Grain Market Outlook for 2017 - 2018

KSU Ag Econ 520 - Fall 2017

Manhattan, Kansas

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KANSAS STATE

Department of Agricultural Economics

Topics to be discussed.....

- 1) Grain Market Analysis & Outlook
 - Corn & Grain Sorghum
 - Wheat
 - Soybeans & Cotton

2) Economic "forces at work" in the grain markets & where they are taking us...



Corn & Sorghum Markets





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U.S. Corn & Sorghum Supply-Use

• Prospects **C** "LARGE" 14 billion bu+ 2017 U.S. Corn Crop

Large Supplies & Stocks are limiting Feedgrain Price\$'s

• Low Price\$'s are supporting Corn Use

- Livestock Feed ^{2017/18} = 5.500 bln bu (10 year high vs 5.858 bb in 2007/08)
- Ethanol ^{2017/18} = 5.475 bln bu (*Record high* vs 5.438 bb last year)
- Other FSI $^{2017/18}$ = 1.460 bln bu (2nd highest vs 1.462 bb in 2016/17)
- Exports ^{2017/18} = 1.850 bln bu (*vs 2.293 bb in '16/17 & 1.901 in '15/16*)

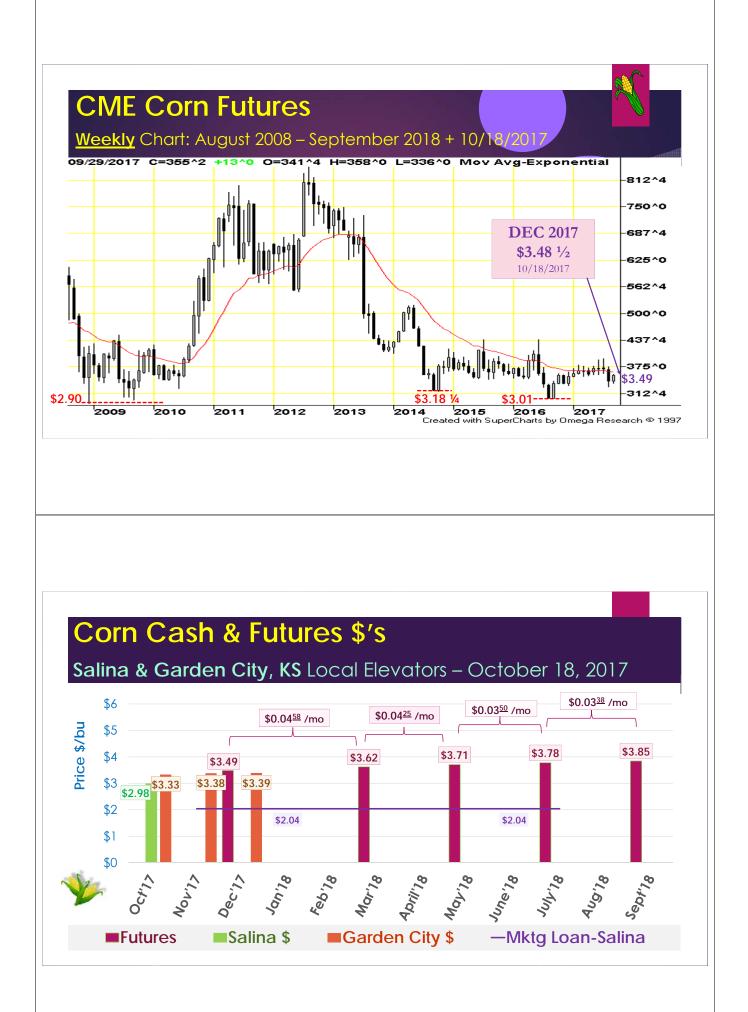
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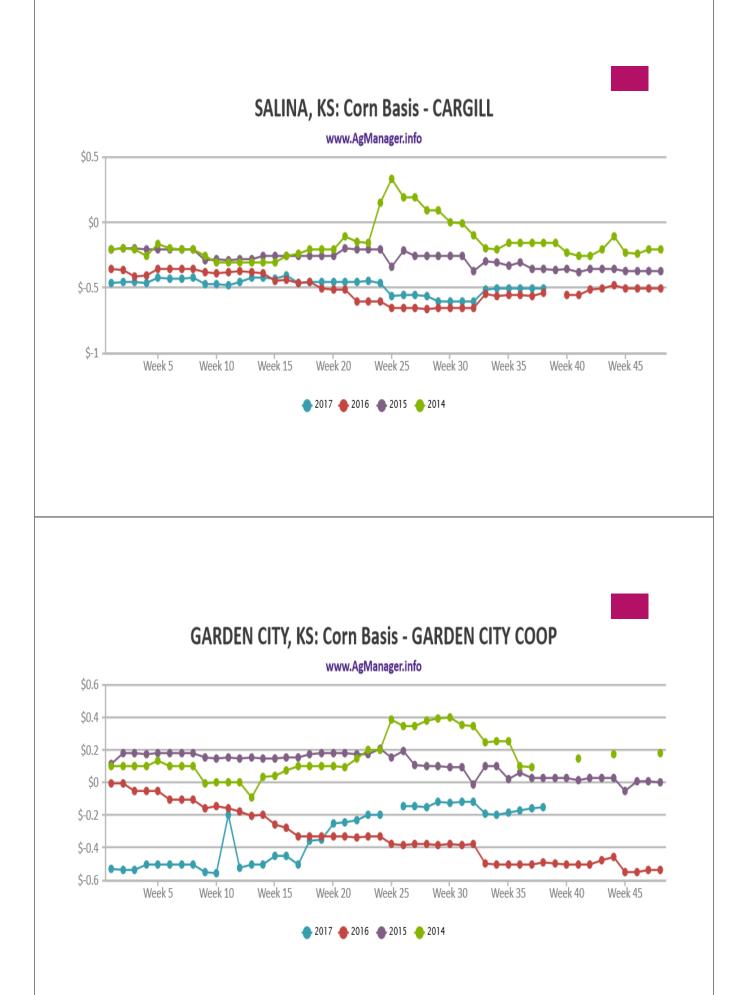
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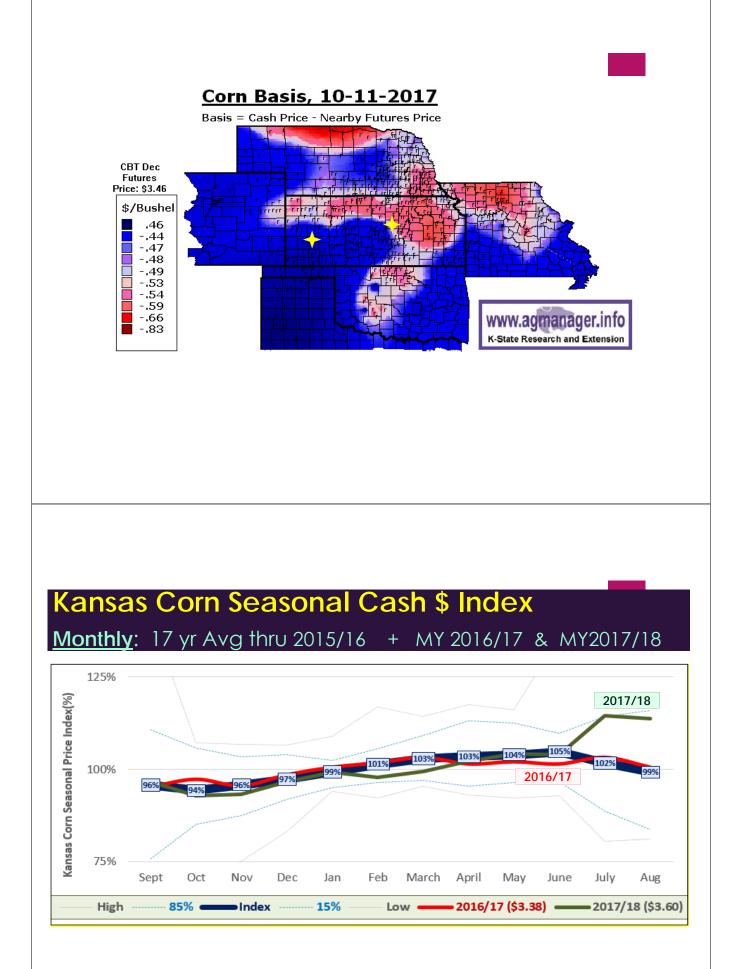
U.S. Corn & Grain Sorghum Stocks.....

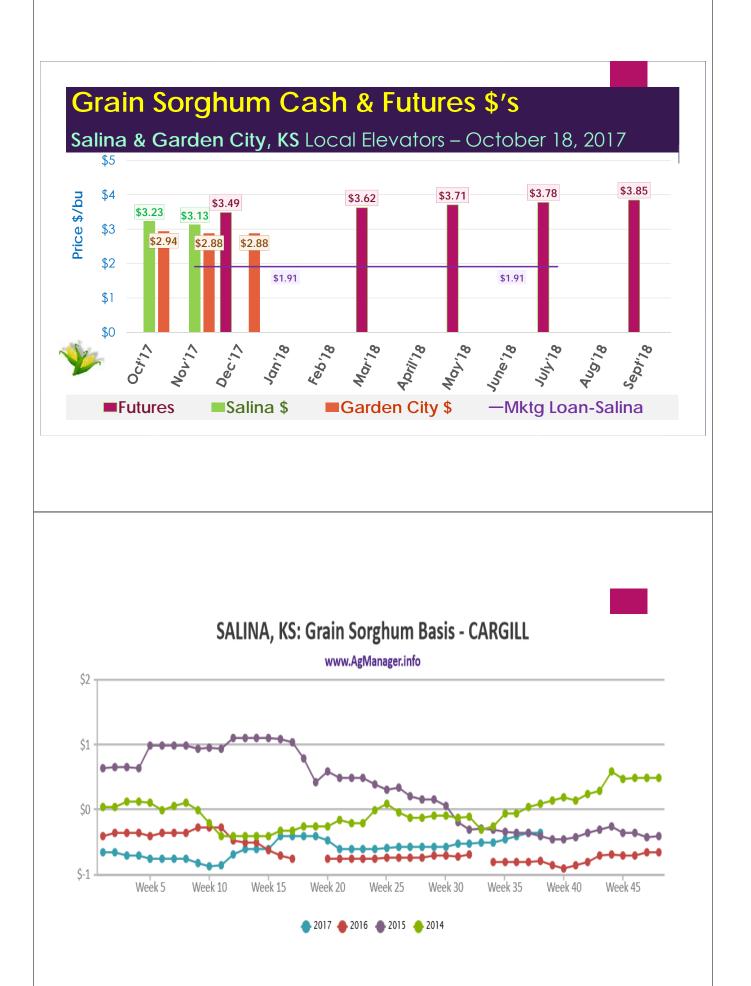
- <u>Corn</u>: "Large" Stocks & % Stx/Use
 - End Stocks ^{2017/18} \Rightarrow 2.340 bln bu (2nd highest since 1987/88)
 - % Stocks/Use ^{2017/18} ⇒ 16.4% S/U (Highest since 2005/06)
- Grain Sorghum: "Tighter" Stocks & % Stx/Use than Corn

