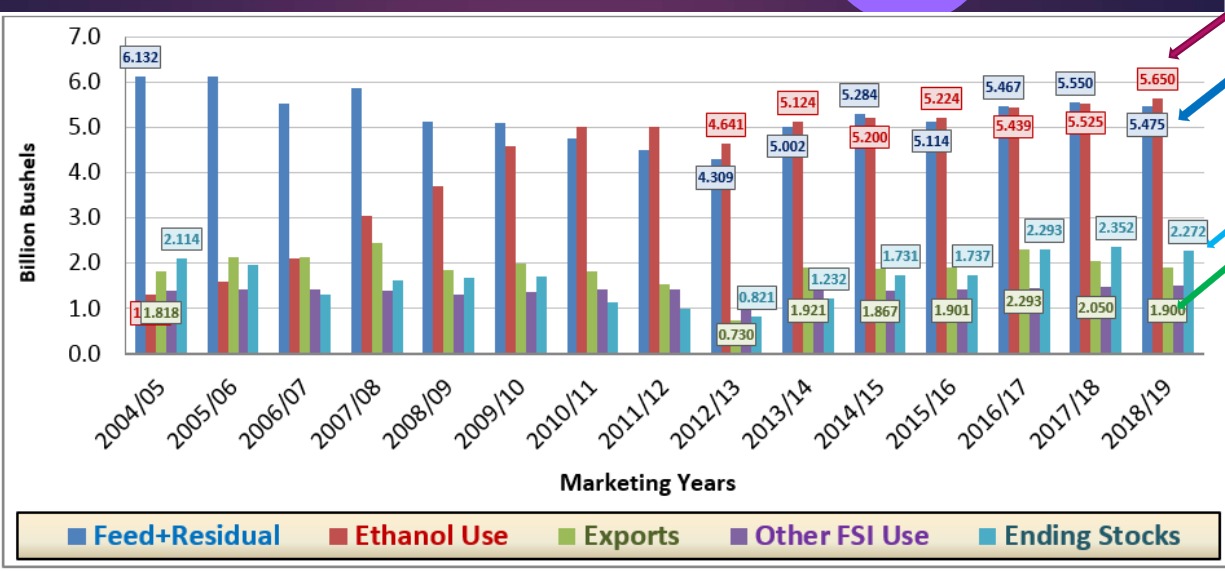
USDA 2018 USDA Forecast = 174.0 bu/ac



U.S. Corn Production & Supplies

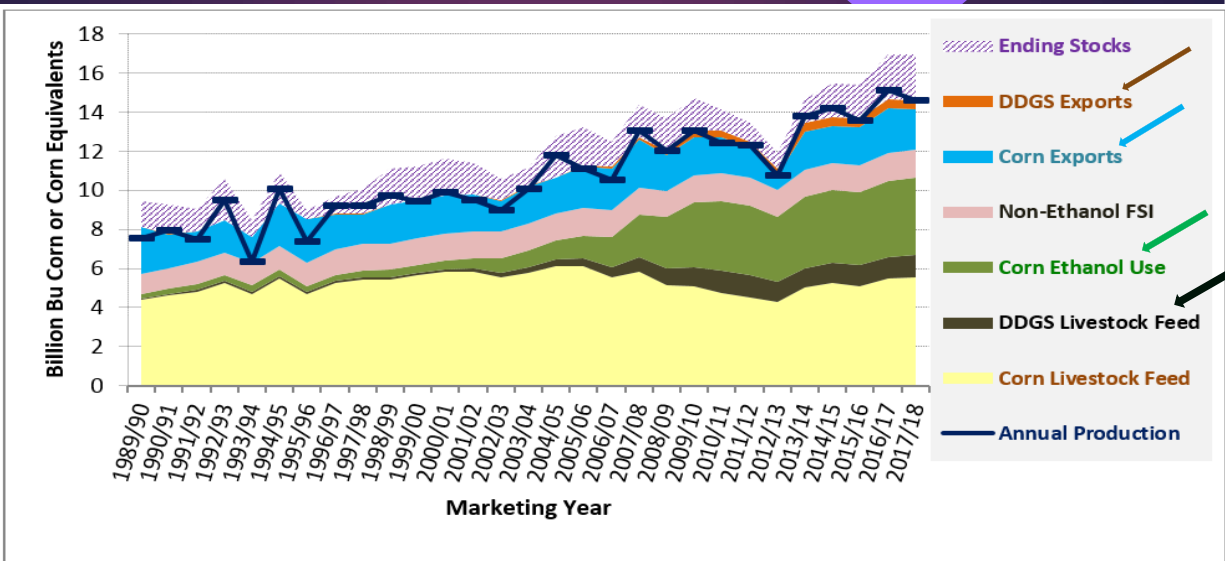


U.S. Corn Use - By Category





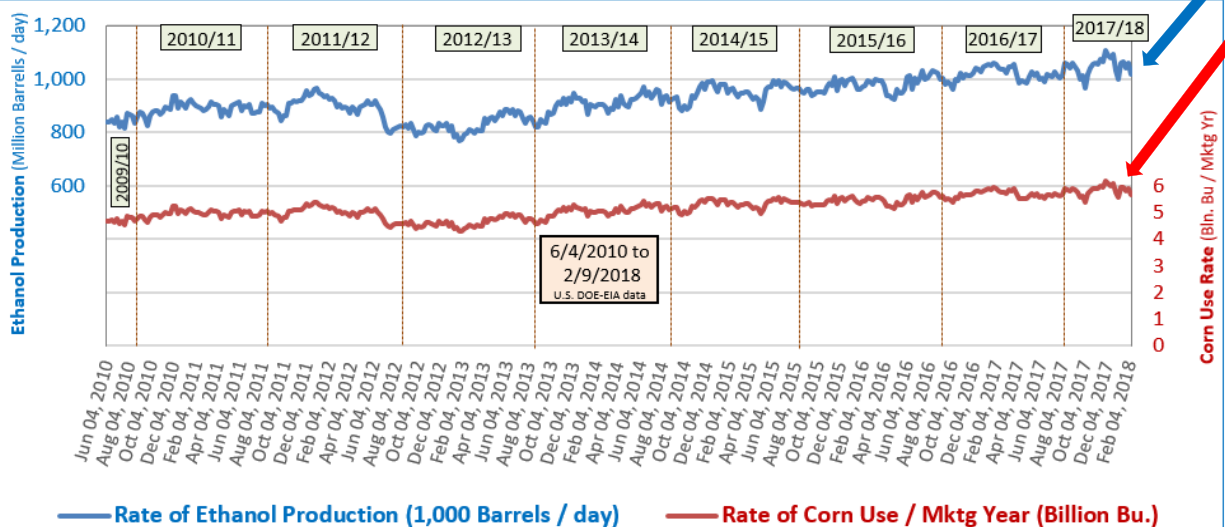
U.S. Corn Use - By Category



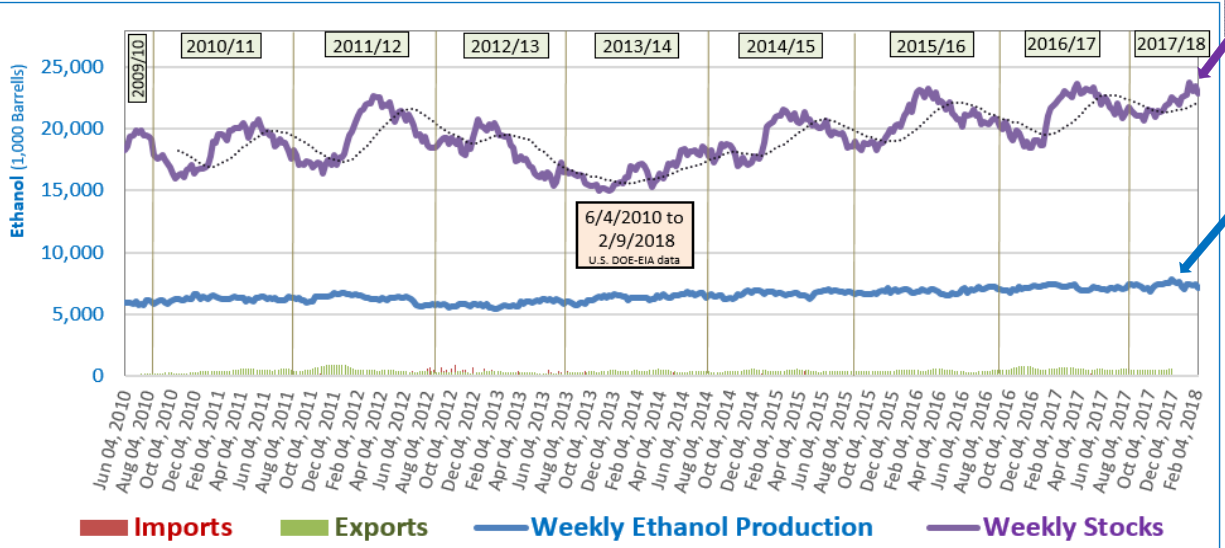
U.S. Meat Production and Prices

	2017 estimate	2018 forecast	Change from January 12	Change from 2017		
Production						
<i>Billion pounds</i>						
