

KSU Agriculture Today Radio Notes

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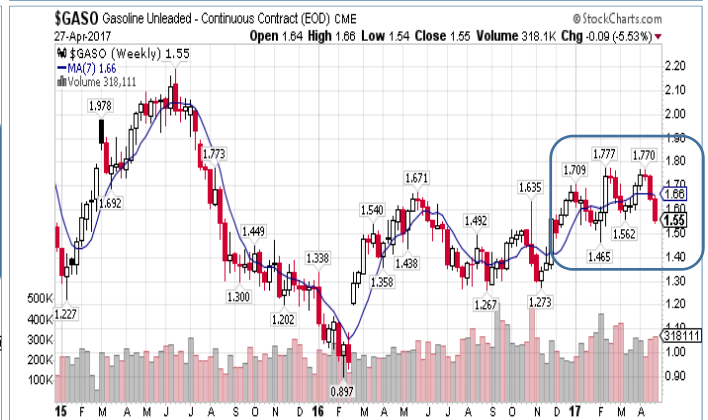
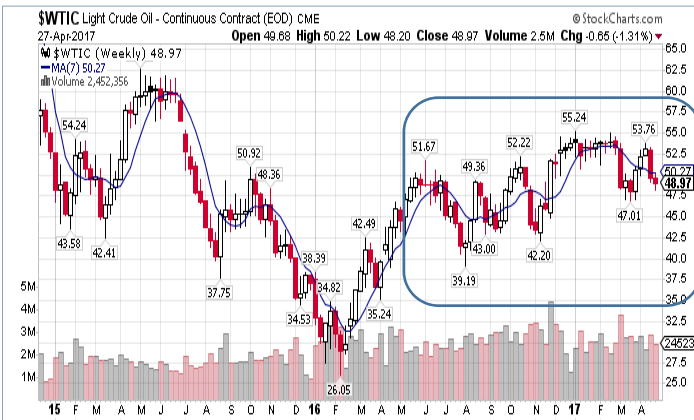
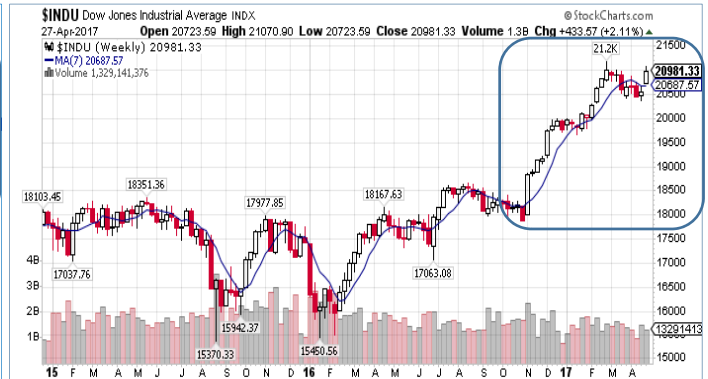
For Radio Program to be aired 10:00-10:15 a.m., Friday, April 28, 2017

I. Grain Futures Closes, Changes & Carry on Thursday, April 27, 2017

Corn Futures				Soybean Futures				Kansas HRW Wheat Futures			
Month	Close	Change	Carry /mo	Month	Close	Change	Carry /mo	Month	Close	Change	Carry /mo
May 17	\$3.62	↑ \$0.03	---	May 17	\$ 9.45 ¾	No Change	---	May 17	\$4.20 ¾	↑ \$0.0850	---
July 17	\$3.69 ¼	↑ \$0.0250	\$0.03 ⁶²⁵	July 17	\$ 9.57 ¼	↑ \$0.0075	\$0.05 ⁷⁵	July 17	\$4.33 ¾	↑ \$0.0850	\$0.06 ⁵⁰
Sept 17	\$3.76 ¼	↑ \$0.0250	\$0.03 ⁵⁰	Aug 17	\$ 9.59 ¼	↑ \$0.0075	\$0.02	Sept 17	\$4.49 ½	↑ \$0.08	\$0.07 ⁸⁷⁵
Dec 17	\$3.86 ¾	↑ \$0.0250	\$0.03 ⁵⁰	Sept 17	\$ 9.55 ¾	↑ \$0.0025	No Carry	Dec 17	\$4.74	↑ \$0.07 ¼	\$0.08 ¹⁶⁷
Mar 18	\$3.96 ½	↑ \$0.0250	\$0.03 ²⁵	Nov 17	\$ 9.54 ½	↑ \$0.0050	No Carry	Mar 18	\$4.89 ¾	↑ \$0.07	\$0.05 ²⁵
May 18	\$4.03	↑ \$0.0250	\$0.03 ²⁵	Jan 18	\$ 9.61 ½	↑ \$0.0075	\$0.03	May 18	\$5.01 ¼	↑ \$0.0625	\$0.05 ⁷⁵
July 18	\$4.08 ½	↑ \$0.0325	\$0.02 ⁷⁵	Mar 18	\$ 9.63	↓ \$0.0025	\$0.00 ⁷⁵	July 18	\$5.11	↑ \$0.06	\$0.04 ⁸⁷⁵
Sept 18	\$3.99 ½	↑ \$0.0225	No Carry	May 18	\$ 9.67 ½	↓ \$0.0025	\$0.02 ²⁵	Sept 18	\$5.25 ½	↑ \$0.0575	\$0.07 ²⁵

Price^{Soybeans} / Price^{Corn} Ratios on April 27, 2017:

- “Current Crop^{2016/17}” ⇨ \$MAY²⁰¹⁷ Soybeans ÷ \$MAY²⁰¹⁷ Corn = \$ 9.45 ¾ ÷ \$3.62 = 2.61
- “New Crop^{2017/18}” ⇨ \$NOV²⁰¹⁷ Soybeans ÷ \$DEC²⁰¹⁷ Corn = \$ 9.54 ½ ÷ \$3.86 ¾ = 2.47 ***



Central Kansas Terminal and Processor Daily Grain Report

TERMINAL HRW WHEAT ORD US NO 1				
	Bids	Change (¢/bu)	Basis	Change
Topeka	3.6575	UP 8.5	-55K	UNCH
Concordia	3.4075	UP 8.5	-80K	UNCH
Salina	3.5075	UP 8.5	-70K	UNCH
Great Bend	3.5075	UP 13.5	-70K	UP 5
Newton	3.2475	UP 13.5	-96K	UP 5
Hutchinson	3.3775-3.6075	UP 13.5-UP 23.5	-83K to -60K	UP 5-UP 15
Wichita	3.4275-3.5275	UP 13.5-UP 12.5	-78K to -68K	UP 5-UP 4
Wellington	3.3575-3.4575	UP 8.5	-85K to -75K	UNCH
Arkansas City	3.3075	UP 8.5	-90K	UNCH

TERMINAL HWW WHEAT ORD US NO 2				
	Bids	Change (¢/bu)	Basis	Change
Wichita	3.5275	UP 12.5	-68K	UP 4

TERMINAL US NO 2 YELLOW CORN				
	Bids	Change (¢/bu)	Basis	Change
Atchison	3.4700	UP 3	-15K	UNCH
Topeka	3.4000	UP 3	-22K	UNCH
Salina	3.2200	UP 3	-40K	UNCH
Newton	2.9700	UP 8	-65K	UP 5
Hutchinson	3.0300-3.0500	UP 8-UP 3	-59K to -57K	UP 5-UNCH
Wellington	2.9200	UP 3	-70K	UNCH
Arkansas City	2.9700	UP 3	-65K	UNCH

TERMINAL US NO 2 SORGHUM				
	Bids	Change (¢/cwt)	Basis	Change
Topeka	5.75	UP 5	-40K	UNCH
Concordia	5.30	UP 5	-65K	UNCH
Salina	5.57-5.75	UP 5	-50K to -40K	UNCH
Newton	4.88	UP 17	-89K	UP 6
Hutchinson	5.00-5.39	UP 14-UP 23	-82K to -60K	UP 5-UP 10
Wellington	4.75	UP 5	-96K	UNCH
Arkansas City	4.77	UP 6	-95K	UNCH

TERMINAL US NO 2 SOYBEANS				
	Bids	Change (¢/bu)	Basis	Change
Atchison	8.9075	UNCH	-55K	UNCH
Topeka	8.8575	UNCH	-60K	UNCH
Salina	8.5075	UNCH	-95K	UNCH
Newton	8.3275	UNCH	-113K	UNCH
Hutchinson	8.3175-8.4575	UNCH	-114K to -100K	UNCH
Wichita	8.4175	UNCH	-104K	UNCH
Wellington	8.3875	UNCH	-107K	UNCH
Arkansas City	8.4475	UNCH	-101K	UNCH

PROCESSOR HRW WHEAT US NO 1				
	Bids	Change (¢/bu)	Basis	Change
Wichita-11%	3.9075	UP 8.5	-30K	UNCH
Wichita-12%	4.2575	UP 8.5	5K	UNCH
Wichita-13%	4.5575	UP 8.5	35K	UNCH

PROCESSOR US NO 2 YELLOW CORN				
	Bids	Change (¢/bu)	Basis	Change
Atchison	3.3700	UP 3	-25K	UNCH

PROCESSOR US NO 2 SOYBEANS				
	Bids	Change (¢/bu)	Basis	Change
Emporia	9.0075	UNCH	-45K	UNCH
Wichita	8.8075	UNCH	-65K	UNCH

* All bids are \$/bu except Sorghum, which is \$/cwt.