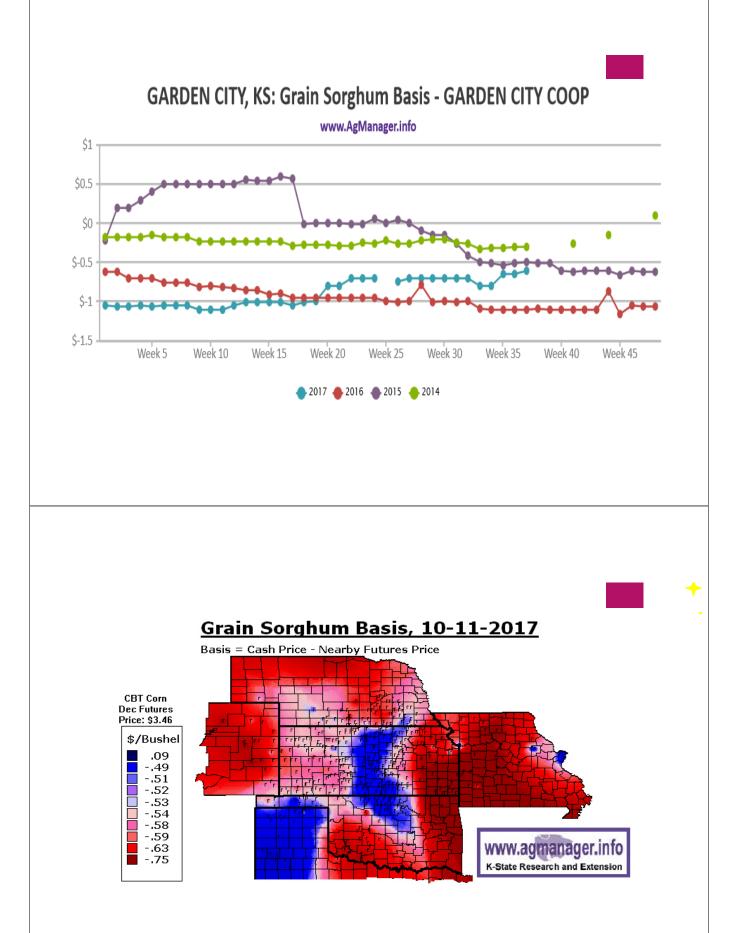
• End Stocks ^{2017/18}	⇒	28 Mln bu	(15 - 55 mb since 2008/09)
○ % Stocks/Use ^{2017/1}	8 🖒	7.6% S/U	(Highest since 2005/06)