Beef	26.17	27.73	-0.04	1.55	+6.0%	
Pork	25.58	26.89	-0.07	1.30	+5.1%	
Broilers	41.66	42.60	0.15	0.94	+2.2%	
Turkey	5.98	5.97	-0.03	-0.01	-0.2%	
Total meat	100.15	103.94	0.01	3.80	+3.8%	
Prices						
<i>Dollars/cwt</i>						
Steers	121.52	119.25	1.00	-2.27	} Prices to decline	
Hogs	50.48	48.00	0.25	-2.48		
<i>Cents/lb</i>						
Broilers	93.5	90.8	0.3	-2.8		
Turkey	96.1	91.3	0.3	-4.8		

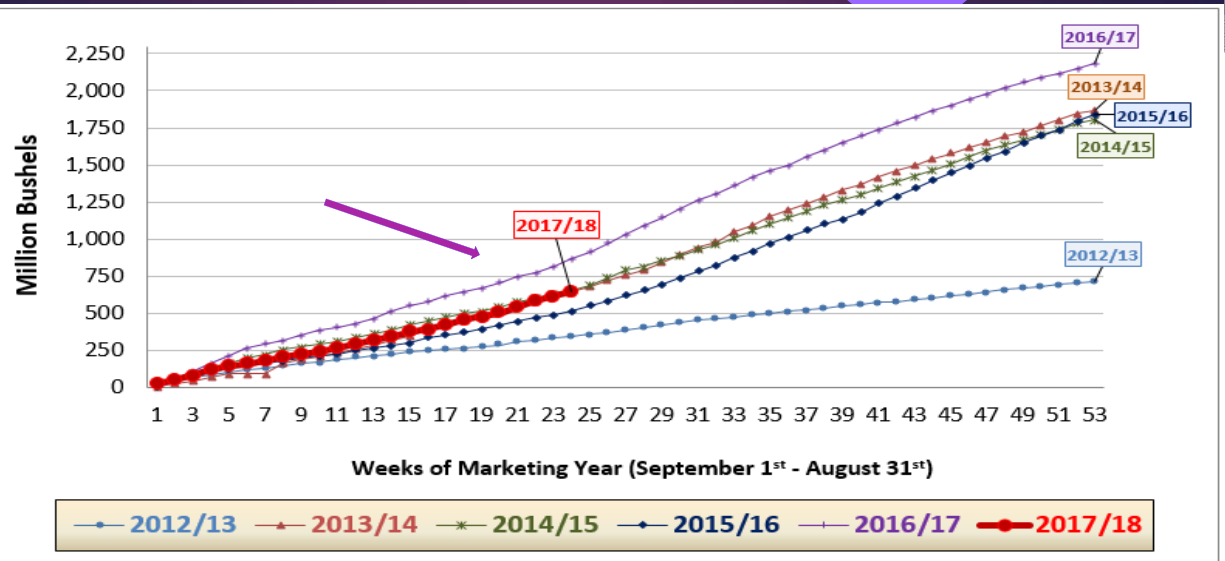
U.S. Corn Ethanol Use - Weekly thru February 9, 2018