Chicago Board of Trade month symbols: F January, G February, H March, J April, K May, M June, N July, Q August, U September, V October, X November, Z December

Source: USDA-KS Department of Ag Market News Service, Dodge City, KS
Cheyenne Marrs 620-227-8881 DodgeCity.LPGMN@ams.usda.gov

Western Kansas Grain Markets

Thursday's closing elevator grain bids:

HRW WHEAT ORD US NO 1				
	Bids	Change (¢/bu)	Basis	Change
Dodge City	3.16	UP 8.5	-105K	UNCH
Colby	3.26	UP 8.5	-95K	UNCH
Garden City	3.11-3.16	UP 8.5-UP 13.5	-110K to -105K	UNCH-UP 5
Goodland	3.13	UP 8.5	-108K	UNCH
Protection	3.16	UP 8.5	-105K	UNCH
Scott City	3.11-3.15	UP 8.5-UP 12.5	-110K to -119N	UNCH-DN 9
Sublette	3.11-3.16	UP 8.5-UP 13.5	-110K to -105K	UNCH-UP 5
Syracuse	3.29	UP 8.5	-105N	UNCH
Ulysses	3.34	UP 26.5	-100N	UP 5

US NO 2 YELLOW CORN				
	Bids	Change (¢/bu)	Basis	Change
Dodge City	3.12	UP 3	-50K	UNCH
Colby	3.12	UP 3	-50K	UNCH
Garden City	3.17	UP 3	-45K	UNCH
Goodland	2.97	UP 3	-65K	UNCH
Protection	3.12	UP 3	-50K	UNCH
Scott City	3.12	UP 3	-50K	UNCH
Sublette	3.20	UP 3	-42K	UNCH
Syracuse	3.29	UP 2.5	-40N	UNCH
Ulysses	3.32	UP 8.25	-37N	DN 2

US NO 2 SORGHUM				
	Bids	Change (¢/cwt)	Basis	Change
Dodge City	4.77	UP 6	-95K	UNCH
Colby	4.82	UP 5	-92K	UNCH
Garden City	4.68-4.77	UP 5-UP 14	-100K to -95K	UNCH-UP 5
Goodland	4.70	UP 6	-99K	UNCH
Protection	4.77	UP 6	-95K	UNCH
Scott City	4.68	UP 5	-100K	UNCH
Sublette	4.73-4.82	UP 5-UP 14	-97K to -92K	UNCH-UP 5
Syracuse	4.72	UP 5	-105N	UNCH
Ulysses	4.77	UP 14	-102N	DN 2

US NO 2 YELLOW SOYBEANS				
	Bids	Change (¢/bu)	Basis	Change
Dodge City	8.26	UNCH	-120K	UNCH
Colby	8.16	UNCH	-130K	UNCH
Garden City	8.26	UNCH	-120K	UNCH
Protection	8.26	UNCH	-120K	UNCH
Scott City	8.21	UNCH	-125K	UNCH
Sublette	8.21-8.26	UNCH	-125K to -120K	UNCH
Ulysses	8.16	UP 0.5	-141N	DN 11

US NO 2 SORGHUM - FEEDMILL BID				
	Bids	Change (¢/cwt)	Basis	Change
Ashland	5.39	UP 5	-60K	UNCH

Cotton Grade 41, Leaf 4, Staple 34, West Texas base price 76.00 cents per pound
FOB Railcar or Truck

* All bids are \$/bu except Sorghum, which is \$/cwt.

Chicago Board of Trade month symbols: F January, G February, H March, J April,
K May, M June, N July, Q August, U September, V October, X November, Z December

Source: USDA-KS Department of Ag Market News Service, Dodge City, KS
Cheyenne Marrs 620-227-8881 DodgeCity.LPGMN@ams.usda.gov
www.ams.usda.gov/mnreports/DC_GR110.txt
www.ams.usda.gov/LPSMarketNewsPage



US #2 Yellow Corn - dollars/bushel					Distillers Grain - dollars/ton								
	Cash Bids	Chg	Basis	Avg:	Dried 10%	Chg	Avg:	Modified 50-55%	Chg	Avg:	Wet 65-70%	Chg	Avg:
Iowa-Eastern:	3.2600 - 3.5400	↓	-33K to -5K	-19.00	93.00 - 95.00	↓	94.00	45.00	↓	45.00	NA	NA	NA
Iowa-Western:	3.1975 - 3.3875	↓	-47N to -30N	-38.50	87.00 - 105.00	↓	96.00	42.00 - 50.00	↓	46.00	25.00 - 42.00	↓	33.50
Illinois:	3.5100 - 3.6800	↓	-8K to 7K	-0.50	98.00 - 110.00	↓	104.00	NA	NA	NA	30.00	↓	30.00
Indiana:	3.5400 - 3.7800	↓	-5K to 17K	6.00	85.00 - 110.00	↓	97.50	52.00	↓	52.00	NA	NA	NA
Ohio:	3.6200 - 3.7800	↓	3K to 17K	10.00	93.00 - 95.00	↓	94.00	NA	NA	NA	NA	NA	NA
Michigan:	3.3600 - 3.6300	↓	-23K to 4K	-9.50	90.00 - 102.00	↓	96.00	39.00 - 45.00	↓	42.00	NA	NA	NA
Kansas:	3.3900 - 3.7400	↓	-20K to 15K	-2.50	105.00 - 135.00	↓	120.00	NA	NA	NA	43.00 - 50.00	↓	46.50
Minnesota:	3.0200 - 3.3100	↓	-57K to -28K	-42.50	92.00 - 100.00	↓	96.00	45.00	↓	45.00	24.00 - 38.00	↓	31.00
Nebraska:	3.1400 - 3.4200	↓	-45K to -17K	-31.00	90.00 - 116.50	↓	103.25	44.00 - 55.00	↓	41.00	34.00 - 48.00	↓	41.00
Wisconsin:	3.1900 - 3.3600	↓	-40K to -23K	-31.50	92.00 - 105.00	↓	98.50	40.00 - 50.00	↓	45.00	NA	NA	NA
South Dakota:	2.9400 - 3.2500	↓	-65K to -34K	-49.50	86.00 - 95.00	↓	90.50	45.00 - 54.50	↓	49.75	28.00 - 35.00	↓	31.50
Missouri:	3.2600 - 3.5100	↓	-33K to -8K	-20.50	103.00 - 120.00	↓	111.50	60.00	↓	60.00	33.00 - 37.00	↓	35.00

Sorghum - dollars/bushel				
	Cash Bids	Chg	Basis	Avg:
Kansas:	3.0900 - 3.1900	↓	-50K to -40K	-45.00
Missouri:	NA	NA	NA	NA

Corn Oil - cents/pound				
WE 04/21/17	Range	Chg:	Avg:	
Iowa:	27.00 - 29.00	↑	28.00	
Eastern Cornbelt:	26.00 - 29.00	↑	27.50	
Nebraska:	28.00 - 29.00	↑	28.50	
South Dakota:	26.00 - 29.00	↑	27.50	

Ethanol - dollars/gallon				
WE 04/21/17	Range	Chg:	Avg:	
Iowa:	1.49 - 1.66	↑	1.58	
Eastern Cornbelt:	1.80 - 1.83	↓	1.82	
Kansas:	1.54 - 1.54	↑	1.54	
Minnesota:	1.51 - 1.66	↓	1.59	
Nebraska:	1.47 - 1.58	↑	1.53	
Wisconsin:	NA	NA	NA	
South Dakota:	1.59 - 1.66	↓	1.63	

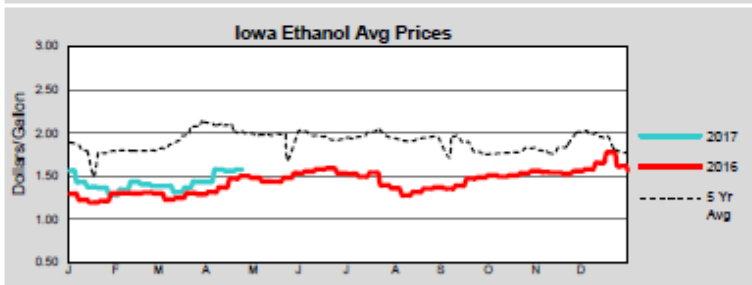
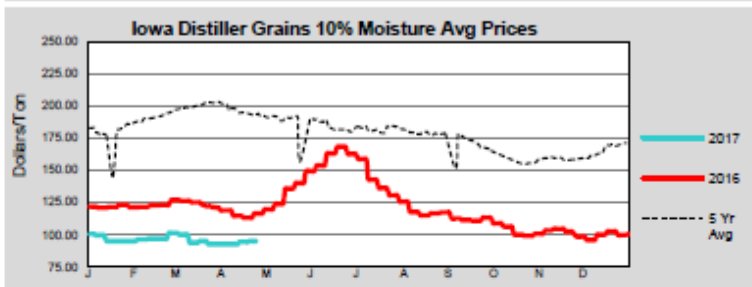
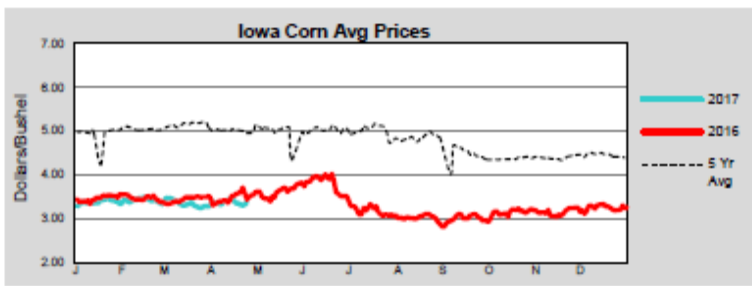
Daily Nearby Futures				
	Today	Yesterday	Last year	
CME group				
Corn (\$/bu)	3.6075	3.5900	3.8700	
Ethanol (\$/gal)	1.5920	1.5950	1.5350	
NYMEX:				
RBOB Gasoline (\$/gal)	1.5517	1.5903	1.5980	
Natural Gas (mmBtu)	3.2230	3.2710	2.0780	

BIO-ENERGY REPORT NOTES

Yellow corn : US #2 spot bids at ethanol plants reported as \$/per bushel
 Distiller grains: Spot bids FOB the ethanol plant reported as \$/per ton. Protein content 28-30% for most distiller grains on a dry matter basis.
 Ethanol: Spot bids FOB the ethanol plant reported as \$/gallon.
 Distiller corn oil: Spot bids FOB the ethanol plant reported as ¢/lb. Distiller corn oil is intended for animal feed or biofuel and is not Generally Regarded As Safe (GRAS) for human consumption. It may also be referred to as inedible crude corn oil or crude corn oil.
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Daily Market Review

Corn bids were lower on concerns over future trade. Some basis are starting to roll over into the July.





INTERNATIONAL GRAINS COUNCIL

www.lgc.int

Grain Market Report

GMR 476 – 27 April 2017

HIGHLIGHTS

Mainly because of increases for maize in the southern hemisphere, the forecast for total grains (wheat and coarse grains) production in 2016/17 is 6m t higher m/m (month-on-month), at a record 2,111m, a gain of 5% y/y (year-on-year). Despite strong demand, carryover stocks are expected to climb to a new peak of 516m t (+8% y/y), lifted by 3m since last time. Led by a bigger figure for wheat, mostly linked to strong buying by India, the trade forecast is raised by 2m t, to 345m, only a fraction below the previous season's highest ever volume.