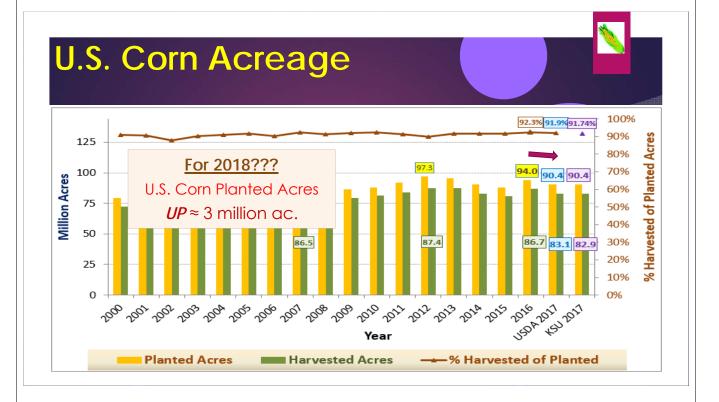


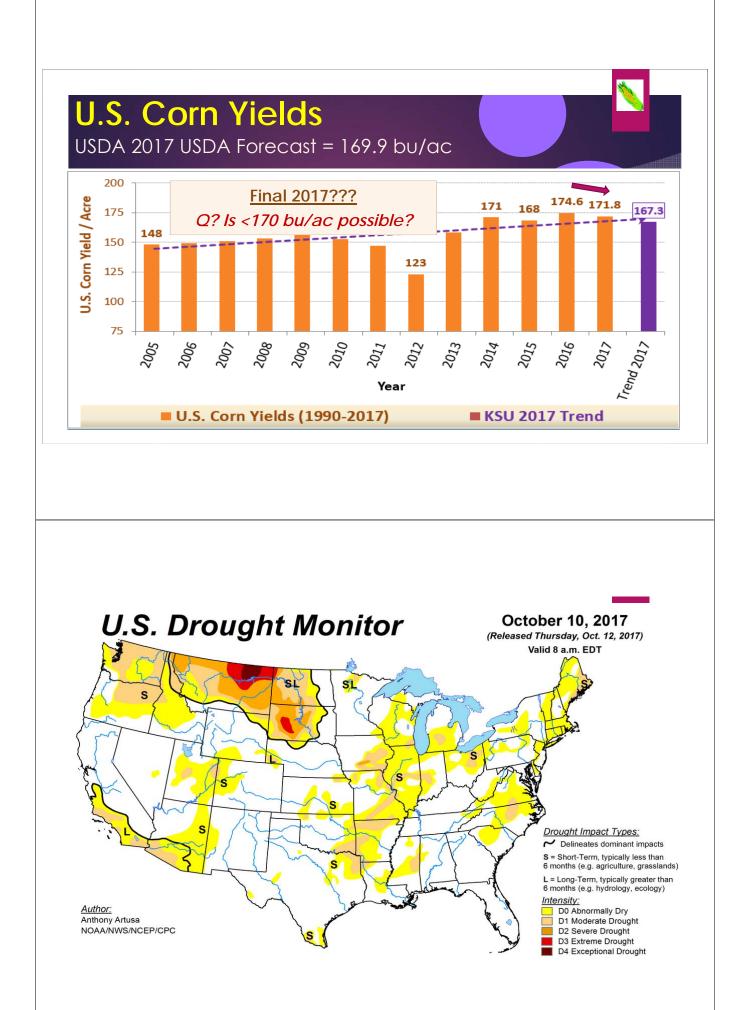


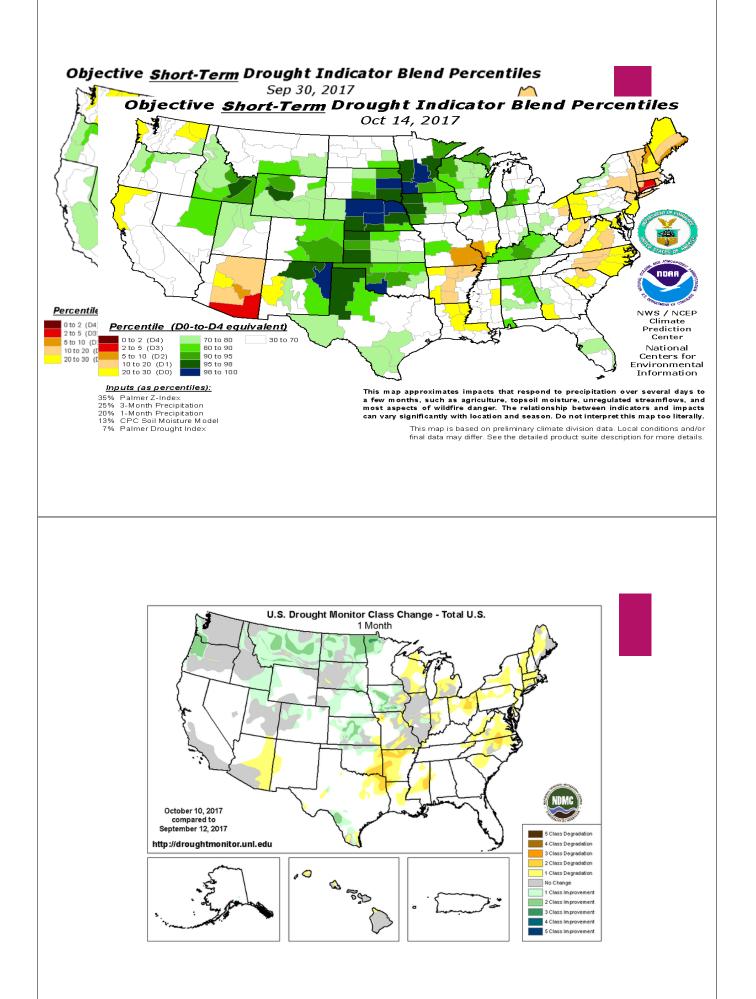


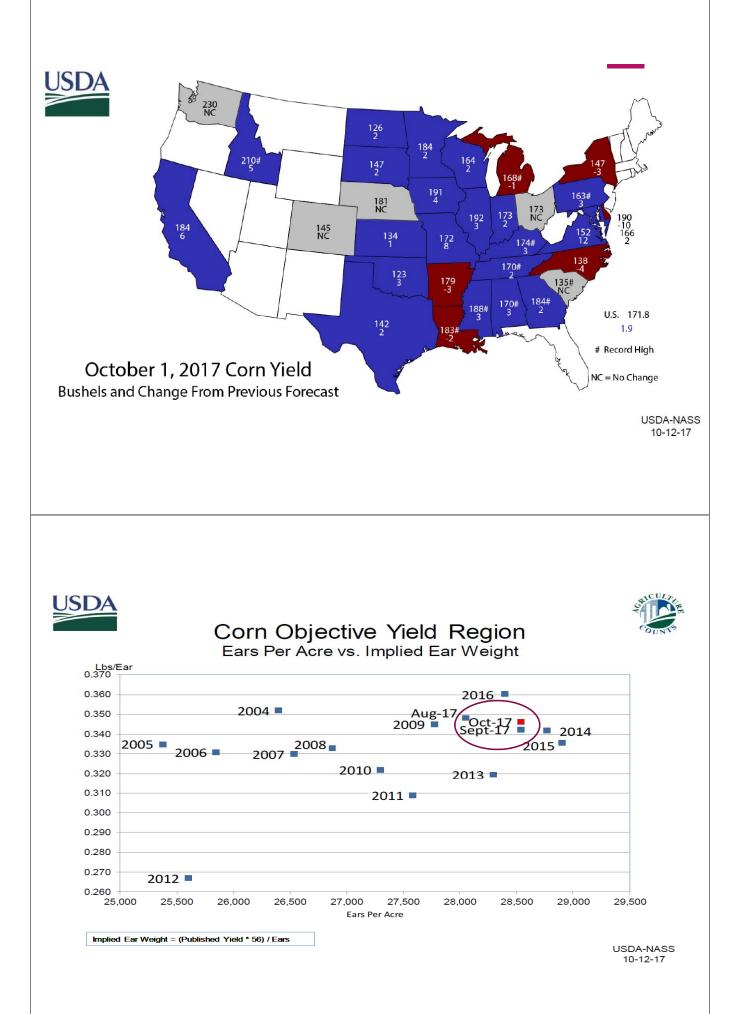
U.S. Corn Supply and Demand

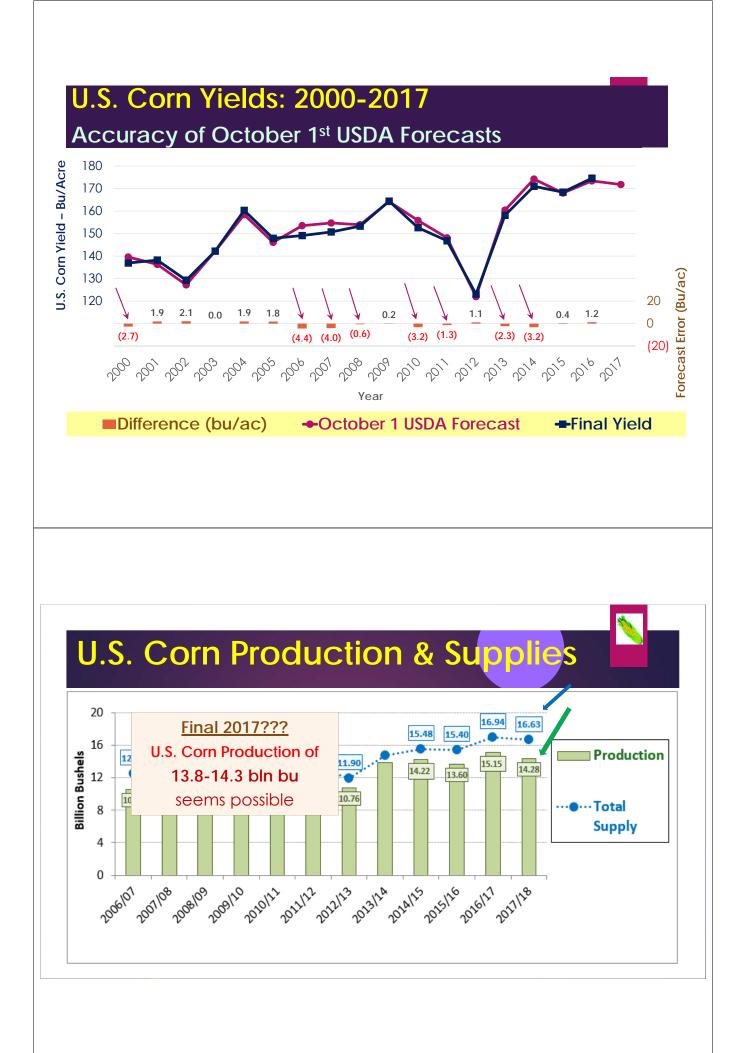
			2017/18		
	2016/17	2017/18	Change from	Change from	
	estimate	forecast	September 12	2016/17	
Planted area (million acres)	94.0	90.4	-0.5	-3.6	
Harvested area (million acres)	86.7	83.1	-0.4	-3.6	
Yield (bushels per acre)	174.6	171.8	1.9	-2.8	↓ Crop
		Million bushel	s		
Beginning stocks	1,737	2,295	-55	558	BUT still
Production	15,148	14,280	96	-868	Large Supply
Imports	57	50		-7	Large Suppry
Total supply	16,942	16,625	41	-317	
Feed and residual	5,464	5,500	25	36]	
Food, seed, and industrial	6,890	6,935	10	45	
Ethanol	5,438	5,475		37	☆ Domestic Use
Domestic use	12,354	12,435	35	81	- &
Exports	2,293	1,850		-443	
Total use	14,647	14,285	35	-362	Exports
Ending stocks	2,295	2,340	6	45	
-		Percent		ے ۲	爺 Stocks/Use
Stocks to use ratio	15.7	16.4	0.0	0.7	
		Dollars per bush	hel	1	- &
Average market price	3.36	2.80/3.60		-0.16	

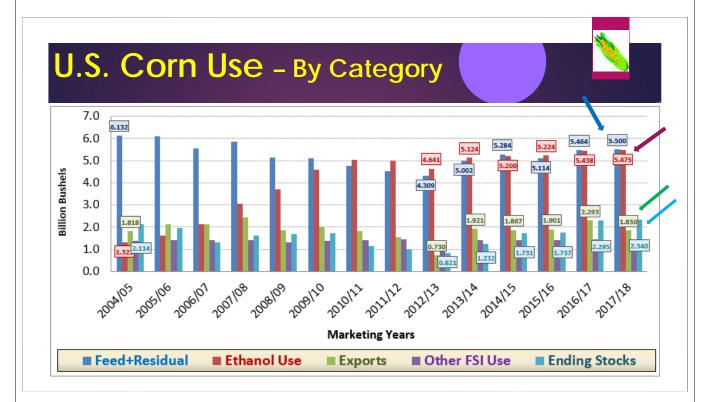












U.S. Meat Production and Prices

	2017	2018	2018 Change from	Change from
.	forecast	forecast	September 12	2017
Production		Billion pour	nds	
Beef	26.55	27.30	0.02	0.75
Pork	25.83	26.86	0.14	1.03
Broilers	41.44	42.28		0.84
Turkey	6.01	6.14	-0.04	0.13
Total meat	100.59	103.34	0.12	2.75
Prices		Dollars/cw	vt	
Steers	119.55	115.25		-4.30
Hogs	49.01	45.25	-3.00	-3.76
		Cents/lb		
Broilers	93.8	88.5		-5.3
Turkey	98.8	104.3	-0.3	5.4