U.S. Ethanol Prodn, Stocks, & Trade - Thru 2/9/2018

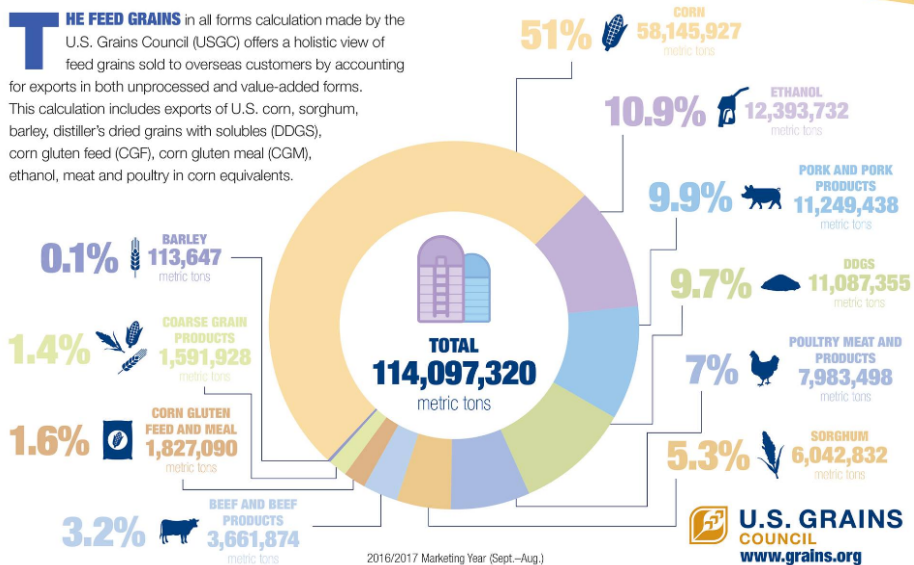


U.S. Corn Exports - Weekly thru February 15, 2018

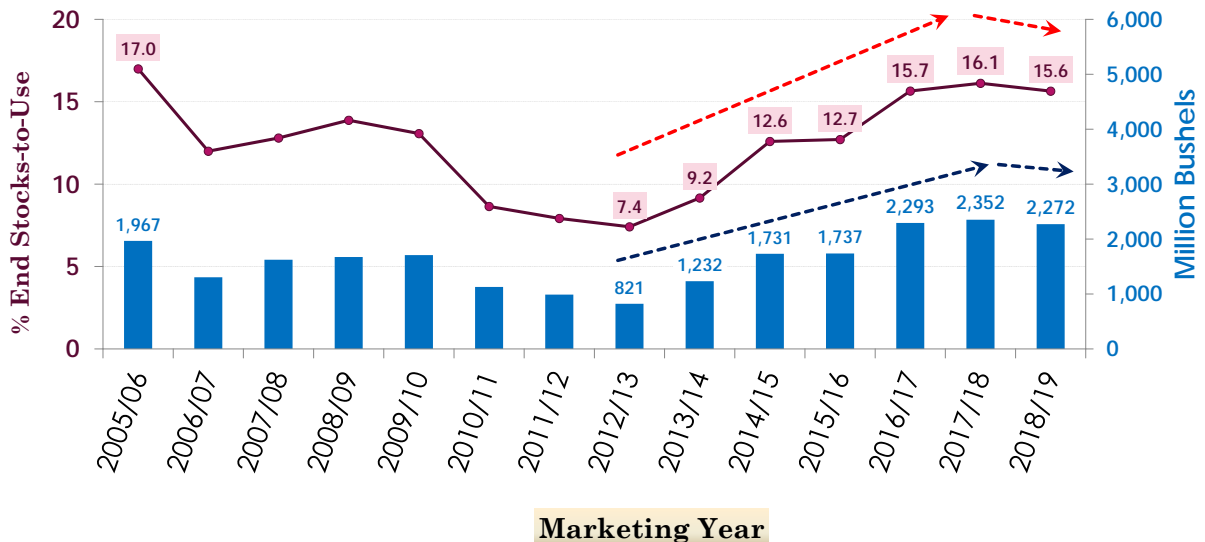


How US Grain Was Exported in 2016/2017

THE FEED GRAINS in all forms calculation made by the U.S. Grains Council (USGC) offers a holistic view of feed grains sold to overseas customers by accounting for exports in both unprocessed and value-added forms. This calculation includes exports of U.S. corn, sorghum, barley, distiller's dried grains with solubles (DDGS), corn gluten feed (CGF), corn gluten meal (CGM), ethanol, meat and poultry in corn equivalents.