Upward revisions for wheat and maize boost the 2017/18 production projection by 4m t m/m, but at 2,054m output is still seen falling by 3%. With the consumption forecast unchanged from before and also taking into account higher opening inventories, the figure for ending stocks is up by 8m t, to 491m (-5% y/y). Global trade is predicted to be only slightly lower y/y, at 342m t.

The inclusion of upgrades for Brazil and other producers lifts the Council's outlook for the 2016/17 global soyabean outturn by 4m t m/m, to 345m, up 30m y/y. This is channelled to higher forecasts for consumption and stocks, the latter raised by 2m t, to an all-time peak of 40m. The projection for world production in 2017/18 is placed at 348m t, up 3m from March and 1% y/y. Taking account of increases for opening stocks and total use, aggregate inventories are raised by 3m t, to 38m, albeit still slightly tighter compared to the previous year. Trade is seen up by 4% to a record of 146m t.

Minor adjustments for production and uptake lift the 2016/17 global rice stocks forecast slightly, to 119m t, a fractional y/y rise. For the 2017/18 season, projections for supply and demand are little changed from March, with output seen edging up to a new peak, mainly on gains in Asian producers, while end-season carryovers are tentatively expected to reach 120m t, 1m higher than before. World import demand in 2018 is seen marginally stronger y/y, at 41m t.

With net declines for all the components except rice, the IGC Grains and Oilseeds Index (GOI) weakened by 1% m/m.

WORLD ESTIMATES

million tons	14/15	15/16 est.	16/17 f'cast.	17/18 proj.	
				30.03	27.04
TOTAL GRAINS ^{a)}					
Production	2049	2008	2111	2050	2054
Trade	322	346	345	340	342
Consumption	2007	1984	2075	2079	2079
Carryover stocks	457	480	516	484	491
year/year change	41	23	36		-25
Major exporters ^{b)}	150	153	182	163	169
WHEAT					
Production	730	736	753	735	736
Trade	153	166	171	166	166
Consumption	714	719	737	740	738
Carryover stocks	206	224	240	234	239
year/year change	16	18	17		-1
Major exporters ^{b)}	65	68	80	68	73
MAIZE (CORN)					
Production	1019	974	1059	1024	1026
Trade	125	136	137	137	139
Consumption	994	971	1041	1044	1046
Carryover stocks	207	209	227	205	207
year/year change	25	3	18		-20
Major exporters ^{c)}	58	58	77	72	73
SOYABEANS					
Production	320	315	345	345	348
Trade	127	134	141	145	146
Consumption	311	320	337	347	350
Carryover stocks	38	33	40	35	38
year/year change	9	-5	8		-2
Major exporters ^{d)}	15	17	24	22	23
<small>million tons (milled basis)</small>					
RICE					
Production	480	473	483	487	487
Trade	42	39	40	41	41
Consumption	476	475	482	486	485
Carryover stocks	120	118	119	119	120
year/year change	4	-2	1		2
Major exporters ^{e)}	37	32	31	28	30

Figures may not add due to rounding

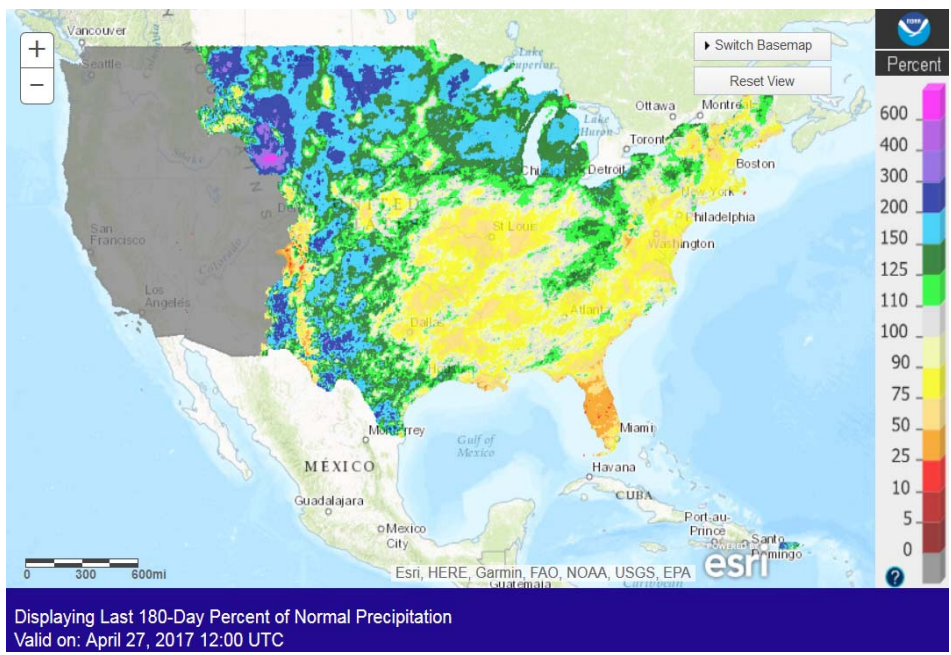
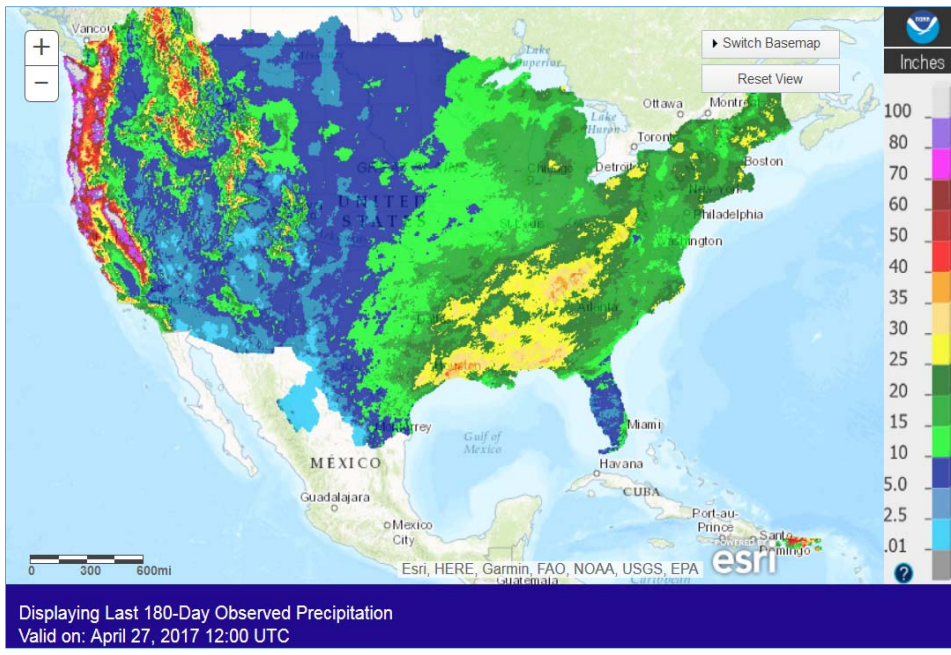
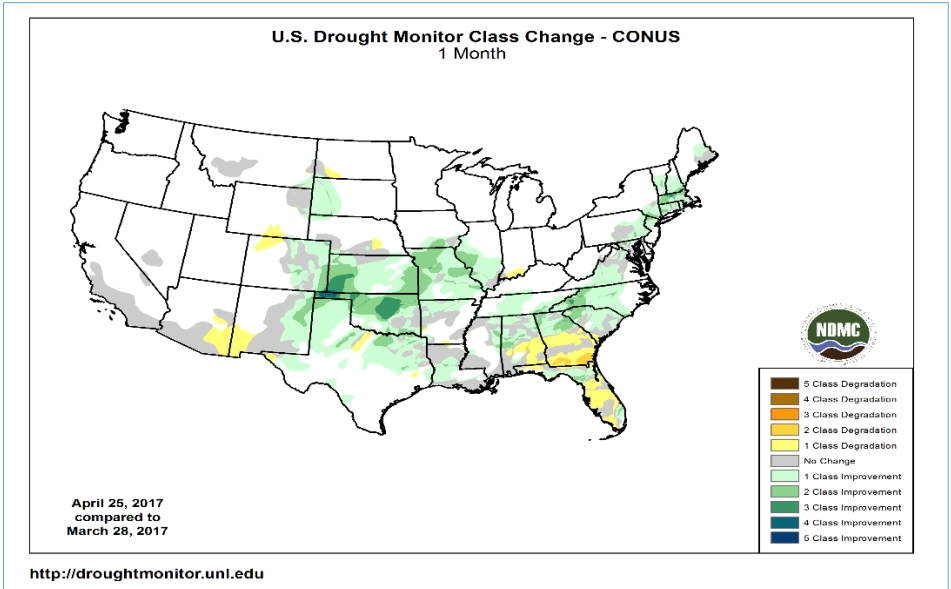
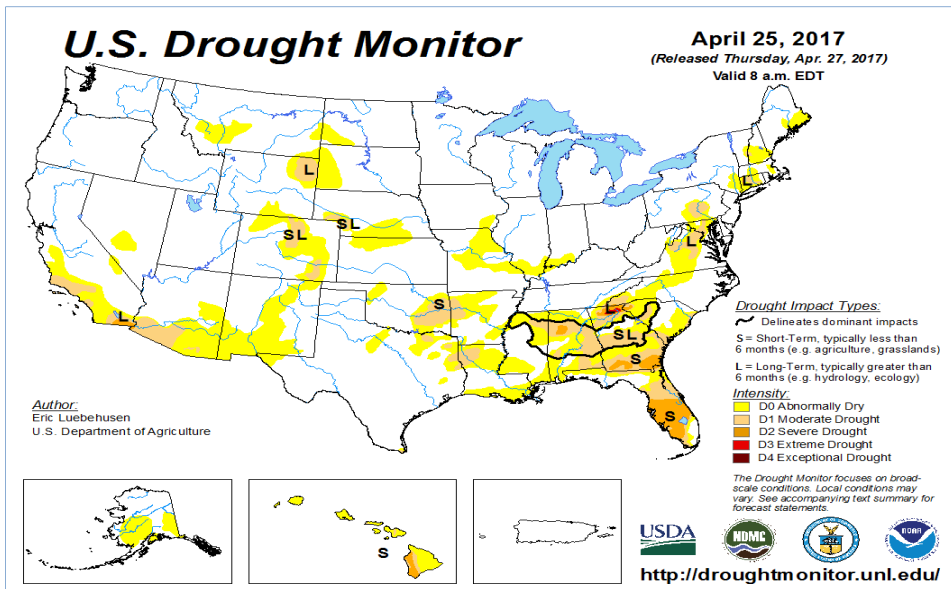
- a) Wheat and coarse grains
- b) Argentina, Australia, Canada, EU, Kazakhstan, Russia, Ukraine, USA
- c) Argentina, Brazil, Ukraine, USA
- d) Argentina, Brazil, USA
- e) India, Pakistan, Thailand, USA, Vietnam