U.S. Corn Exports – Weekly thru October 5, 2017

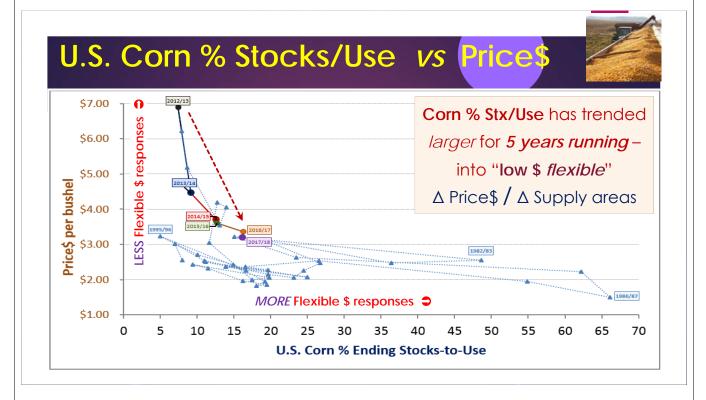


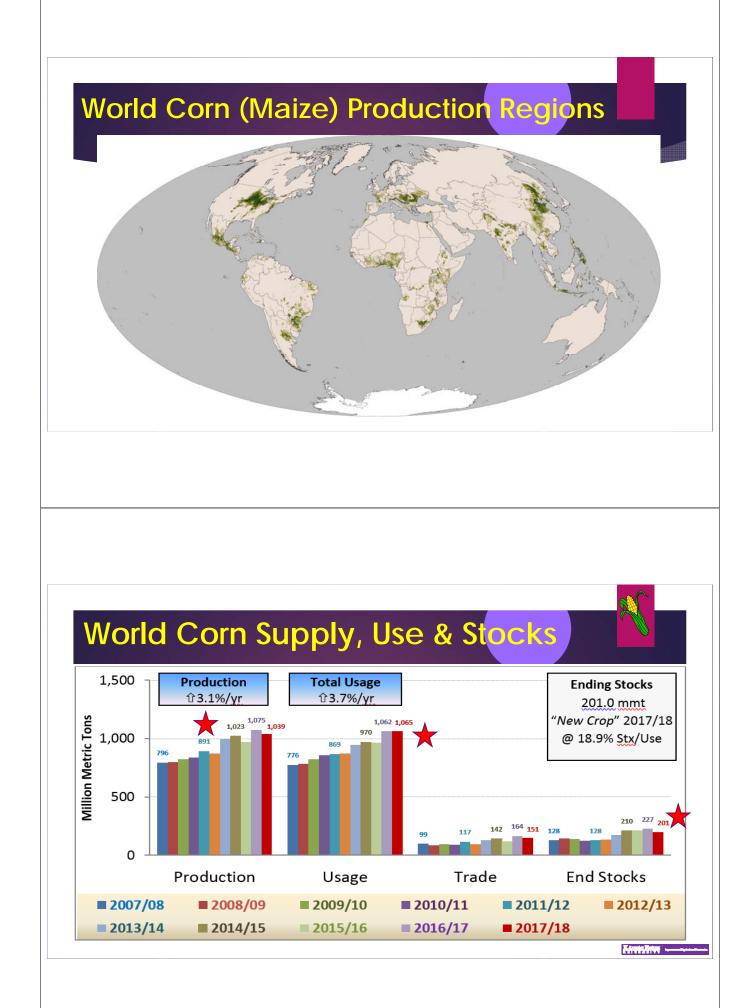


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2005/06 2008/05 200

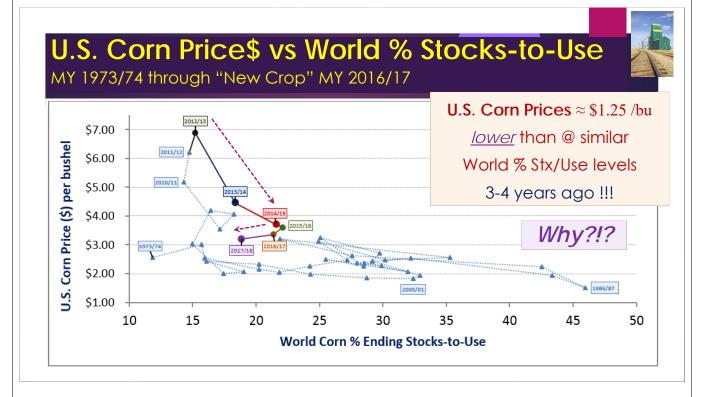


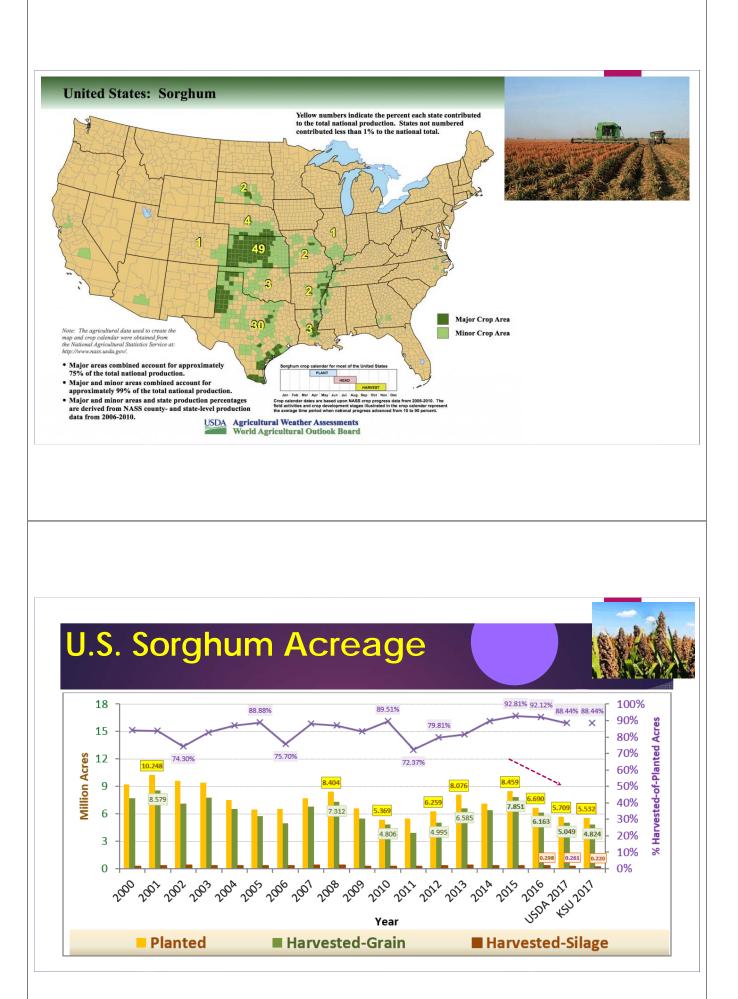


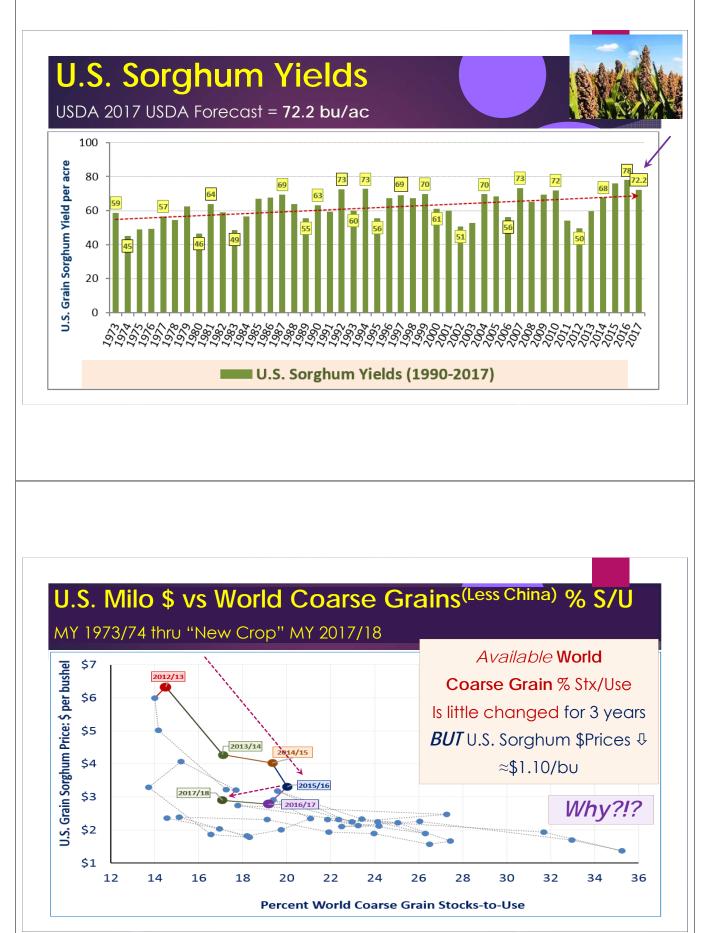


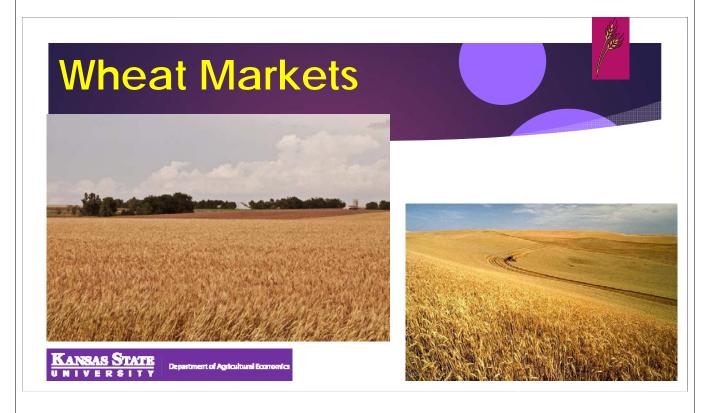
World Corn Production

			Change		
Country or	2016/17	2017/18	from	Change from	
Region	estimate	forecast	September 12	2016/17	
		M	illion Tons		~ n
World	1,075.3	1,038.8	6.17	-36.5 ↓ World Cro	γþ
United States	384.8	362.7	2.43	-22.0 - BUT still	
Foreign	690.6	676.1	3.74	-14.5 _ Large Supp	Jv
Argentina	41.0	42.0		1.0 T	.,
Brazil	98.5	95.0		-3.5	
Mexico	27.6	26.2	0.20	- 1.4	
Canada	13.2	14.1	0.20	0.9	
European Union	61.1	59.4		-1.7 🗸 EU	
Serbia	7.6	4.0		-3.6 🛛 🖓 Brazil	
FSU-12	47.4	46.5	-1.20	- 0.8 BUT	
Ukraine	28.0	27.0	-0.50	-1.0	
Russia	15.3	15.3	-0.70	-0.0 î Argentin	ıa
South Africa	17.5	12.5		-5.0 î Canada	1
China	219.6	215.0		-4.6	
India	26.3	25.0		-1.3	









U.S. Wheat Market Overview

- U.S. Wheat <u>Production</u> trending <u>lower</u> (to a 15 year low in 2017)
- Large U.S. & World Stocks continue to limit Wheat Price\$'s **
- "Moderate" Exports limiting 2017/18 Wheat Disappearance
 - Exports ^{2017/18} = 975 mln bu (778 mb 1.291 bb range since 2008/09)
 - Food Use ^{2017/18} = 950 mln bu (<u>Level</u> Food Use since MY 2012/13)
 - Feed Use+ ^{2017/18} = 120 mln bu (*Down from 228-365 mb in 2012 2013*)
 - HRW Exports ^{2017/18} = 390 mln bu (*Down* from 455 mb in MY 2016/17)

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U.S. Wheat Stocks.....

 <u>All U.S. Wheat</u>: "Large" Stocks (but declining) 								
 o End Stocks ^{2017/18} ⇒ 	960 mln bu	(1.181 bb last year)						
o % Stocks/Use ^{2017/18} ⇒	45.5% S/U	(53.2% S/U last year)						
		• <u>U.S. HRW Wheat</u> : " <i>Large</i> " Carryovers (but <u>also</u> declining)						
• <u>U.S. HRW Wheat</u> : <i>"Larg</i> e	e" Carryove	rs (but <u>also</u> <i>declining)</i>						
• <u>U.S. HRW Wheat</u> : " <i>Large</i> ∘ End Stocks ^{2017/18} ⇒	e " Carryove 487 mln bu	rs (but <u>also</u> declining) (589 mb last year)						

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U.S. Wheat Quality & Grade

- U.S. HRW Wheat ²⁰¹⁷ ⇒ 11.4% protein, 60.8 lb test, 1.1% defects
 Versus 11.2% protein, 60.7 lb test wt, 1.2% defects in 2016
- <u>U.S. SRW Wheat ²⁰¹⁷</u> ⇒ 9.5% protein, 58.8 lb test, 1.7% defects
 Versus 9.4% protein, 58.6 lb test wt, 1.4% defects in 2016
- <u>U.S. Soft White ²⁰¹⁷</u> ⇒ 9.6% protein, 60.9 lb test, 0.6% defects
 o Versus 10.1% protein, 60.8 lb test wt, 0.6% defects in 2016
- U.S. HRS Spring Wheat ²⁰¹⁷ ⇒ 14.6% protein, 61.2 lb test, 1.0% defects
 o Versus 14.2% protein, 61.3 lb test wt, 0.9% defects in 2016

World Wheat Market Prospects Large Supplies ⇒ A "Buyer's Market" <u>Record</u> Supplies & <u>Large</u> Usage Forecast for 2017/18 • 4 consecutive record high World wheat crops Varying 2017/18 Crop Prospects by Country Still a "buyer's market" for World Wheat Trade....but.... Uncertainty about U.S. & World Crops in 2017-2018? BUT a TIGHT "World-Less-China" supply situation has emerged*** KANNAS STATE CME Kansas Hard Red Winter Wheat Monthly Chart: August 2008 – September 2017 + 10/18/20 09/29/2017 C=442^ $1 = 407^{0}$ Mov Avg-Exponential 1000^0 937^4 875^0 **DEC 2017** 812^4 \$4.28 750^0 10/18/2017 687^4 [┩]┧_{┛╹}┙┥</sub> ┛┙[┩]┧┿┪╴║┨ ┪┿[┿]┫┿┿╸ 625^0 6 01 562^4 500^0 437^4

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2009

2010

2011

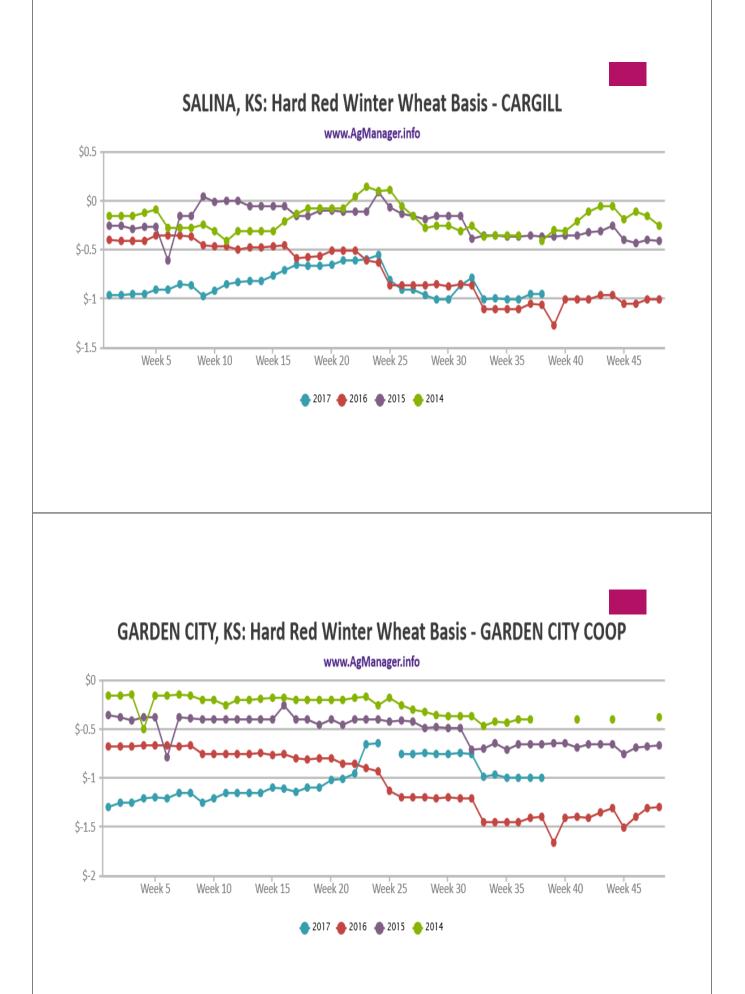
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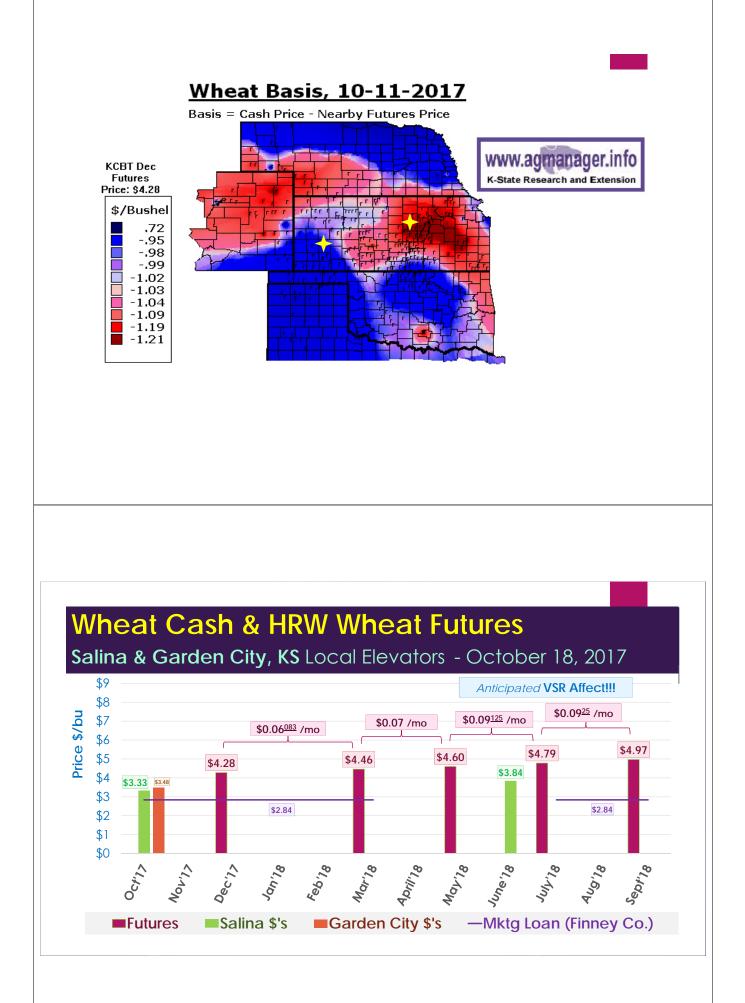
2013