U.S. Corn Ending Stocks & % Stx/Use

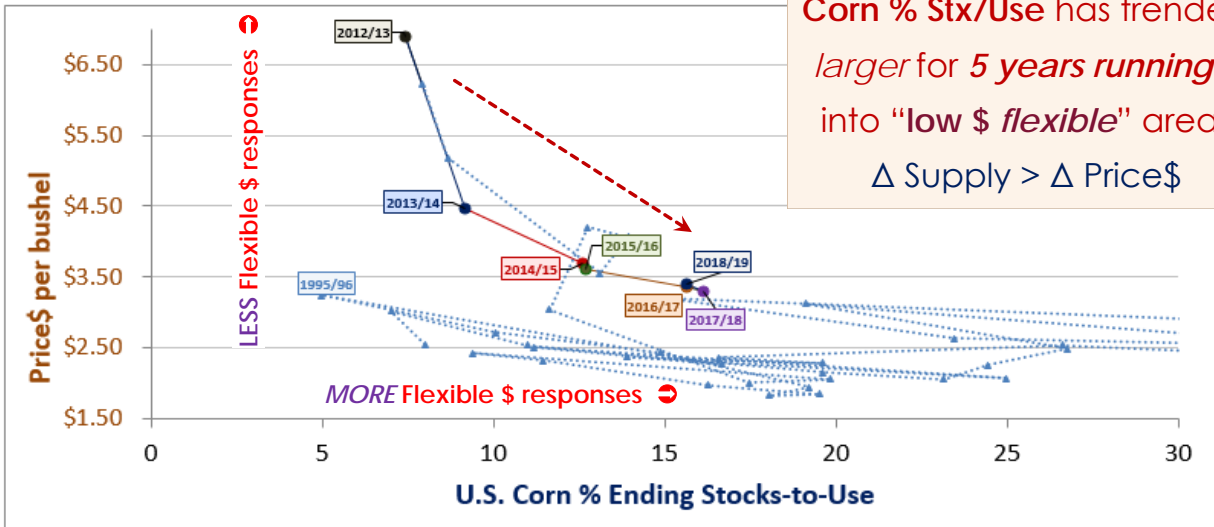




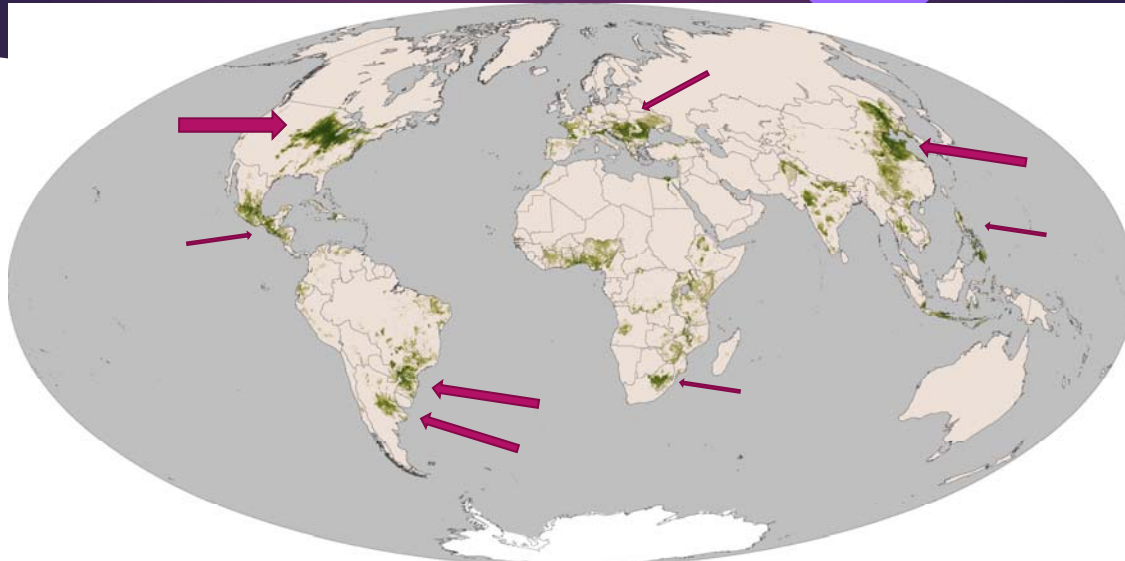
U.S. Corn % Stocks/Use vs Price\$



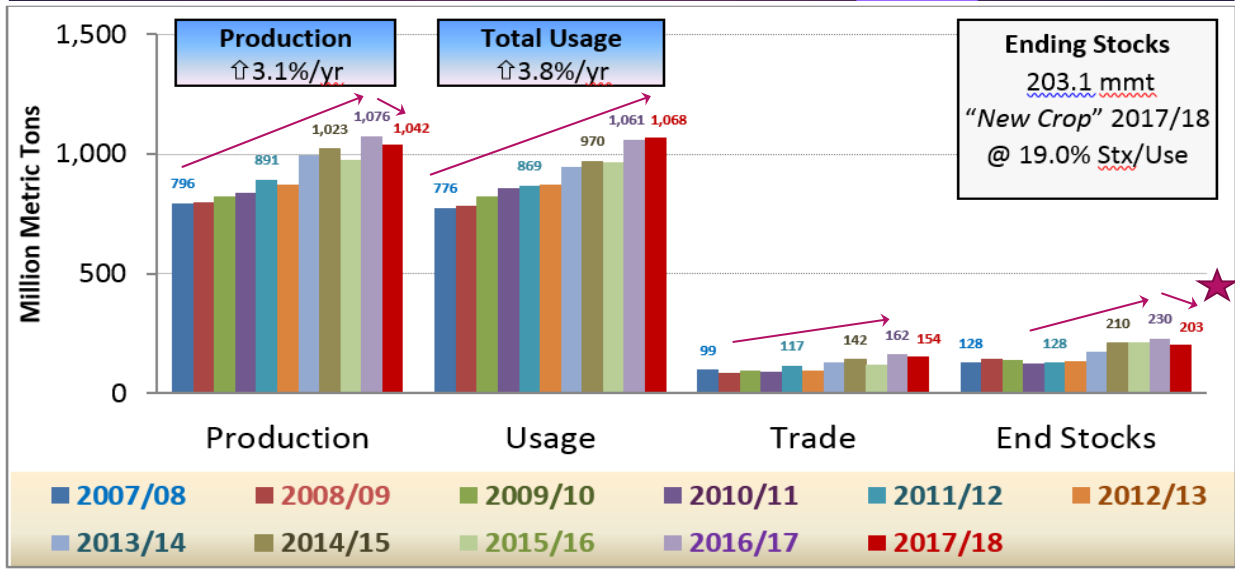
U.S. Corn % Stocks/Use vs Price\$



World Corn (Maize) Production Regions



World Corn Supply, Use & Stocks



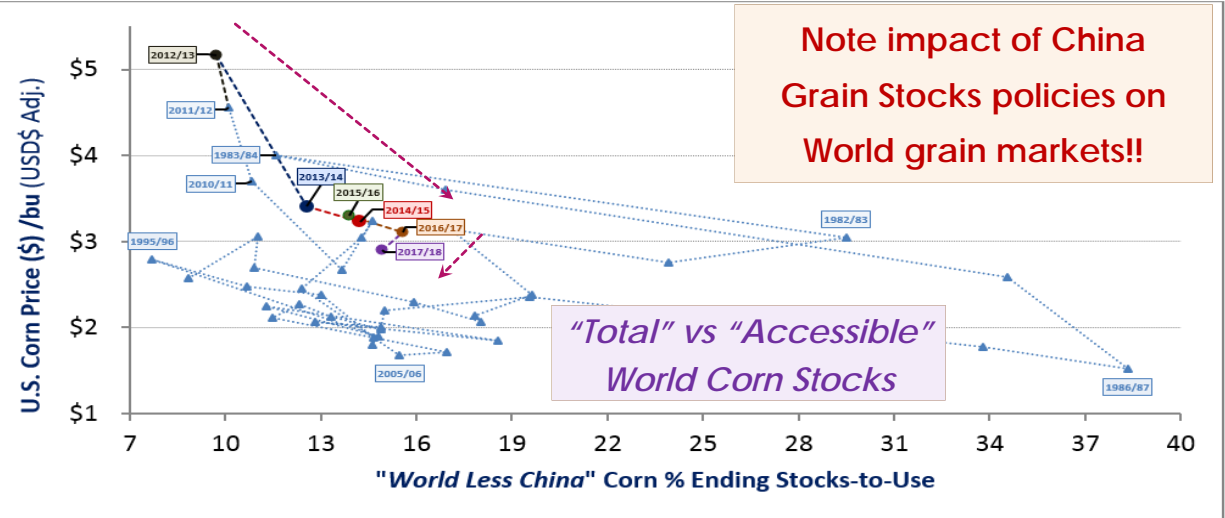
World Corn Production

Country or Region	2016/17 estimate	2017/18 forecast	Change from January 12	Change from 2016/17
<i>Million Tons</i>				
World	1,076.0	1,041.7	-2.82	-34.2
United States	384.8	371.0	--	-13.8
Foreign	691.2	670.8	-2.82	-20.4
Argentina	41.0	39.0	-3.00	-2.0
Brazil	98.5	95.0	--	-3.5
Mexico	27.6	26.5	0.30	-1.1
Canada	13.2	14.1	--	0.9
European Union	61.5	60.1	--	-1.4
Serbia	7.6	4.0	--	-3.6
FSU-12	47.3	42.3	-0.48	-5.0
Ukraine	28.0	24.1	-0.88	-3.9
Russia	15.3	13.5	--	-1.8
South Africa	17.5	12.5	--	-5.0
China	219.6	215.9	--	-3.7
India	26.3	25.0	--	-1.3