IGC GRAINS & OILSEEDS INDEX (GOI)

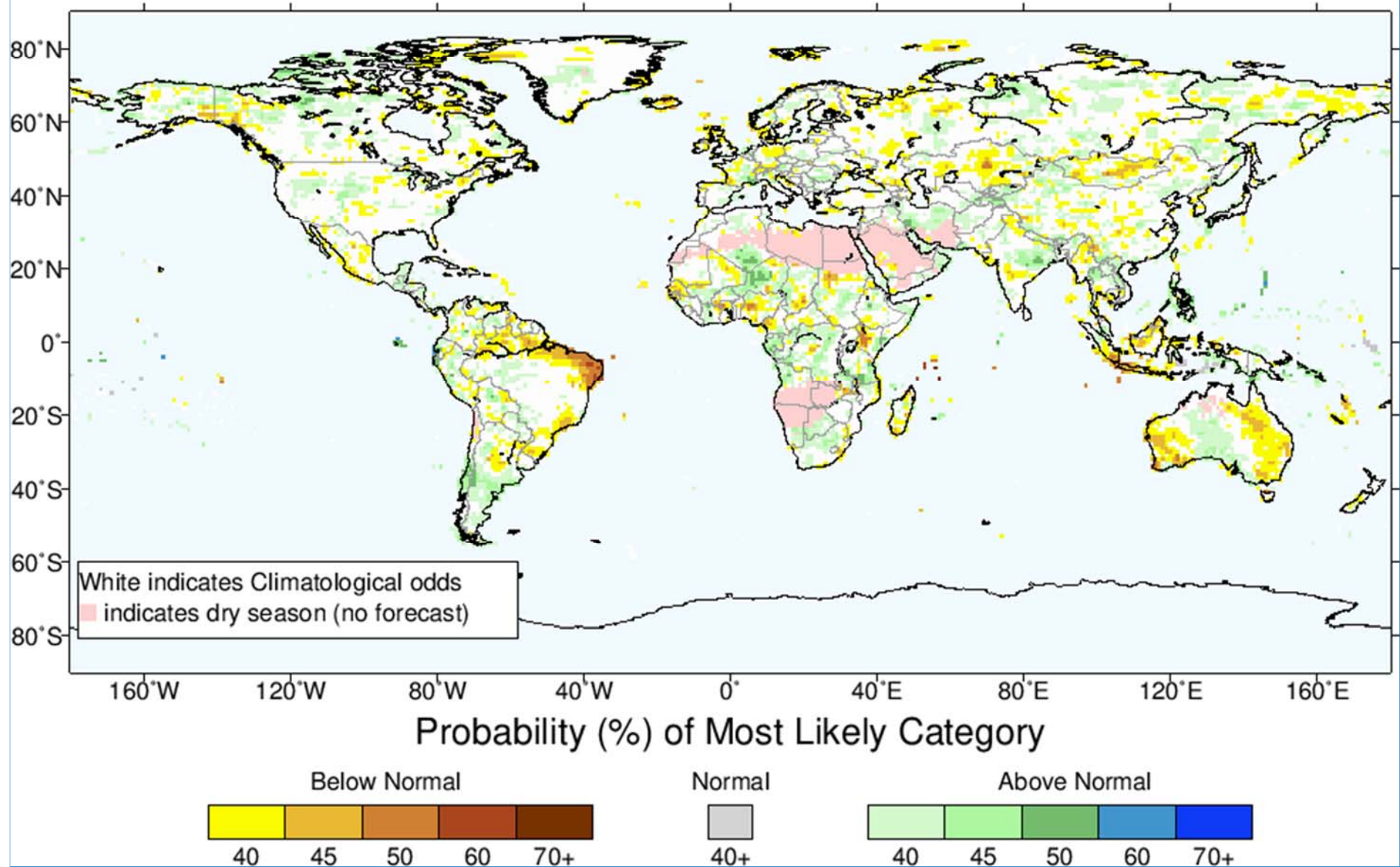


See: http://www.lgc.int/grainsupdate/lgc_goi.xlsb

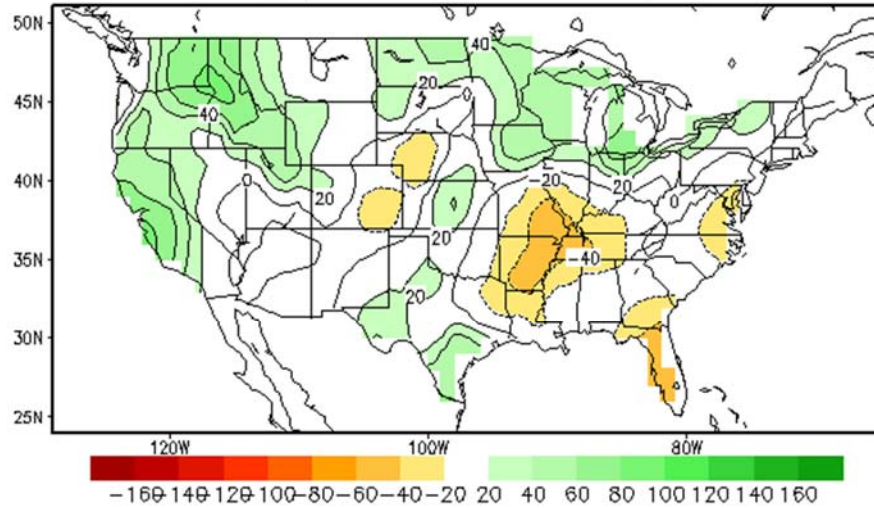
II. U.S. & World Drought Monitor, Moisture Accumulations & Forecasts (Weekly Weather and Crop Bulletin)



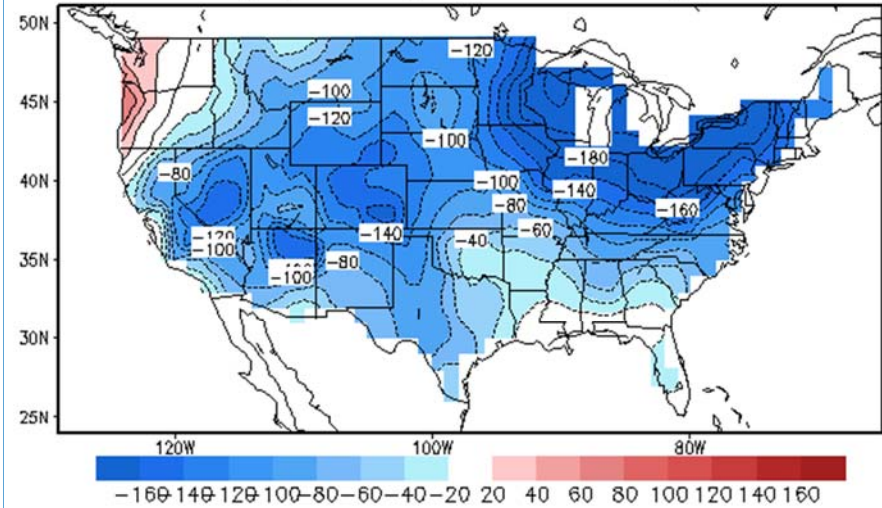
IRI Multi-Model Probability Forecast for Precipitation for May–June–July 2017, Issued April 2017



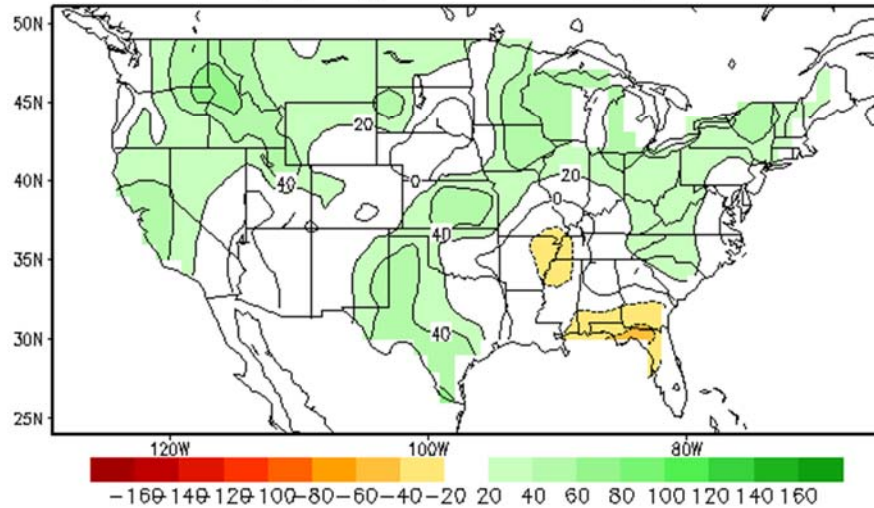
Lagged Averaged Soil Moisture Outlook for End of MAY 2017
units: anomaly (mm), SM data ending at 20170426