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2014 2015 2016 2017 Created with SuperCharts by Omega Research © 1997

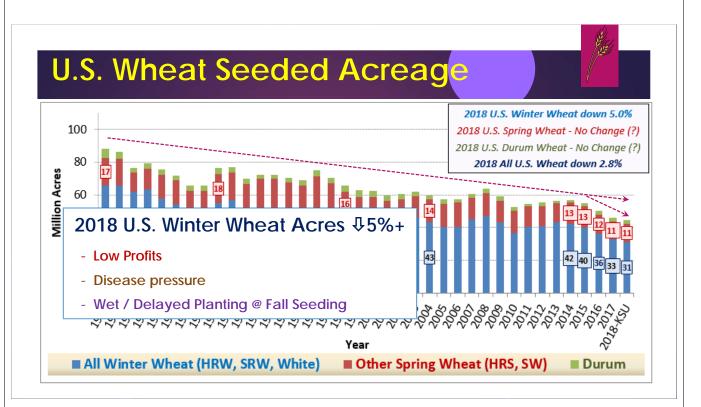
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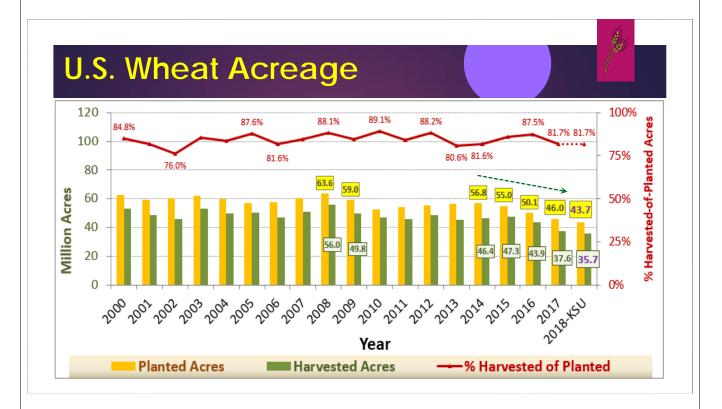


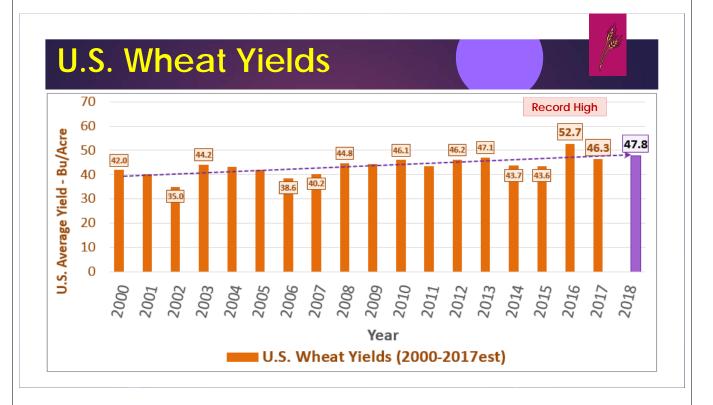


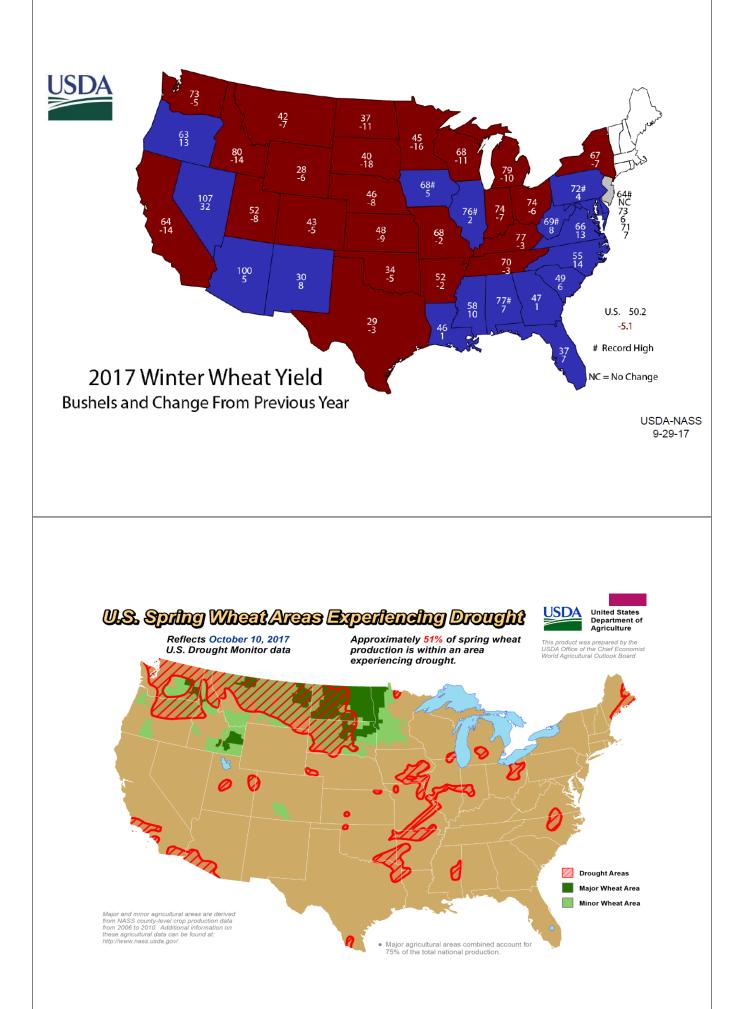
U.S. Wheat Supply and Demand

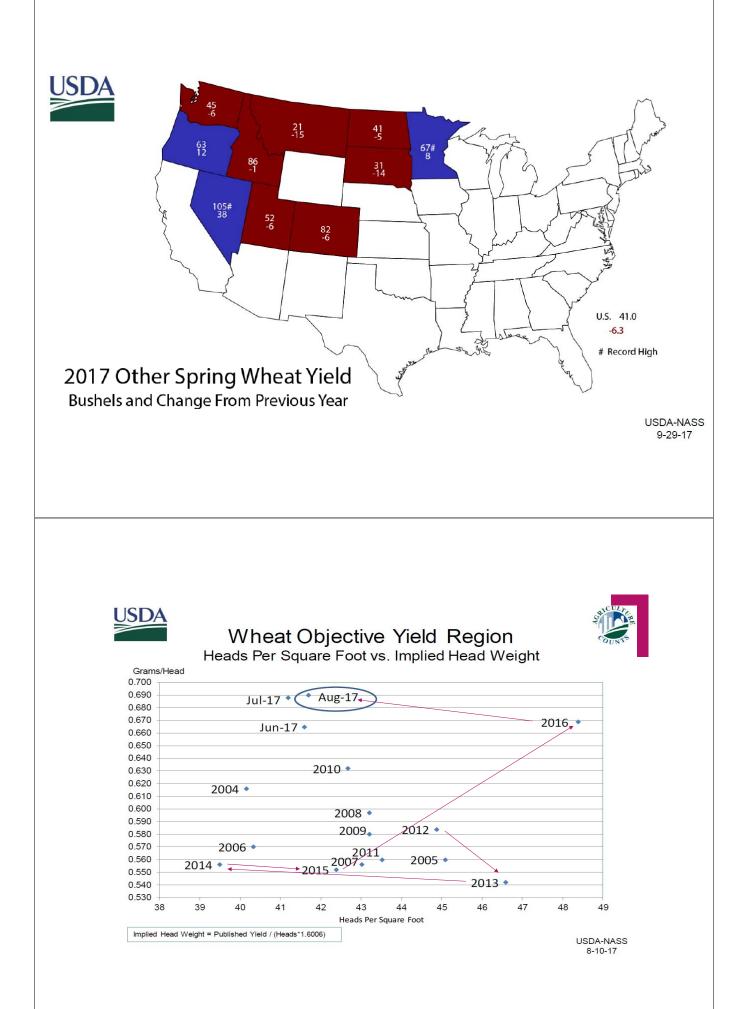
			Change		
	2016/17	2017/18	from	Change from	
	estimate	forecast	September 12	2016/17	
Planted area (million acres)	50.1	46.0	0.4	-4.1	
Harvested area (million acres)	43.9	37.6	-0.5	-6.3	
Yield (bushels per acre)	52.7	46.3	0.7	-6.3	↓ Crop
		Milli	on bushels	ļ	- BUT still
Beginning stocks	976	1,181	-4	205	DUT SUII
Production	2,309	1,741	1	-568	Large Supply
Imports	118	150		32	5 11 5
Total supply	3,402	3,071	-2	-331	
Food use	949	950		1 7	
Seed	61	66		5	Less Domestic Use
Feed and residual	157	120	-30	-37	&
Domestic use	1,167	1,136	-30	-31	
Exports	1,055	975		-80	Exports
Total use	2,222	2,111	-30	-111	
Ending stocks	1,181	960	28	-220	
g	_,	F	Percent		Stocks/Use
Stocks to use ratio	53.1	45.5	1.9	-7.7	- &
		Dollar	s per bushel		① Prices
Average market price	3.89	4.40/4.80		0.71	111005