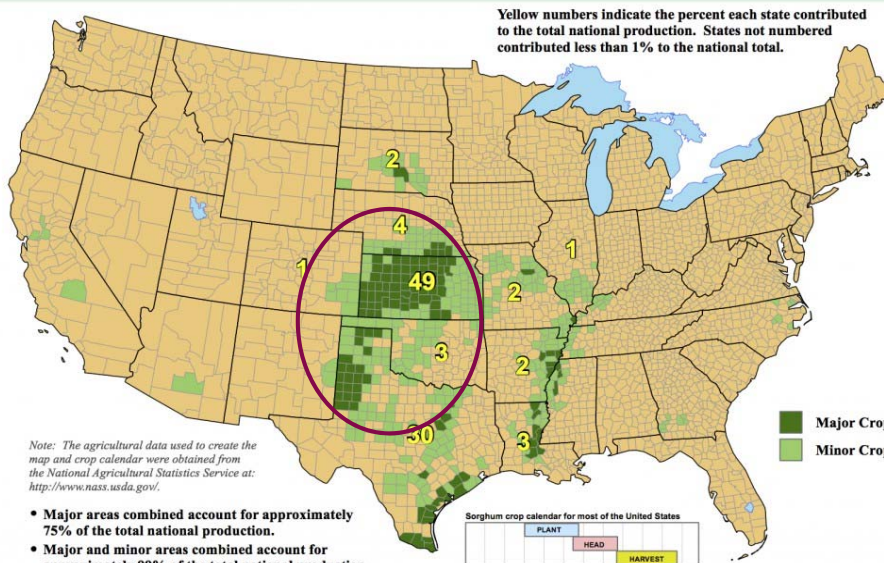
↓ World Crop
 BUT still
 Large Supply
 ↓ China
 ↓ EU
 ↓ Brazil
 ↓ FSU-12
 ↓ So. Africa
 ↓ Mexico
 ↑ Argentina
 ↑ Canada

U.S. Corn Price\$ vs "World-China" % S/U

MY 1973/74 through "New Crop" MY 2017/18

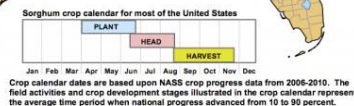


United States: Sorghum



Note: The agricultural data used to create the map and crop calendar were obtained from the National Agricultural Statistics Service at: <http://www.nass.usda.gov/>.

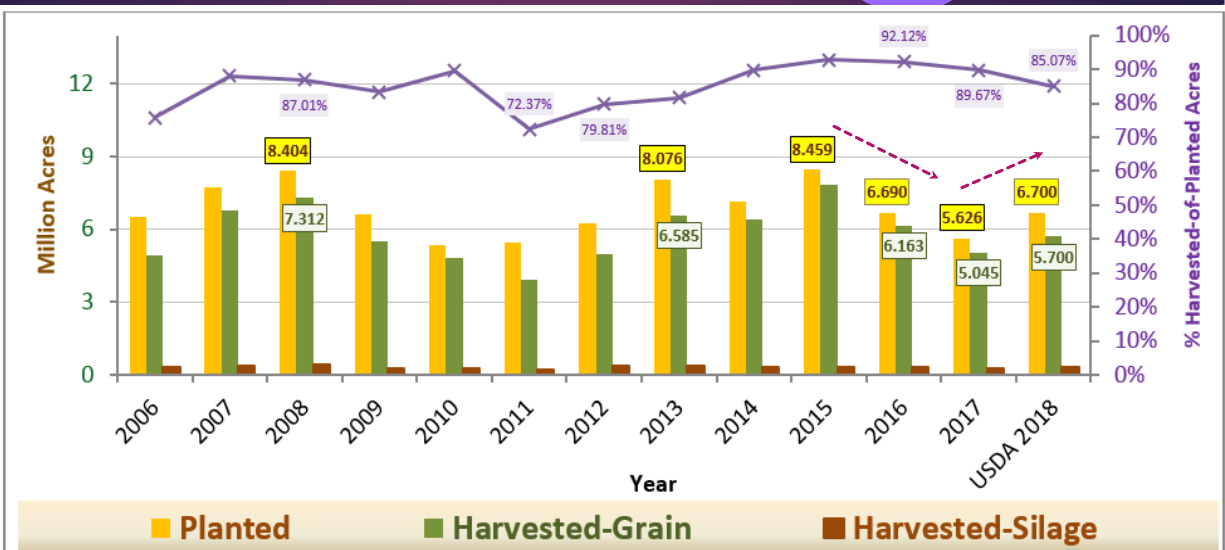
- Major areas combined account for approximately 75% of the total national production.
- Major and minor areas combined account for approximately 99% of the total national production.
- Major and minor areas and state production percentages are derived from NASS county- and state-level production data from 2006-2010.



U.S. Grain Sorghum Supply-Demand

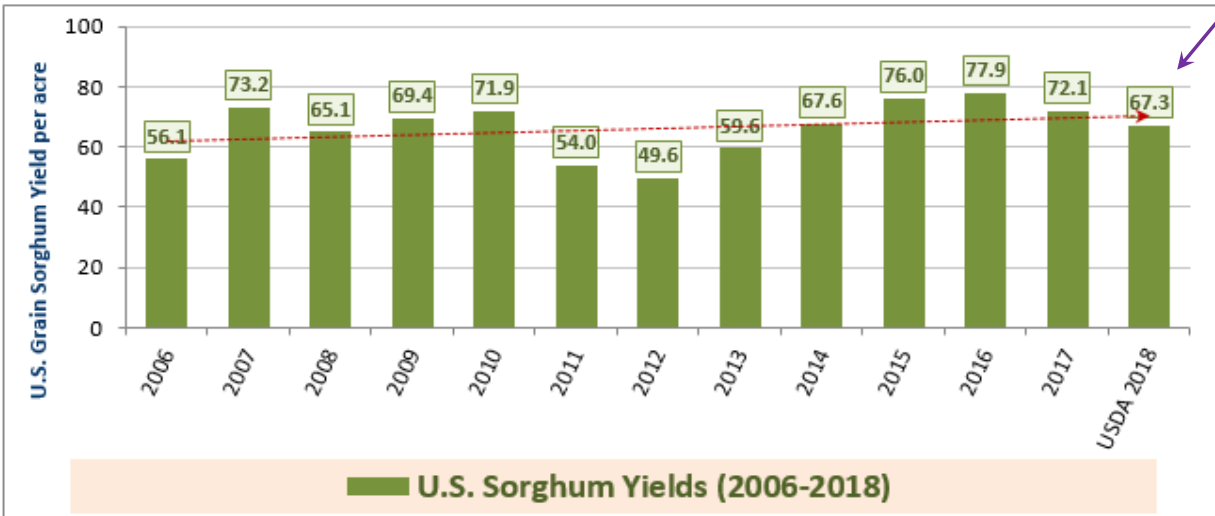
	MY 2015/16	MY 2016/17	MY 2017/18	MY 2018/19	
Area Planted (mln. ac.)	8.459 ma	6.690 ma	5.626 ma	6.700 ma	↑ Planted Ac.
Area Harvested (mln. ac.)	7.851 ma	6.163 ma	5.045 ma	5.700 ma	↓ Yield
Yield (bu/ac)	76.0 bu/ac	77.9 bu/ac	72.1 bu/ac	67.3 bu/ac	↑ 2018 Crop
Production (million bu.)	597	480	364	384	↑ Total Supply
Beginning Stocks (mln bu.)	18	37	33	24	
Imports	5	2	2	0	
Total Supply	620	519	399	408	
Food, Seed, Industrial	137	115	50	74	↑ Domestic Use
Exports	340	241	260	230	↓ Exports
Feed & Residual	107	130	65	65	
Total Use	583	485	375	370	
Ending Stocks	37	33	24	38	↑ % Stocks/Use
% End Stocks-to-Use	6.4%	6.8%	6.4%	10.3%	↑ Prices
U.S. Average Corn \$ /bu	\$3.31	\$2.79	\$3.15	\$3.30	