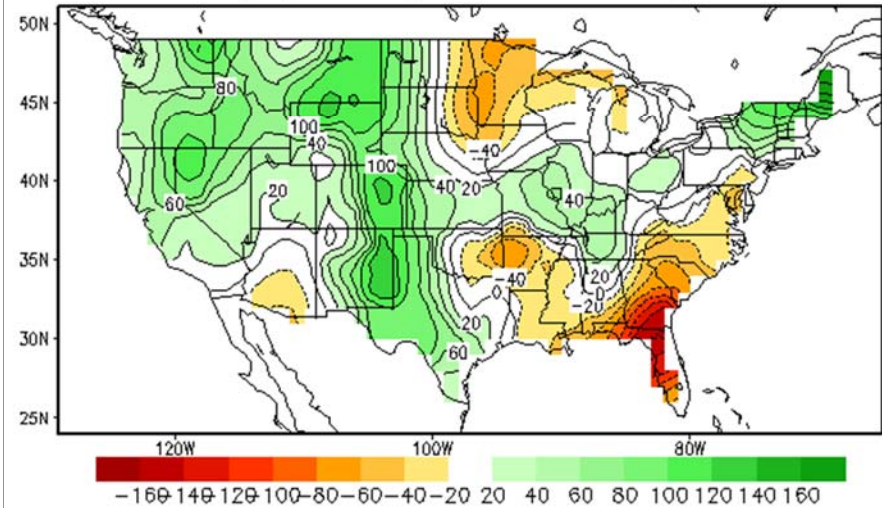
Lagged Averaged Temperature Outlook for JAS 2017
units: anomaly (sdX100), SM data ending at 20170426



Lagged Averaged Soil Moisture Outlook for End of JUL 2017
units: anomaly (mm), SM data ending at 20170426



Lagged Averaged Precipitation Outlook for JAS 2017
units: anomaly (sdX100), SM data ending at 20170426



INTERNATIONAL CROP AND WEATHER HIGHLIGHTS

USDA/WAOB Joint Agricultural Weather Facility

April 25, 2017

EUROPE – Highlight: Western Dryness Concerns Increasing

- Warm, increasingly dry weather over **France** and **England** reduced soil moisture for vegetative winter crops, while short-term drought in **northwestern Spain** adversely impacted flowering winter grains.
- Showers maintained or improved moisture supplies for vegetative winter wheat and rapeseed over **central and eastern Europe**.

MIDDLE EAST – Highlight: Widespread Showers Timely For Winter Grains

- Additional rain benefited vegetative to reproductive winter grains in **Turkey, Syria, Iraq, and northwestern Iran**.

NORTHWEST AFRICA – Highlight: Heat And Dryness Impacted Moroccan Winter Grains

- Untimely heat and pronounced short-term dryness reduced yield prospects for reproductive to filling wheat and barley in **Morocco**.

FSU – Highlight: Beneficial Rain In Ukraine

- Widespread beneficial rain in **Ukraine** further improved soil moisture for vegetative winter wheat.
- Additional showers maintained good to excellent prospects for **southern Russia's** winter wheat.

SOUTH ASIA – Highlight: Oppressive Seasonal Heat In India

- Oppressive seasonal heat continued across **interior India**, while unseasonably heavy showers in **Bangladesh** caused flooding but maintained abundant irrigation reserves for spring rice.

EAST ASIA – Highlight: Widespread Showers In Southern China

- Widespread showers in **southern China** boosted soil moisture for reproductive early-crop rice, but slowed rapeseed maturation in the **Yangtze Valley**.

SOUTHEAST ASIA – Highlight: Showers Remained Confined To Southern Locales

- Showers remained confined to **southern locales**, benefiting oil palm and irrigation reserves for rice, as growers in **Indochina** continued to prepare fields for the onset of the wet season.

AUSTRALIA – Highlight: Beneficial Pre-planting Rains

- In **western and southeastern Australia**, widespread showers provided a welcome boost in topsoil moisture in advance of wheat, barley, and canola planting.
- Warm, dry weather persisted in the **northeast**, aiding summer crop dry down and harvesting.

SOUTH AMERICA – Highlight: Rain Boosted Moisture For Brazilian Corn

- Late-season rainfall maintained favorable crops for **Brazil's** second corn crop.
- Favorably dry weather improved conditions for grain and oilseed harvesting in **central Argentina**.

SOUTH AFRICA – Highlight: Cool, Dry Weather Dominated Key Farming Areas

- Conditions favored corn and other maturing summer crops in major commercial farming areas.

III. Corn Market Information

Daily MAY 2017 Corn Futures



Key Corn & Grain Sorghum Supply-Demand Factors:

U.S. Corn Exports: "Bullish" short-term MY 2016/17 U.S. corn export shipments with "positive" long term outlook for total sales

- **Weekly Export Shipments week of 4/20/2017 for MY 2016/17 = 54.1 mb** vs 42.5 mb/wk needed to meet USDA's April 11th projn of 2.225 bb exports
- **Total shipments through 4/20/2017 for MY 2016/17 = 1.417 bb** i.e., 63.7% of 2.225 bb USDA projn with 63.5% of MY complete (33/52 weeks)
- **Total sales (4/20/2017) for "current" MY 2016/17 = 2.010 bb** i.e., 90.3% of 2.225 bb USDA projn w. 63.5% of MY complete (33/52 weeks)

U.S. Grain Sorghum Exports: "Bearish" short-term MY 2016/17 grain sorghum export shipments & "neutral-positive" long term sales

- **Weekly Export Shipments wk of 4/20/2017 for MY 2016/17 = 1.07 mb** vs 5.0 mb/wk needed to meet USDA's April 11th projn of 225 mb exports
- **Total shipments through 4/20/2017 for MY 2016/17 = 130.3 mb** i.e., 57.9% of 225 mb USDA projn with 63.5% of MY complete (33/52 weeks)
- **Total new sales (4/20/2017) for "current" MY 2016/17 = 163.4 mb** i.e., 72.6% of 225 mb USDA projn w. 63.5% of MY complete (33/52 weeks)

World & U.S. Corn Supply-Demand Fundamentals

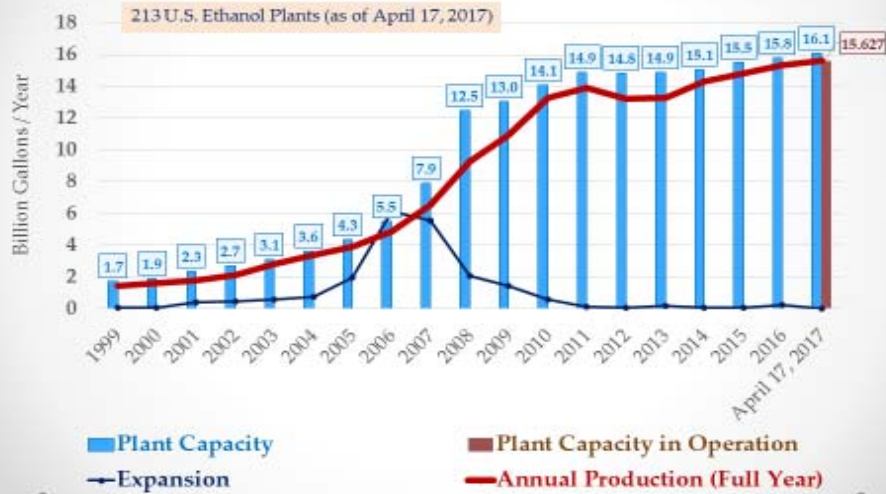
Mktg Yr	World % S/U	U.S. % S/U	U.S. \$/bu	U.S. Crop
2007/08	16.5% S/U	12.8% S/U	\$4.20 /bu	13.038 bln bu
2008/09	18.3% S/U	13.9% S/U	\$4.06 /bu	12.043 bln bu
2009/10	17.2% S/U	13.1% S/U	\$3.55 /bu	13.067 bln bu
2010/11	14.5% S/U	8.7% S/U	\$5.18 /bu	12.425 bln bu
2011/12	14.8% S/U	7.9% S/U	\$6.22 /bu	12.314 bln bu
2012/13	15.3% S/U	7.4% S/U	\$6.89 /bu	10.755 bln bu
2013/14	18.6% S/U	9.2% S/U	\$4.46 /bu	13.829 bln bu
2014/15 ^{USDA}	21.4% S/U	12.6% S/U	\$3.70 /bu	14.216 bln bu
2015/16 ^{USDA}	22.0% S/U	12.7% S/U	\$3.61 /bu	13.601 bln bu
2016/17 ^{USDA}	21.4% S/U	15.9% S/U	\$3.40 /bu	15.148 bln bu
2017/18 ^{USDA}	na	15.6% S/U	\$3.50 /bu	14.065 bln bu

❖ U.S. Grain Sorghum Supply-Demand Fundamentals

2014/15 ^{USDA}	67.6 bu/ac ^{US}	4.0% S/U	\$4.03 /bu	433 mln bu
2015/16 ^{USDA}	76.0 bu/ac ^{US}	6.4% S/U	\$3.31 /bu	597 mln bu
2016/17 ^{USDA}	77.9 bu/ac ^{US}	10.2% S/U	\$2.70 /bu	480 mln bu
2017/18 ^{USDA}	67.1 bu/ac ^{US}	9.6% S/U	**\$3.00 /bu	362 mln bu

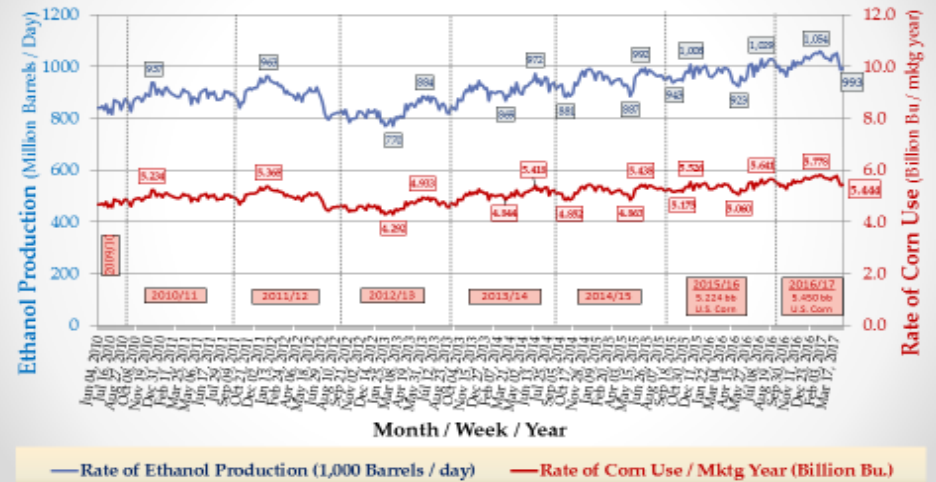
U.S. Ethanol Capacity & Production

Source: Renewable Fuels Association as of April 17, 2017 (most recent)