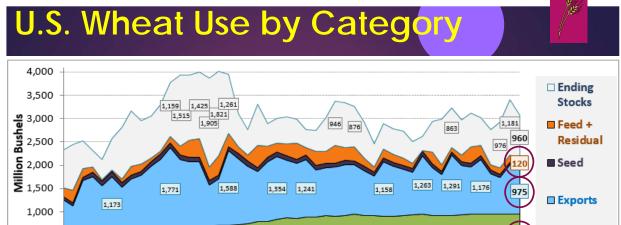


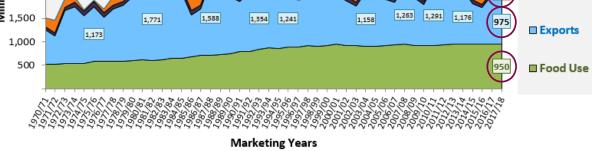




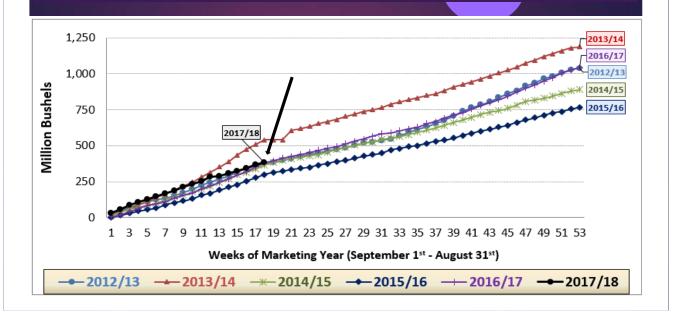




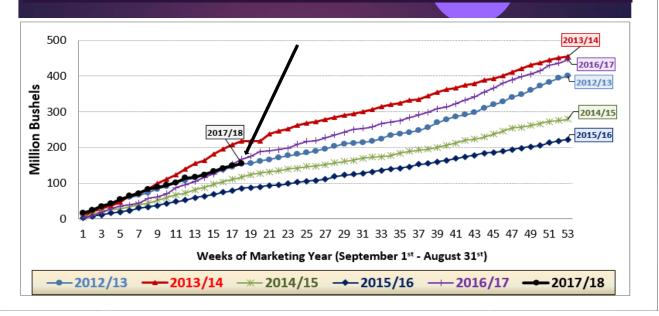


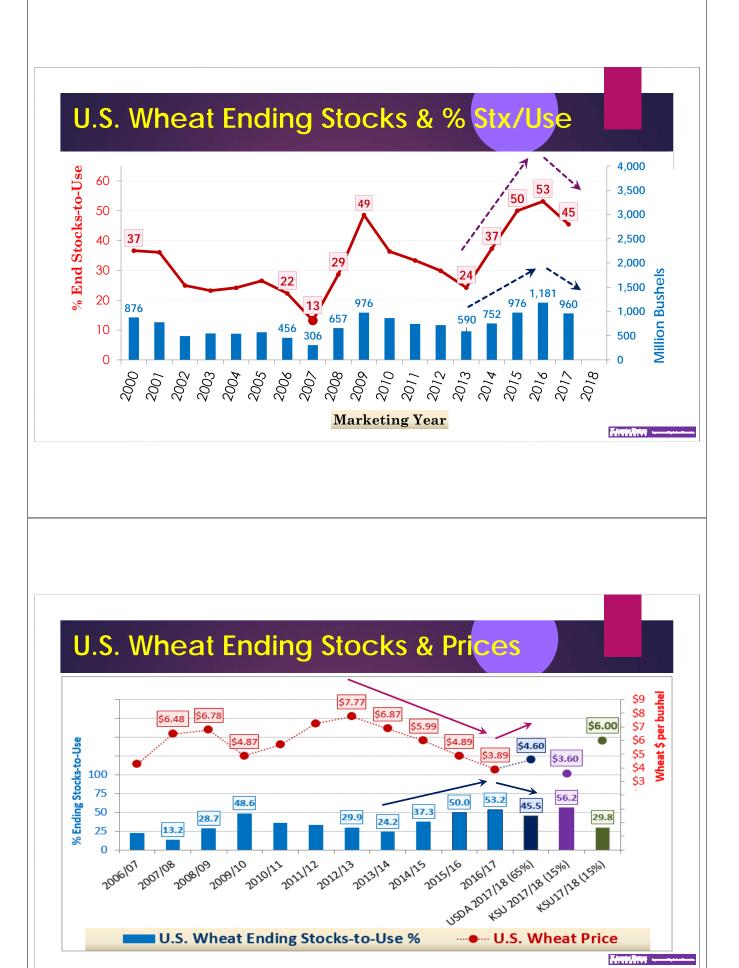


U.S. All Wheat Exports - Weekly thru October 5, 2017

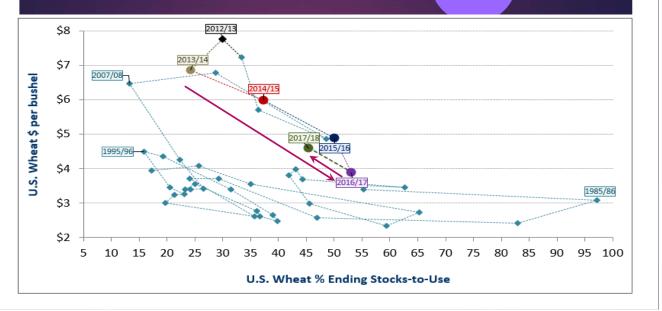


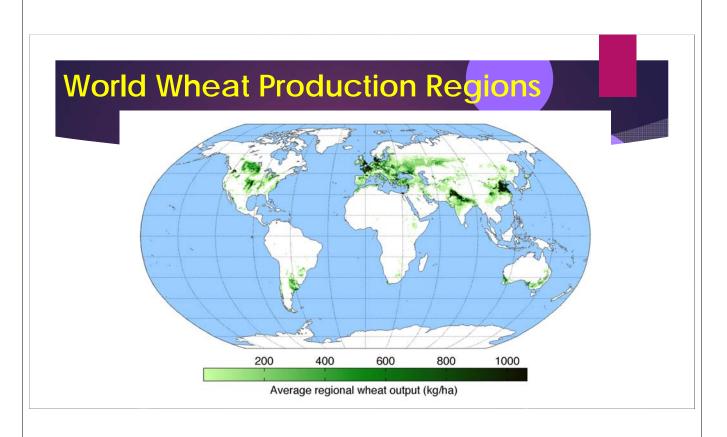
U.S. Hard Red Winter Wheat Exports - Weekly

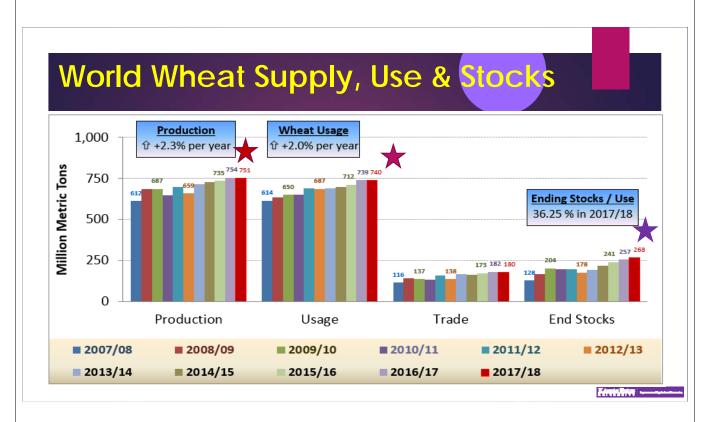




U.S. Wheat Price vs U.S. Stocks-to-Use







World Wheat Production

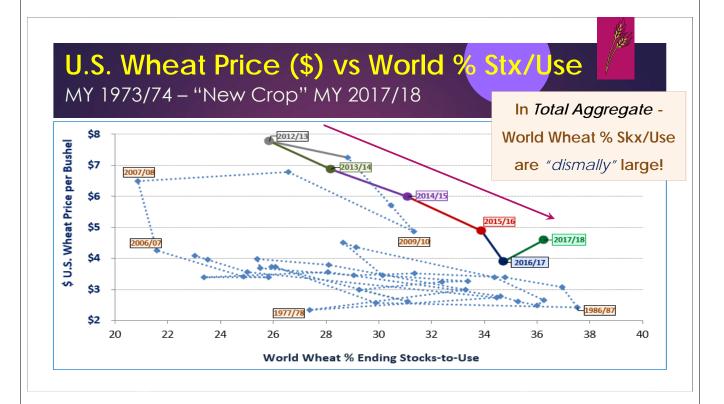
			Change		
	2016/17	2017/18	from	Change from	
Country or Region	estimate	forecast	September 12	2016/17	
		Mil	lion Tons	_	↓ World & U.S. Crop
World	754.2	751.2	6.3	-3.0	
United States	62.8	47.4	0.0	-15.5	BUT
Foreign	691.3	703.8	6.3	12.5	☆ Foreign Wheat
Argentina	18.4	17.5		-0.9	
Canada	31.7	27.0	0.5	-4.7	
Australia	33.5	21.5	-1.0	-12.0	☆ Russia, Turkey,
European Union	145.5	151.0	2.2	5.6	û EU, India, China
Turkey	17.3	21.0	1.0	3.8	BUT
Russia	72.5	82.0	1.0	9.5	-
Ukraine	26.8	26.5		-0.3	Canada
Kazakhstan	15.0	14.0		-1.0	Australia
China	128.9	130.0		1.2	♣ Kazakhstan
India	87.0	98.4	2.4	11.4	

World Wheat Supply and Use

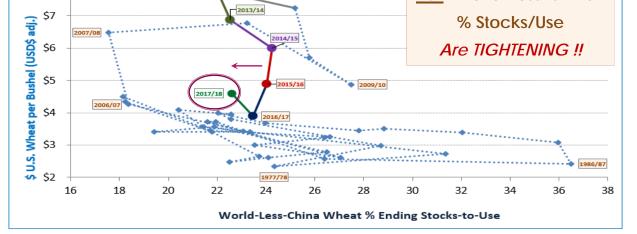
			Change		
	2016/17	2017/18	from	Change from	
	estimate	forecast	September 12	2016/17	
		Mi	llion Tons		
Beginning stocks	241.2	256.6	0.7	15.4	û Beg. Stoc
Production	754.2	751.2	6.3	-3.0	- ↓ Productio
Total Supply	995.4	1,007.8	7.1	12.4	
Feed use	147.3	141.5	0.9	-5.8]
Total use	738.8	739.6	2.1	0.9	↓ Total Us
Trade	182.5	180.0	0.0	-2.4	
Ending Stocks	256.6	268.1	5.0	11.6 -	













U.S. Soybean Supply-Use

2017 U.S. Soybean Production & Supplies @ record HIGHS

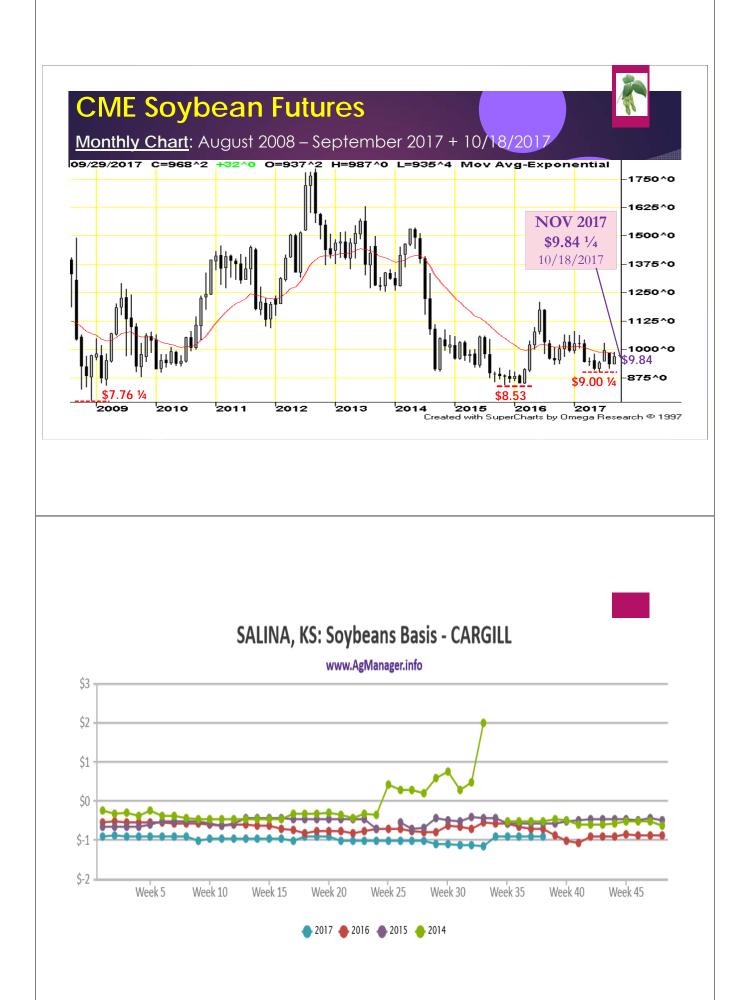
- Large Soybean Stocks in U.S. & So. America** limit Price\$'s
- Low Price\$'s support Use in "New Crop" MY 2017/18 ***
 - Soy Crush ^{2017/18} = 1.940 bln bu (*Record vs 1.899 bb 1 year ago*)
 - **Exports** $^{2017/18}$ = 2.250 bln bu (*Record vs* 2.174 bb 1 year ago)
 - Total Use ^{2017/18} = 4.326 bln bu (*Record vs 4.214 bb 1 year ago*)
 - SBM Use ^{2017/18} = 46.4 mln tons (*vs* 44.95 in MY 2016/17 & 45.1 in MY 2015/16)