U.S. Sorghum Acreage

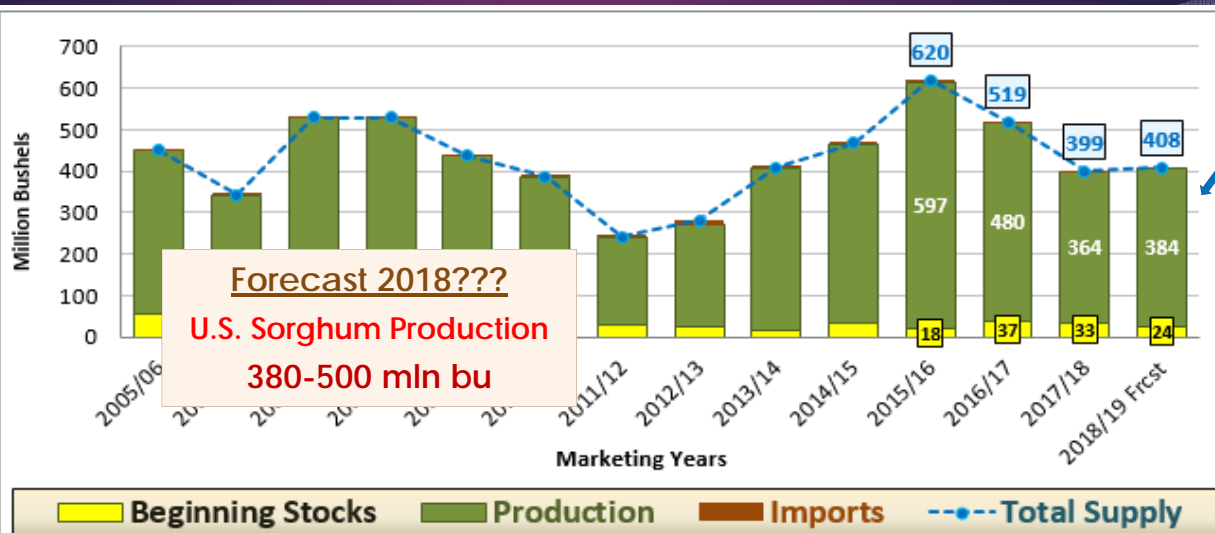


U.S. Sorghum Yields

USDA 2018 USDA Forecast = 67.3 bu/ac



U.S. Sorghum Crop & Supplies





NSP Statement on China Anti-Dumping and Countervailing Duties Investigations

February 5, 2018

NSP Statement on China Anti-Dumping and Countervailing Duties Investigations

Washington, DC – In response to an announcement from the Ministry of Commerce of the People's Republic of China that it has launched anti-dumping and countervailing duty investigations related to sorghum imported to China from the United States, National Sorghum Producers CEO Tim Lust released the following statement:

“National Sorghum Producers is aware of this action and is prepared to participate fully in the investigations in cooperation with other sorghum industry participants.

The U.S. - China agricultural relationship is beneficial to U.S. farmers, Chinese consumers, and our respective partners. U.S. sorghum farmers sell their product to our valued partners in China. We appreciate our deep and long-standing relationships within these buyers, and the feed and livestock industries in China. U.S. sorghum farmers do not dump our products into China or elsewhere, and our products are not unfairly subsidized. A fair proceeding will demonstrate these facts.

This investigation is expected to last a year or more, and we are just at the beginning today. We will provide more information to our farmers and industry as it becomes available and this process moves forward.”

Perdue: Ag Markets Sensitive

Chris Clayton DTN Ag Policy Editor

Ag Secretary Says Sorghum Price Fall Reflects Influence of Trade Disputes on Ag Commodities

Tue Feb 6, 2018 03:04 PM CST

WASHINGTON (DTN) -- The quick decline in cash grain sorghum prices was highlighted by Agriculture Secretary Sonny Perdue on Tuesday as he pointed out the sensitivity of commodities to trade news right now.

Reflecting a little tit-for-tat with the U.S., the Chinese Ministry of Commerce announced Sunday it was conducting an anti-dumping investigation into U.S. sorghum exports to China. The decision came after the Trump administration placed tariffs on washing machines and solar panels, affecting exports from China to the U.S.

While some DTN cash grain bids moved little from Friday to Monday, some spot sorghum (milo) prices across the Plains dropped as much as 88 cents from Friday's close to Monday.

Perdue said he thinks the sorghum situation will mollify over time, but he said it reflects the sensitivity to bad trade news.



Ag Secretary Sonny Perdue highlighted some of the issues with ag and trade at a congressional hearing Tuesday on the state of the rural economy. (DTN photo by Chris Clayton)



FARM OPERATIONS > FARM BILL

Barry Flinchbaugh minces no words when talking ag policy

K-State's ag policy guru and 50-year veteran of farm bills sees trade, immigration as stumbling points.

P.J. Grelkspeer | Feb 06, 2018

NebraskaFarmer.

PLAIN TALK: Kansas State University Professor Emeritus Barry Flinchbaugh told the Kansas Commodity Classic that we are in times of uncertainty. Bright spots he sees are Sonny Perdue as Secretary of Ag and a rollback of regulations. Worrysome are administration stances on immigration and trade.