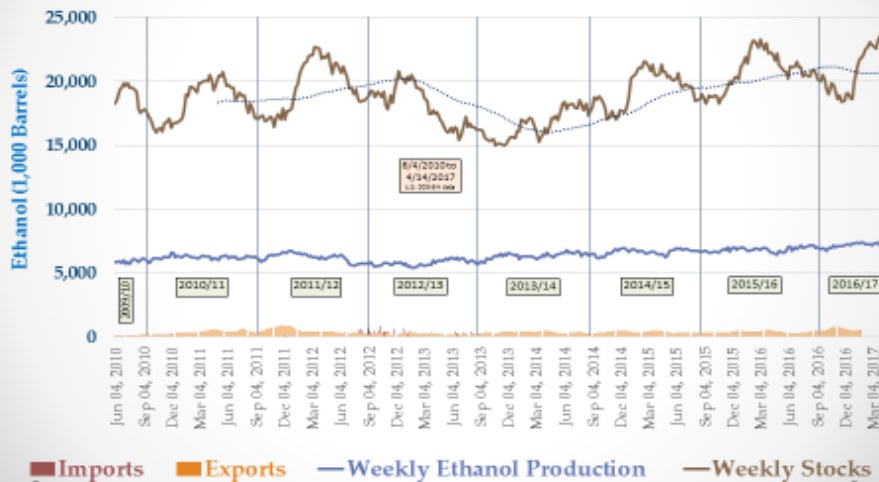


U.S. Ethanol Production & Corn Use

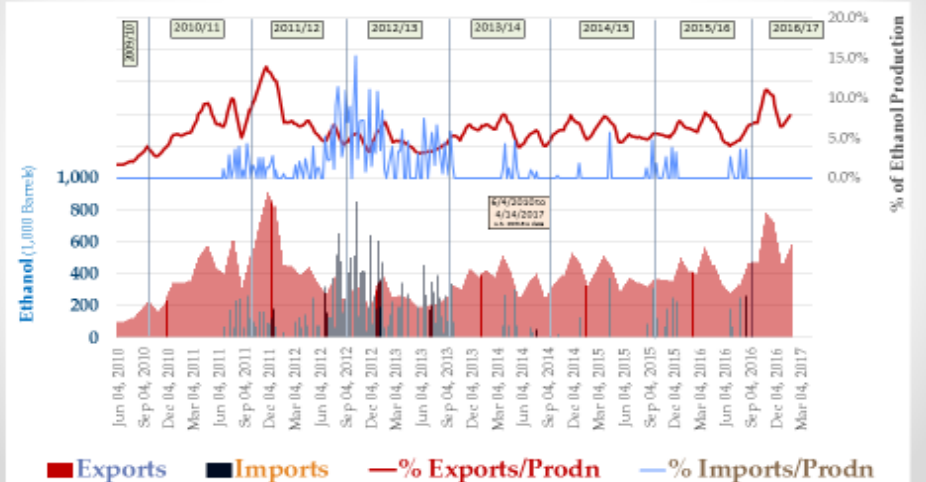
Weekly EIA ethanol data & KSU corn use est's. (6/4/2010 thru 4/14/2017)



Weekly U.S. Ethanol Production, Imports, Exports & Stocks



Weekly U.S. Ethanol Imports, Exports & Percent-of-Stocks



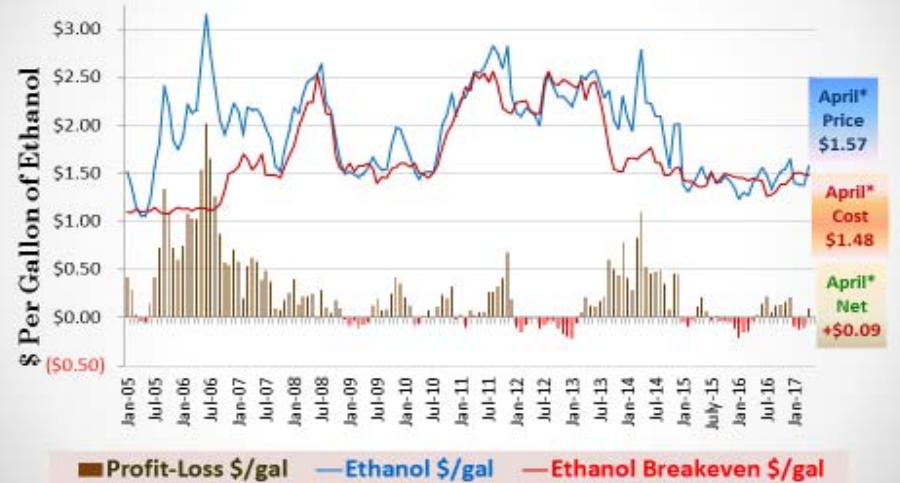
Ethanol DDGS & Corn Input Prices

ISU Ethanol Plant Model (January 2005 – April 25, 2017)



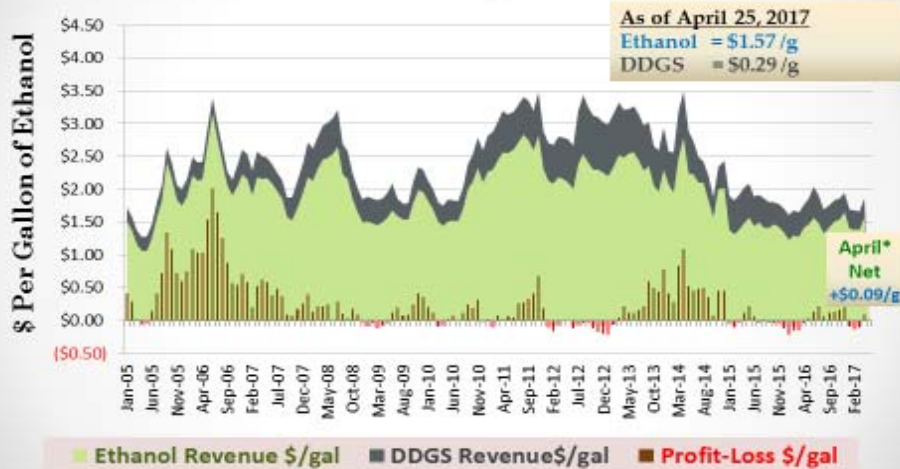
Ethanol Price, Cost & Profits

ISU Ethanol Plant Model (January 2005 – April 25, 2017**)



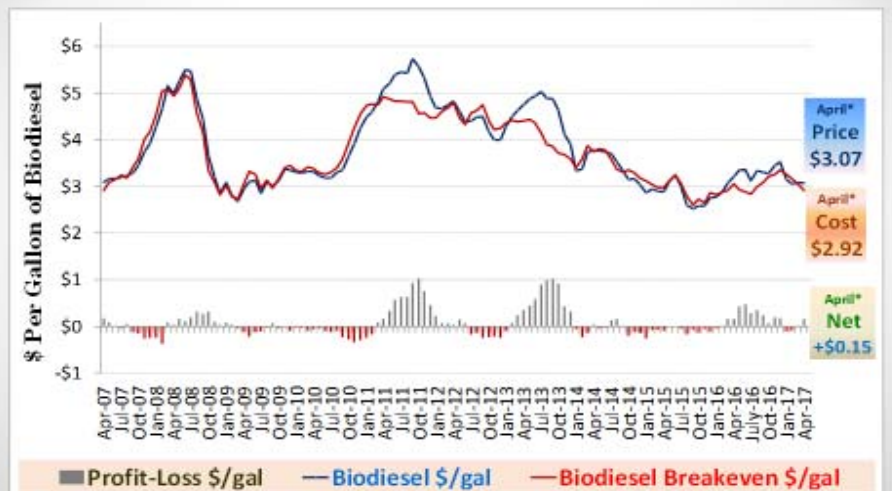
Ethanol Revenues & Net Returns

ISU Ethanol Plant Model (January 2005 – April 25, 2017**)



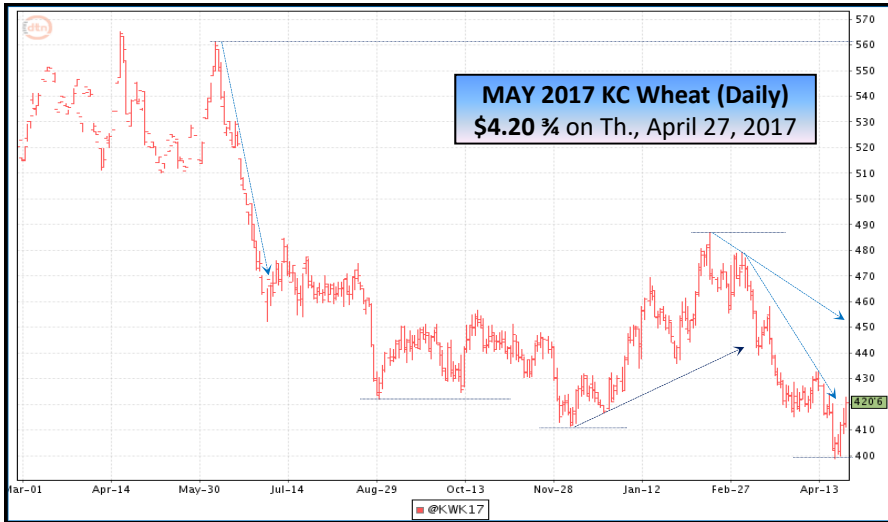
Biodiesel Price, Cost & Profits

ISU Biodiesel Plant Model (April 2007 – April 21, 2017)



IV. Wheat Market Outlook

Daily MAY 2017 HRW Futures



Wheat Export Situation:

U.S. All Wheat Exports: “Bearish” Short Term Export Shipments with “neutral-positive” **long run** export prospects in “current” MY 2016/17 total sales

- Weekly Export Shipments wk of 4/20/2017 for “current” MY 2016/17 = 22.5 mb vs 46.5 mb /wk needed to meet USDA’s April 11th projn of 1,025 mb exports
- Total shipments through 4/20/2017 for “current” MY 2016/17 = 0.839 bb i.e., 81.9% of 1.025 bb USDA projn with 92.3% of MY complete (48/52 weeks)
- Total shipments + new sales 4/20/2017 for “current” MY 2016/17 = 1.018 bb i.e., 99.3% of 1.025 bb USDA projn with 92.3% of MY complete (48/52 weeks)