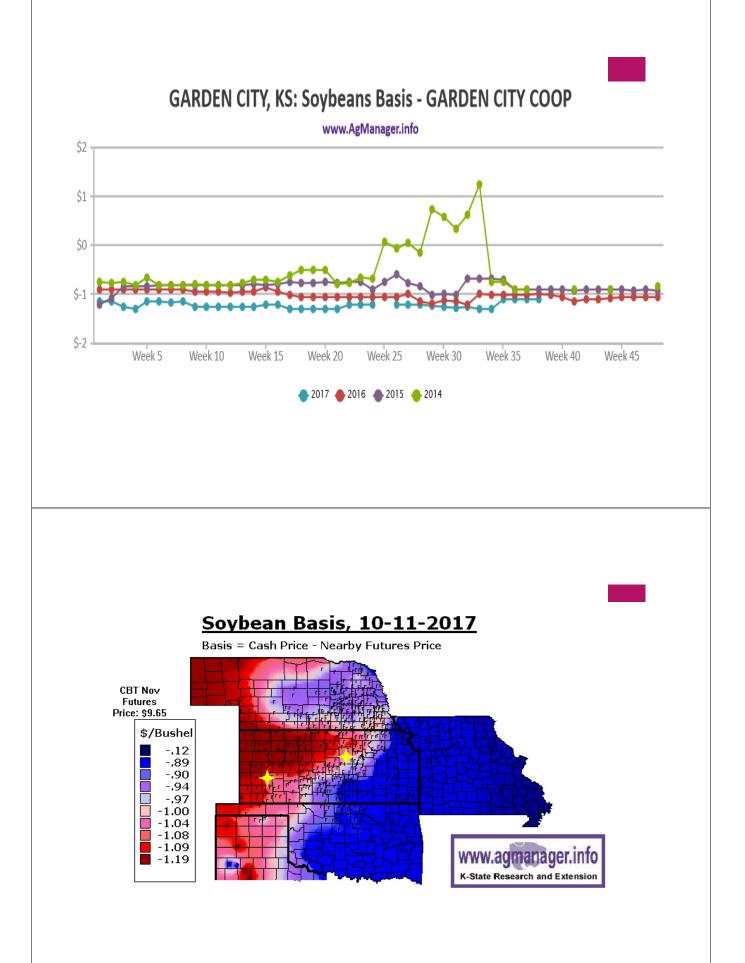
U.S. Soybean & Cotton Stocks.....

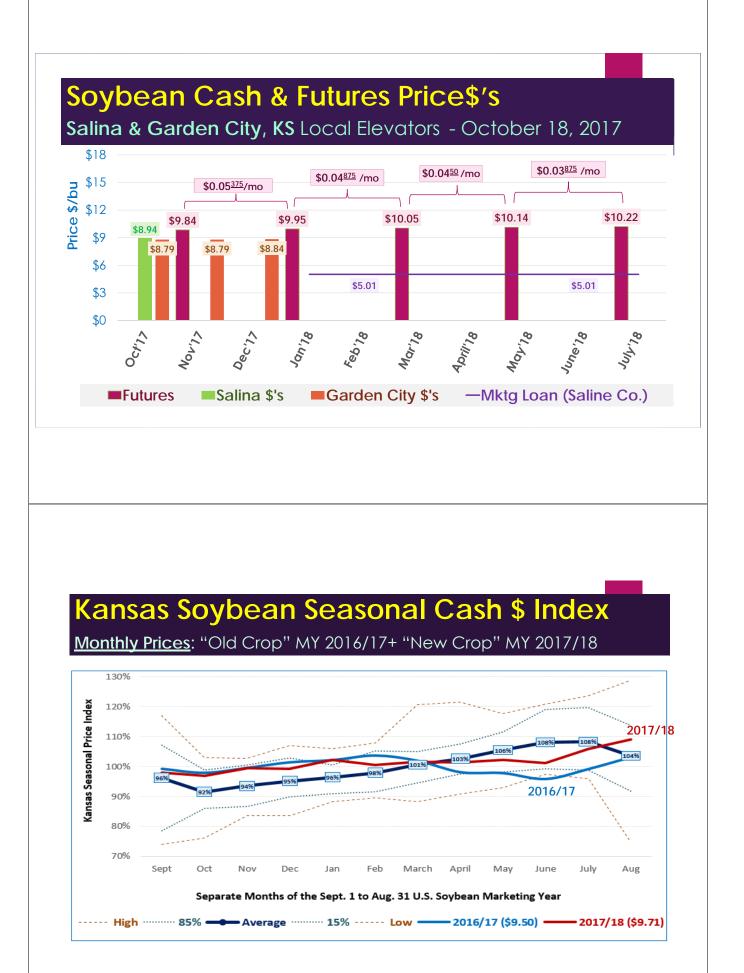
- <u>Soybean</u>: "Large" Stocks & % S/U
 - End Stocks ^{2017/18} ⇒ 430 mln bu (*High vs 574 mb in 2006/07*)
 - % Stocks/Use ^{2017/18} ⇒ 9.9% S/U (High vs 18.6% in 2006/07)

<u>Cotton</u>: "Large" 2017 Crop & "Growing" Stocks

- **Production**^{2017/18} ⇒ 21.1 mln bales (17.2 & 12.9 mb last 2 years)
- End Stocks ^{2017/18} ⇒ 5.8 mln bales (2.75 & 3.8 mb last 2 years)
- % Stocks/Use ^{2017/18} ⇒ 32.5% S/U** (15.1% & 30.2% last 2 years)

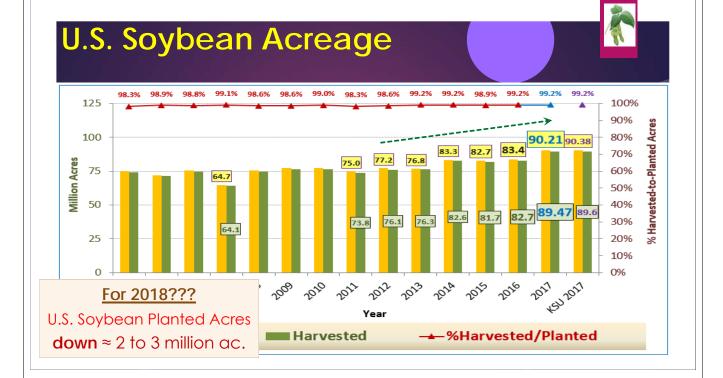


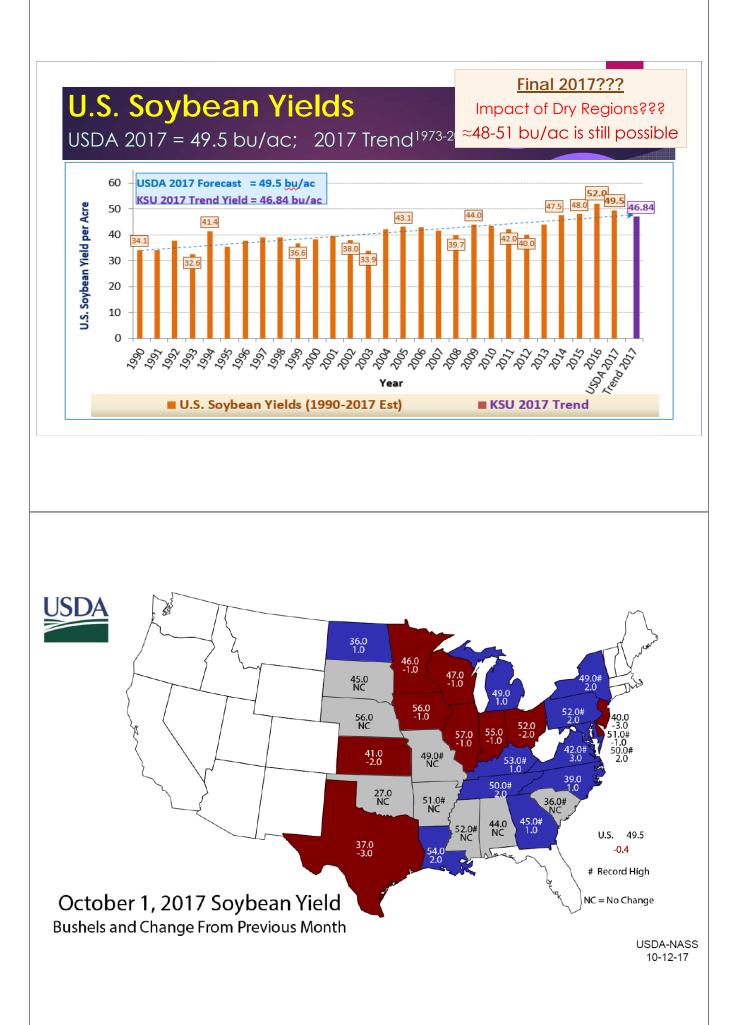


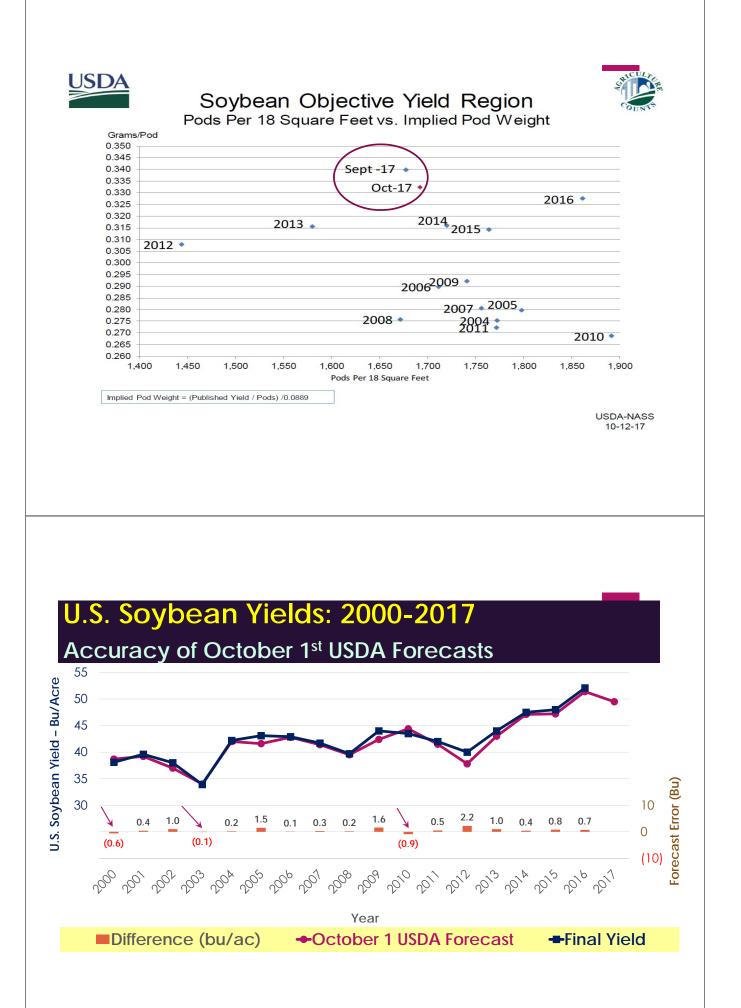


U.S. Soybean Supply and Demand

	Change				
	2016/17	2017/18	from	Change from	
	estimate	forecast	September 12	2016/17	
Planted area (million acres)	83.4	90.2	0.7	6.8	ן
Harvested area (million acres)	82.7	89.5	0.7	6.8	
Yield (bushels per acre)	52.0	49.5	-0.4	-2.4	企 Record Crop
	Million bushels				- and
Beginning stocks	197	301	-44	105	
Production	4,296	4,431	-0	135	Large Supply
Imports	22	25		3	
Total supply	4,515	4,757	-45	242 _	J
Crush	1,899	1,940		41	ि Record Use
Seed and residual	141	136	-0	-5	
Domestic use	2,040	2,076	-0	36	L &
Exports	2,174	2,250		76	仓 Exports
Total use	4,214	4,326	-0	113 _	J
Ending stocks	301	430	-45	129]
0		Per	cent		☆ Stocks/Use
Stocks to use ratio	7.2	10.0	-1.0	2.8	- &
		Dollars p	er bushel		♣ Prices
Average market price	9.47	8.35/10.05		-0.27 -	J