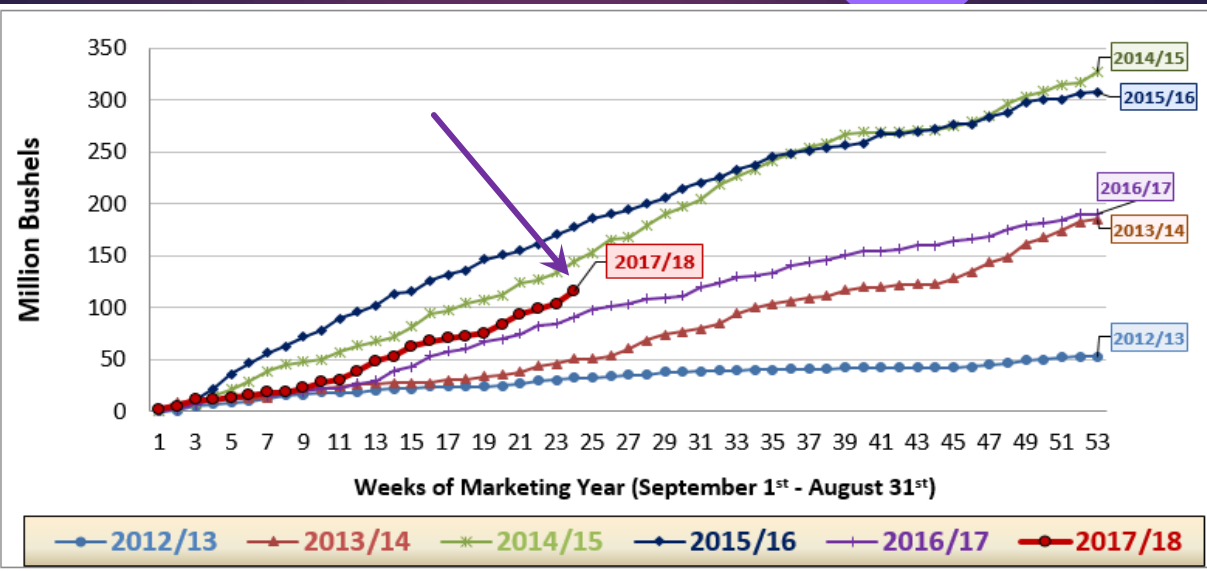
PLAIN TALK:

Kansas State University Professor Emeritus Barry Flinchbaugh told the Kansas Commodity Classic that we are in times of uncertainty.

Bright spots he sees are Sonny Perdue as Secretary of Ag and a rollback of regulations.

Worrysome are administration stances on immigration and trade.

U.S. Sorghum Exports – Weekly thru February 15, 2018



Where Is U.S. Sorghum Going?

TOP U.S. EXPORT CUSTOMERS



Dollar amount*

1	CHINA	\$1.47 BILLION
2	MEXICO	\$117.3 MILLION
3	PAKISTAN	\$41.7 MILLION
4	SUDAN	\$34.9 MILLION
5	SOUTH AFRICA	\$17.5 MILLION
	Kenya	\$15.8 million
	Djibouti	\$14.6 million
	Japan	\$12.4 million
	Somalia	\$11.2 million
	Colombia	\$11.1 million

Metric tons

1	CHINA	7,005,660
2	MEXICO	606,127
3	PAKISTAN	204,394
4	SUDAN	193,040
5	SOUTH AFRICA	99,266
	Kenya	86,337
	Djibouti	80,528
	Japan	67,788
	Colombia	63,528
	Somalia	58,107

Source: USDA Foreign Agriculture Service's Global Agriculture Trading System report for marketing year Sept. 1, 2015 to Aug. 31, 2016.

*Sorghum is sold based on contract and at varying rates, therefore, top rankings for tonnage do not align with rankings for value.



DC_GR112

Dodge City, KS

Wed, Jan 31, 2018

USDA-KS Dept of Ag Market News

Central Kansas Terminal and Processor Daily Grain Report

TERMINAL US NO 2 YELLOW CORN				
	Bids	Change (+/bu)	Basis	Change
Atchison	3.4950	UNCH	-12H	UNCH
Topeka	3.4350	UNCH	-18H	UNCH
Salina	3.2650	UNCH	-35H	UNCH
Newton	3.2250	UNCH	-39H	UNCH
Hutchinson	3.3650-3.3950	UNCH	-25H to -22H	UNCH
Wellington	3.2150	UNCH	-40H	UNCH
Arkansas City	3.2150	UNCH	-40H	UNCH

TERMINAL US NO 2 SORGHUM				
	Bids	Change (+/cwt)	Basis	Change
Topeka	7.53	UNCH	60H	UNCH
Concordia	6.72	UNCH	15H	UNCH
Salina	6.90-6.99	UNCH	25H to 30H	UNCH
Hutchinson	6.51-6.81	UNCH	3H to 20H	UNCH
Wellington	6.54-6.81	UNCH	5H to 20H	UNCH
Arkansas City	6.54	UNCH	5H	UNCH
Great Bend	6.72	UNCH	15H	UNCH

Central Kansas Terminal and Processor Daily Grain Report

TERMINAL US NO 2 YELLOW CORN

	Bids	Change (+/bu)	Basis	Change
Atchison	3.5150	UP 4.75	-12H	UNCH
Topeka	3.4550	UP 4.75	-18H	UNCH
Salina	3.2850-3.3050	UP 4.75	-35H to -33H	UNCH
Newton	3.2450	UP 4.75	-39H	UNCH
Hutchinson	3.3850-3.4150	UP 4.75	-25H to -22H	UNCH
Wellington	3.2350	UP 4.75	-40H	UNCH
Arkansas City	3.2350	UP 4.75	-40H	UNCH

TERMINAL US NO 2 SORGHUM

	Bids	Change (+/cwt)	Basis	Change
Topeka	5.51	UP 9	-55H	UNCH
Concordia	5.51	DN 72	-55H	DN 45
Salina	5.51	UP 9-DN 90	-55H	UNCH-DN 55
Hutchinson	6.01-6.49	DN 45-DN 27	-27H to OptH	DN 30-DN 20
Wellington	6.22	DN 28	-15H	DN 20
Arkansas City	6.04	DN 28	-25H	DN 20
Great Bend	5.96	UP 9	-30H	UNCH