U.S. Hard Red WINTER Wheat Exports: “Bearish” Shipments with “neutral-positive” **long run** prospects in “current” MY 2016/17 total sales

- Weekly Export Shipments wk of 4/20/2017 for “current” MY 2016/17 = 8.9 mb vs 16.7 mb /wk needed to meet USDA’s April 11th projn of 430 mb exports
- Total shipments through 4/20/2017 for “current” MY 2016/17 = 363.3 mb i.e., 84.5% of 430 mb USDA projn with 92.3% of MY complete (48/52 weeks)
- Total shipments + new sales 4/20/2017 for “current” MY 2016/17 = 425.0 mb i.e., 98.8% of 430 mb USDA projn with 92.3% of MY complete (48/52 weeks)

Monthly Kansas HRW Wheat eFutures

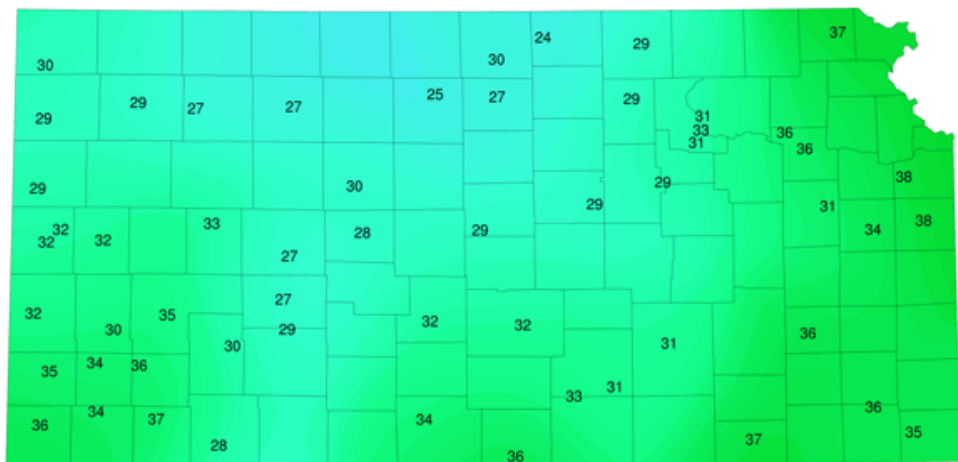


“Negative” World & U.S. Wheat S/D Fundamentals

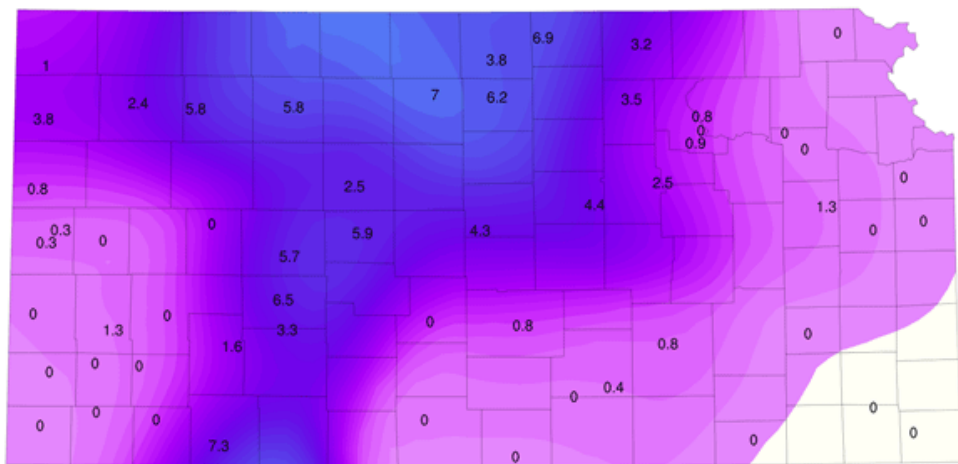
Mktg Yr	World % S/U	World Crop	U.S. % S/U	U.S. \$/bu	U.S. Exports
2007/08	20.8% S/U	611.7 mmt	13.2% S/U	\$6.48 /bu	1,263 mln bu
2008/09	26.5% S/U	683.7 mmt	28.7% S/U	\$6.78 /bu	1,015 mln bu
2009/10	31.2% S/U	687.0 mmt	48.6% S/U	\$4.87 /bu	879 mln bu
2010/11	30.4% S/U	679.3 mmt	36.4% S/U	\$5.70 /bu	1,291 mln bu
2011/12	28.6% S/U	696.9 mmt	33.4% S/U	\$7.24 /bu	1,051 mln bu
2012/13	25.7% S/U	658.3 mmt	29.9% S/U	\$7.77 /bu	1,012 mln bu
2013/14	28.1% S/U	715.1 mmt	24.2% S/U	\$6.87 /bu	1,176 mln bu
2014/15	30.9% S/U	728.1 mmt	37.3% S/U	\$5.99 /bu	864 mln bu
2015/16 ^{USDA}	34.0% S/U	735.2 mmt	50.0% S/U	\$4.89 /bu	775 mln bu
2016/17^{USDA}	34.1% S/U	751.4 mmt	51.8% S/U	\$3.85 /bu	1,025 mln bu
2017/18^{USDA}	na	na	40.9% S/U	\$4.30 /bu	975 mln bu

Effect of freeze on April 27, 2017, on wheat in boot and early heading stages

Temperatures during the morning of April 27 dropped below freezing and into the lower 30's or upper 20's in most of the state. The lowest measured temperature was 24F in north central Kansas (Scandia, Republic Co.), where temperatures were below 32F for as long as 7.3 hours (Figure 1). Far southwest Kansas (Meade Co.) also reported 28F and was below 32F for more than 7 hours.



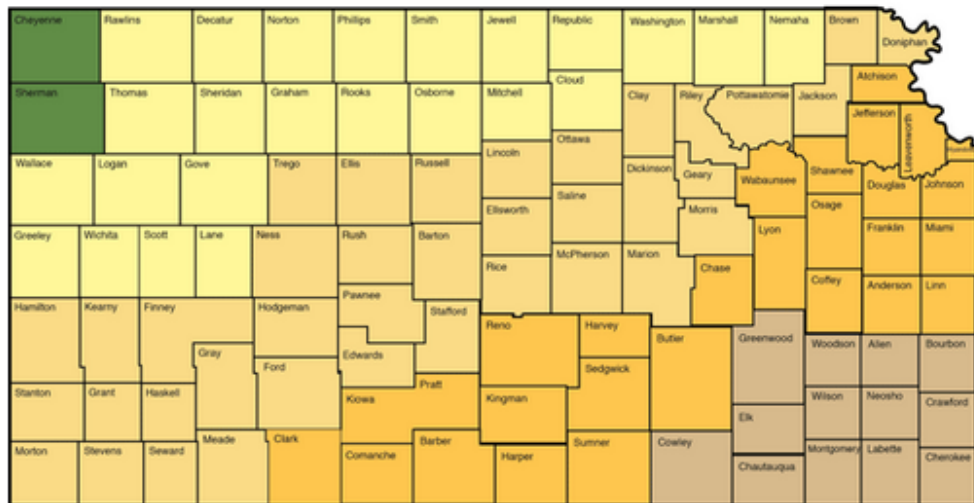
24 Hour Low Temperatures (F) - Kansas Mesonet 04/27 06:48 (CST)



Hours Below Freezing (in the past 24) - Kansas Mesonet - Updated: 04/27 06:48 (CST)

Figure 1. Minimum temperatures during the morning of April 27 (upper panel) and length of time below 32 degrees Fahrenheit during the 24-hour period encompassing the morning of April 27 (lower panel). Source: Weather Data Library (mesonet.ksu.edu/freeze).

Estimated Wheat Growth Stage April 27, 2017



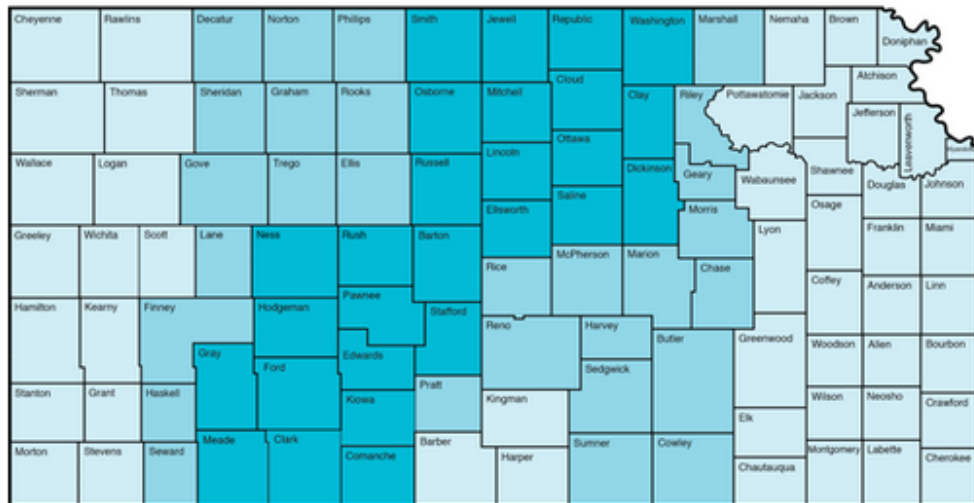
Wheat Growth Stage

- | | |
|--|--|
| Tillering or strongly upright tillers | Boot or flowering |
| Strongly upright tillers or jointing | Flowering or watering ripe |
| Jointing or approaching flag leaf emergence | Watering ripe or milk |
| Approaching flag leaf emergence or at flag leaf emergence | Milk or dough |
| Flag leaf emergence or boot | Dough or physiologically mature |

Growth observation map based on reports from R. Lullien, E. De Wolf, D. Shoup, L. Haag, S. Duncan, A.J. Foster, L. Brooks, S. Campbell, J. Calhoun, J. Falk Jones, D. Hallauer, R. Hein, D. Hibberd, C. Long, T. Maxwell, C. Miller, Z. Simon, S. Wick

Figure 2. Estimated wheat growth stages across Kansas as of April 27, 2017.

Risk of Freeze Injury to Wheat April 27, 2017



Risk of Freeze Injury

- Low risk
- Moderate risk
- High risk

Risk map based on observations of wheat growth stage and duration of temperature below 32 degrees. Kansas State University: E. De Wolf, R. Lullien, M. Kruggs and C. Redman.

Figure 3. Estimated risk of freeze damage due to a combination of wheat growth stage sensitivity, lowest temperatures during the morning of April 27, 2017, and number of hours below 32F during the same period.

VI. Soybean Market Outlook

Daily MAY 2017 Soybean Futures



Monthly Soybean eFutures



Key Soybean Supply-Demand Issues:

- ❖ **U.S. Soybean Exports: “Positive-Bullish” short run export shipments in MY 2016/17 and “positive-bullish” total sales**
 - Export Shipments for week of 4/20/2017 for “current” MY 2016/17 = 28.7 mb vs 11.3 mb/wk needed to meet USDA’s April 11th projn of 2.025 bb exports +
 - Total shipments through 4/20/2017 for “current” MY 2016/17 = 1.811 bln bu i.e., 89.4% of 2.025 bb USDA projn with 63.5% of MY complete (33/52 weeks)
 - Total new sales (4/20/2017) for “current” MY 2016/17 = 2.074 bb i.e., 102.4% of 2.025 bb USDA projn with 63.5% of MY complete (33/52 weeks)

- ❖ **U.S. Soybean Meal Exports: “Neutral-negative” short run export shipments in MY 2016/17 and “positive” total sales**
 - Export Shipments for week of 4/20/2017 for “current” MY 2016/17 = 170,600 mt vs 197,761 mt/wk needed to meet USDA’s April 11th projn of 10,800 mmt exports
 - Total shipments through 4/20/2017 for “current” MY 2016/17 = 6.252 mmt i.e., 57.9% of 10.800 mmt USDA projn with 55.8% of MY complete (29/52 weeks)
 - Total shipments & new sales (4/20/2017) for “current” MY 2016/17 = 8.979 mmt i.e., 83.1% of 10.800 mmt USDA projn with 55.8% of MY complete (29/52 weeks)

- ❖ **World & U.S. Soybean Supply-Demand Fundamentals**

Mktg Yr	World % S/U	World Crop	U.S. % S/U	U.S. \$/bu	U.S. Exports
2007/08	22.9% S/U	219.0 mmt	6.7% S/U	\$10.10 /bu	1.159 bln bu
2008/09	19.3% S/U	212.0 mmt	4.5% S/U	\$ 9.97 /bu	1.279 bln bu
2009/10	25.2% S/U	260.5 mmt	4.5% S/U	\$ 9.59 /bu	1.499 bln bu
2010/11	27.7% S/U	264.3 mmt	6.6% S/U	\$11.30 /bu	1.505 bln bu
2011/12	20.3% S/U	240.6 mmt	5.4% S/U	\$12.50 /bu	1.365 bln bu
2012/13	21.0% S/U	268.6 mmt	4.5% S/U	\$14.40 /bu	1.328 bln bu
2013/14	22.4% S/U	282.5 mmt	2.7% S/U	\$13.00 /bu	1.638 bln bu
2014/15	25.7% S/U	319.6 mmt	4.9% S/U	\$10.10 /bu	1.842 bln bu
2015/16 ^{USDA}	24.5% S/U	313.0 mmt	5.0% S/U	\$ 8.95 /bu	1.936 bln bu
2016/17^{USDA}	26.3% S/U	346.0 mmt	10.9% S/U	\$ 9.55 /bu	2.025 bln bu
2017/18^{USDA}	na	na	10.3% S/U	\$ 9.60 /bu	2.125 bln bu



Crop Progress

ISSN: 1948-3007

Released April 24, 2017, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA).

Corn Planted - Selected States

[These 18 States planted 92% of the 2016 corn acreage]

State	Week ending			2012-2016 Average
	April 23, 2016	April 16, 2017	April 23, 2017	
	(percent)	(percent)	(percent)	(percent)
Colorado	6	1	8	7
Illinois	38	6	34	28
Indiana	10	4	15	13
Iowa	36	2	8★	14
Kansas	42	9	21	28
Kentucky	46	19	29★	33
Michigan	3	-	1	4
Minnesota	40	1	6	17
Missouri	78	17	46	39
Nebraska	15	3	17	11
North Carolina	69	32	63	64
North Dakota	5	-	1	4
Ohio	7	-	9	10
Pennsylvania	13	2	6	7
South Dakota	5	-	3	7
Tennessee	61	24	45	46
Texas	52	60	68	59
Wisconsin	9	-	1	4
18 States	28	6	17	18

Corn Emerged - Selected States

[These 18 States planted 92% of the 2016 corn acreage]

State	Week ending			2012-2016 Average
	April 23, 2016	April 16, 2017	April 23, 2017	
	(percent)	(percent)	(percent)	(percent)
Colorado	-	(NA)	-	-
Illinois	4	-	5	6
Indiana	-	(NA)	2	2
Iowa	-	(NA)	-	-
Kansas	20	(NA)	4★	10
Kentucky	7	(NA)	10	11
Michigan	-	(NA)	-	-
Minnesota	1	(NA)	-	-
Missouri	23	1	13	12
Nebraska	1	(NA)	2	1
North Carolina	31	(NA)	12	31
North Dakota	-	-	-	-
Ohio	-	(NA)	-	1
Pennsylvania	-	(NA)	-	-
South Dakota	-	(NA)	-	-
Tennessee	13	(NA)	21	18
Texas	43	56	60	49
Wisconsin	-	(NA)	-	-
18 States	4	(NA)	4	4

Soybeans Planted - Selected States

[These 18 States planted 95% of the 2016 soybean acreage]

State	Week ending			2012-2016 Average
	April 23, 2016	April 16, 2017	April 23, 2017	
	(percent)	(percent)	(percent)	(percent)
Arkansas	16	24	39	15
Illinois	2	-	4	2
Indiana	2	(NA)	3	3
Iowa	3	(NA)	-	1
Kansas	-	(NA)	-	1
Kentucky	3	(NA)	2	2
Louisiana	18	36	59	28
Michigan	-	(NA)	-	1
Minnesota	2	(NA)	-	1
Mississippi	24	43	60	26
Missouri	4	-	2	2
Nebraska	-	(NA)	4	1
North Carolina	1	(NA)	1	1
North Dakota	-	(NA)	-	-
Ohio	-	(NA)	1	2
South Dakota	-	(NA)	1	-
Tennessee	2	(NA)	4	1
Wisconsin	1	(NA)	-	-
18 States	3	(NA)	6	3

Cotton Planted - Selected States

[These 15 States planted 98% of the 2016 cotton acreage]

State	Week ending			2012-2016 Average
	April 23, 2016	April 16, 2017	April 23, 2017	
	(percent)	(percent)	(percent)	(percent)
Alabama	12	-	4	9
Arizona	54	40	53	57
Arkansas	3	3	7	7
California	74	26	50	62
Georgia	2	2	7	5
Kansas	-	-	-	-
Louisiana	3	18	37	8
Mississippi	6	6	11	6
Missouri	12	5	13	5
North Carolina	1	-	1	3
Oklahoma	2	-	6	1
South Carolina	7	-	2	6
Tennessee	1	-	3	1
Texas	11	11	12	14
Virginia	4	-	7	2
15 States	10	8	11	12

Sorghum Planted - Selected States

[These 11 States planted 99% of the 2016 sorghum acreage]

State	Week ending			2012-2016 Average
	April 23, 2016	April 16, 2017	April 23, 2017	
	(percent)	(percent)	(percent)	(percent)
Arkansas	28	30	46	40
Colorado	-	-	-	-
Illinois	1	-	1	2
Kansas	-	-	-	-
Louisiana	62	50	79	69
Missouri	12	8	10	5
Nebraska	1	-	-	1
New Mexico	5	-	-	3
Oklahoma	9	9	16	8
South Dakota	-	-	-	-
Texas	49	58	65	57
11 States	19	21	24	23

Winter Wheat Headed - Selected States

[These 18 States planted 90% of the 2016 winter wheat acreage]

State	Week ending			2012-2016 Average
	April 23, 2016	April 16, 2017	April 23, 2017	
	(percent)	(percent)	(percent)	(percent)
Arkansas	54	89	96	44
California	83	59	90	80
Colorado	-	-	-	-
Idaho	3	-	-	1
Illinois	2	3	28	12
Indiana	3	3	18	5
Kansas	20	9	25	17
Michigan	-	-	-	-
Missouri	20	23	56	19
Montana	-	-	-	-
Nebraska	-	-	-	-
North Carolina	37	21	59	37
Ohio	-	-	1	-
Oklahoma	52	40	65	47
Oregon	-	-	-	1
South Dakota	-	-	-	-
Texas	48	51	67	50
Washington	4	-	-	1
18 States	24	19	32	23

Winter Wheat Condition - Selected States: Week Ending April 23, 2017

[National crop conditions for selected States are weighted based on 2016 planted acreage]

State	Very poor	Poor	Fair	Good	Excellent
	(percent)	(percent)	(percent)	(percent)	(percent)
Arkansas	2	5	20	60	13
California	-	-	-	55	45
Colorado	6	16	36	35	7
Idaho	1	4	27	49	19
Illinois	2	4	20	58	16
Indiana	1	3	24	57	15
Kansas	4	12	32	45	7
Michigan	2	9	24	55	10
Missouri	-	2	28	62	8
Montana	1	5	28	53	13
Nebraska	1	8	37	47	7
North Carolina	1	9	26	58	6
Ohio	-	2	18	61	19
Oklahoma	4	11	41	40	4
Oregon	1	4	10	65	20
South Dakota	-	9	35	55	1
Texas	2	13	43	35	7
Washington	1	2	14	67	16
18 States	3	10	33	45	9
Previous week	3	10	33	46	8
Previous year	1	7	33	50	9

Spring Wheat Planted - Selected States

[These 6 States planted 99% of the 2016 spring wheat acreage]

State	Week ending			2012-2016 Average
	April 23, 2016	April 16, 2017	April 23, 2017	
	(percent)	(percent)	(percent)	(percent)
Idaho	62	28	48	71
Minnesota	43	9	14	41
Montana	50	8	24	31
North Dakota	24	6	9	22
South Dakota	70	52	75	56
Washington	71	20	38	71
6 States	40	13	22	34