Central Kansas Terminal and Processor Daily Grain Report

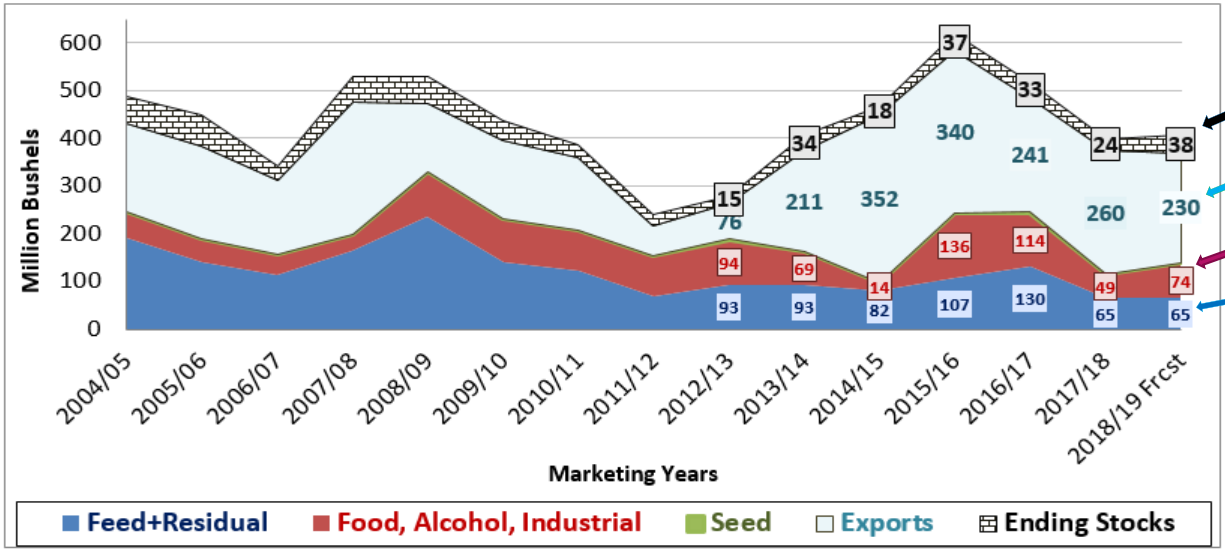
TERMINAL US NO 2 YELLOW CORN

	Bids	Change (+/bu)	Basis	Change
Atchison	3.5625	DN 0.5	-10H	UNCH
Topeka	3.5125	DN 0.5	-15H	UNCH
Salina	3.3625	DN 0.5	-30H	UNCH
Newton	3.2725	DN 0.5	-39H	UNCH
Hutchinson	3.4125-3.4425	DN 0.5	-25H to -22H	UNCH
Wellington	3.2625	DN 0.5	-40H	UNCH
Arkansas City	3.2625	DN 0.5	-40H	UNCH

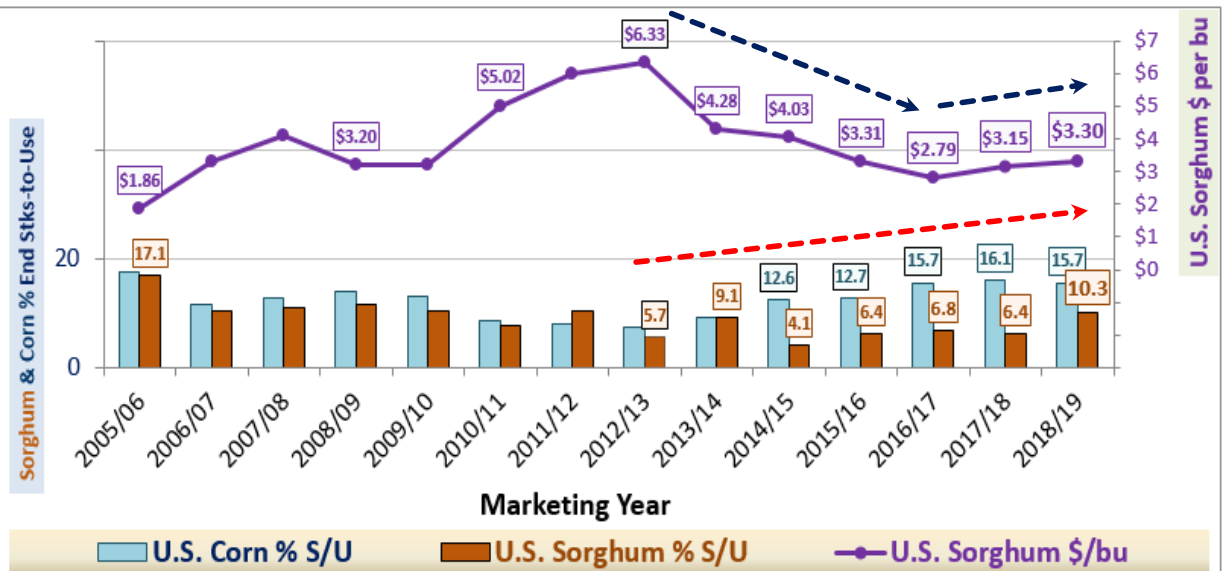
TERMINAL US NO 2 SORGHUM

	Bids	Change (+/cwt)	Basis	Change
Topeka	5.56	DN 1	-55H	UNCH
Concordia	5.47	DN 1	-60H	UNCH
Salina	5.56	DN 1	-55H	UNCH
Hutchinson	5.90-6.18	DN 1	-36H to -20H	UNCH
Wellington	5.92-6.00	UNCH-DN 1	-35H to -30H	UNCH
Arkansas City	5.74	DN 1	-45H	UNCH
Great Bend	5.92	UNCH	-35H	UNCH

U.S. Sorghum Use – By Category

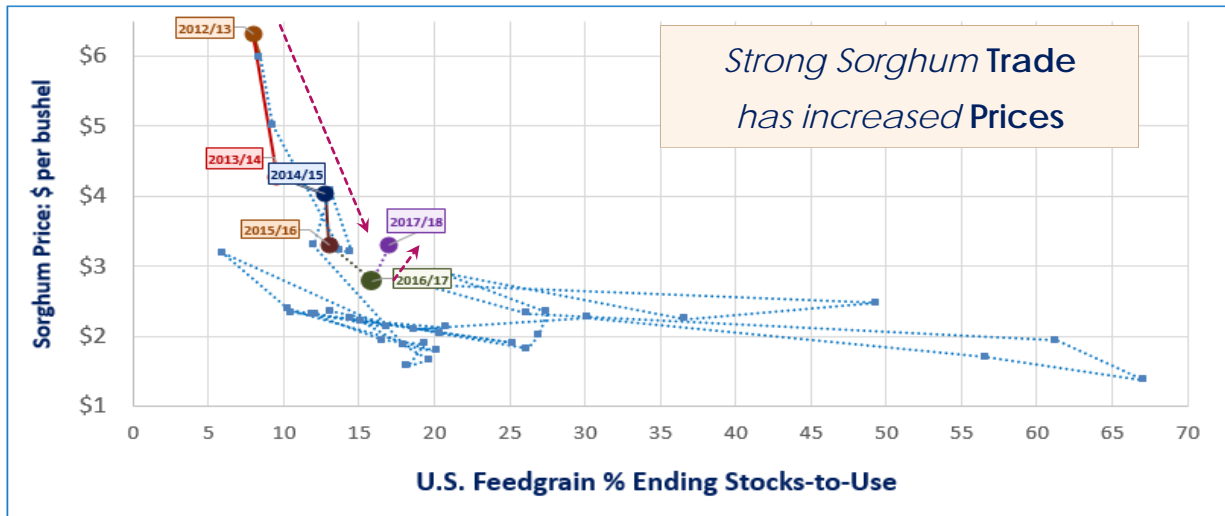


U.S. Sorghum % Stocks/Use vs Price\$



U.S. Milo \$ vs U.S. Feedgrain % Stocks/Use

MY 1973/74 thru "New Crop" MY 2017/18



Questions?

Daniel O'Brien – Extension Ag Economist

Blog: www.ksugrains.wordpress.com

KSUGrains on Twitter & Facebook

www.AgManager.info



KANSAS STATE UNIVERSITY

Department of Agricultural Economics