U.S. Soybean Production & Supplies



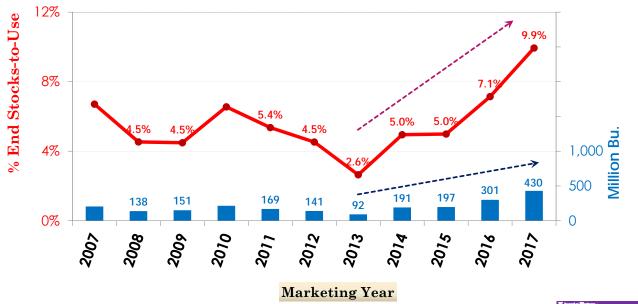
U.S. Soybean Use & End Stocks



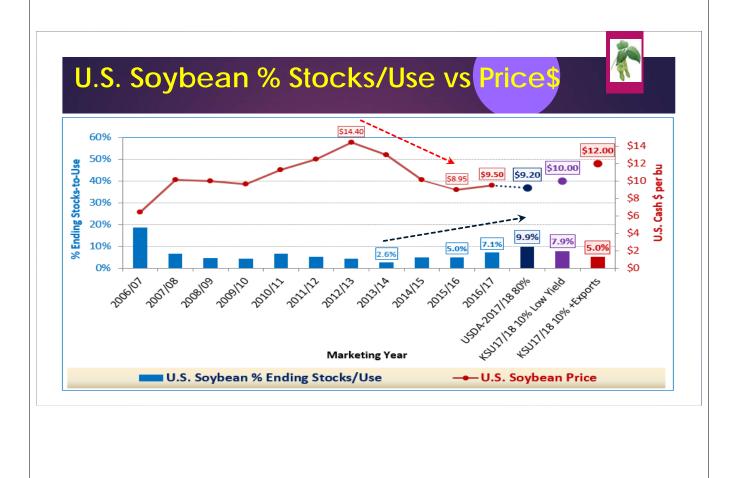
U.S. Soybean Exports - Weekly



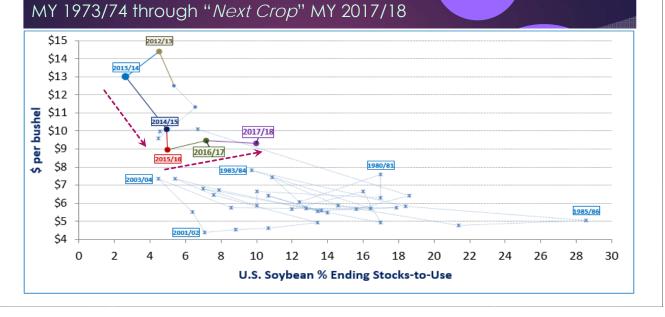




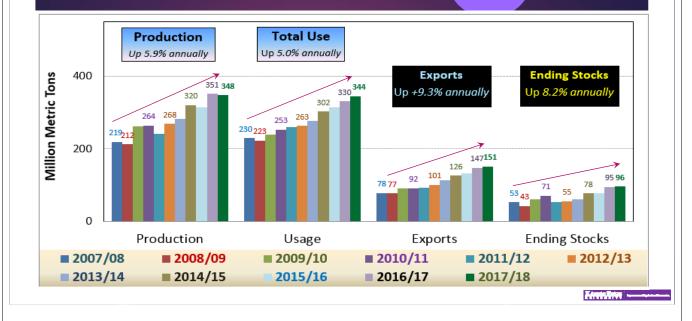
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U.S. Soybean \$ vs U.S. Stx-to-Use



World Soybean Supply, Use & Stocks

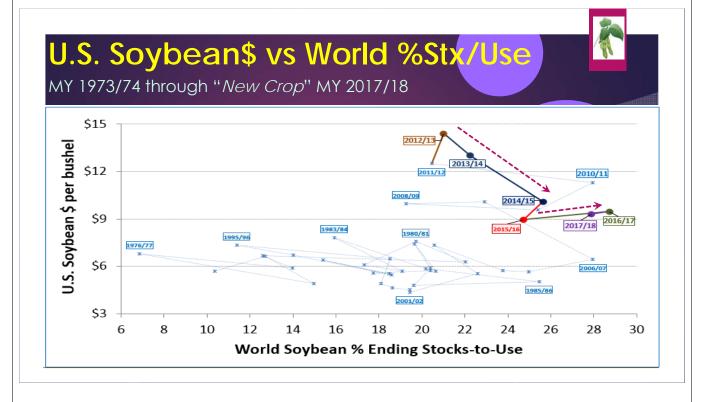


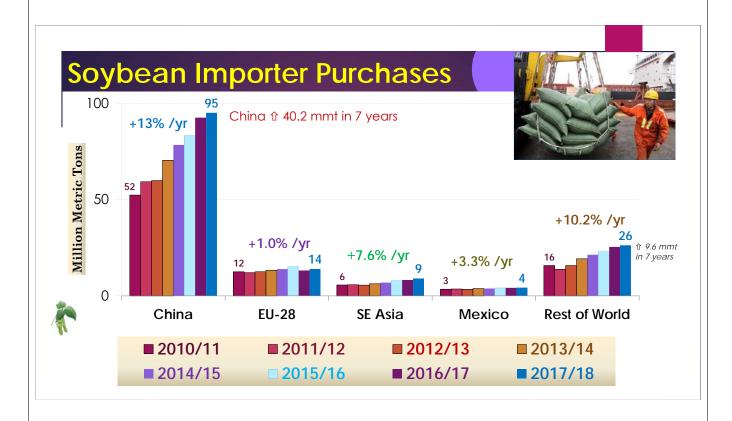
World Soybean Production

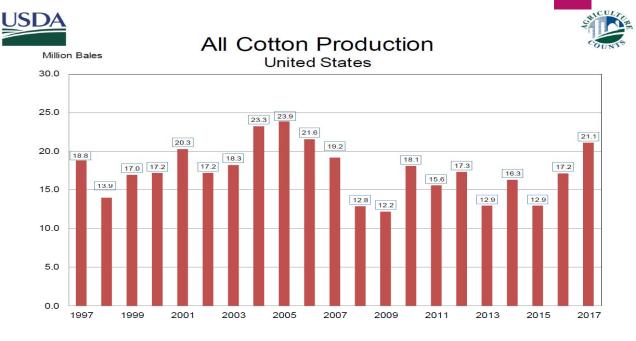
			Change		
Country or	2016/17	2017/18	from	Change from	
Region	estimate	forecast	September 12	2016/17	
		Λ	Aillion Tons		
World	351.3	347.9	-0.6	-3.4	Vorld Crop
United States	116.9	120.6	0.0	3.7	む U.S. Crop
Foreign	234.3	227.3	-0.5	-7.0	♣ Foreign Cro
Argentina	57.8	57.0		-0.8	û Canada
Brazil	114.1	107.0		-7.1	û China
Paraguay	10.7	9.4		-1.3	- U Brazil
Canada	6.5	8.2		1.7	- ↓ Paraguay
India	11.5	10.0		-1.5	
China	12.9	14.2	0.2	1.3	♣ India

	Change				
	2016/17	2017/18	from	Change from	
	estimate	forecast	September 12	2016/17	
	Million Tons				
Beginning stocks	77.7	94.9	-1.1	17.1	
Production	351.3	347.9	-0.6	-3.4	
Total Supply	429.0	442.8	-1.6	13.7	
Domestic crush	288.4	301.3	0.6	12.8	
Total use	330.3	344.4	0.1	14.1	
Trade	147.5	151.0	-0.5	3.5	
Ending Stocks	94.9	96.0	-1.5	1.2	
Addendum:					
Beginning stocks					
Argentina plus Brazil	49.9	60.4	-0.5	10.5	
Imports*					
China	92.5	95.0		2.5	

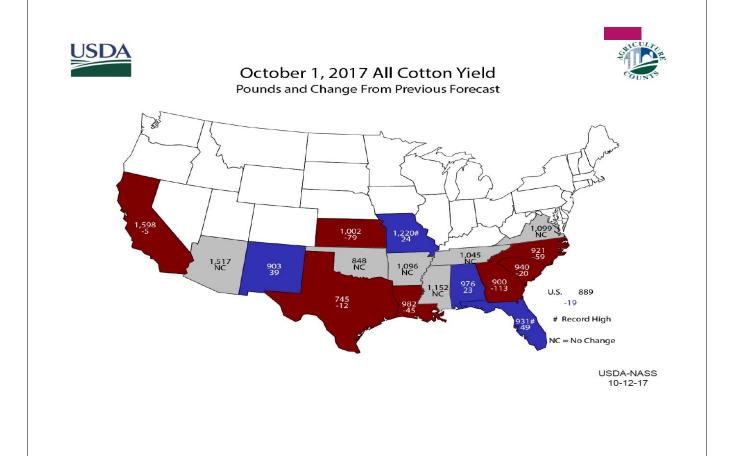
World Soybean Supply and Use







USDA-NASS 10-12-17



U.S. Cotton Supply and Demand

	Change				
	2016/17	2017/18	from	Change from	
	estimate	forecast	September 12	2016/17	
Planted area (million acres)	10.07	12.62		2.55	
Harvested area (million acres)	9.51	11.41	-0.10	1.90	
Yield (pounds per acre)	867	889	-19	22	
		Milli	on bales		
Beginning stocks	3.80	2.75		-1.05	
Imports	0.01	0.01		0.00	
Production	17.17	21.12	-0.64	3.95	
Total supply	20.98	23.88	-0.64	2.90	
Mill use	3.25	3.35		0.10	
Exports	14.92	14.50	-0.40	-0.42	
Total use	18.17	17.85	-0.40	-0.32	
Unaccounted	0.06	0.23	-0.04	0.17	
Ending stocks	2.75	5.80	-0.20	3.05	
C .	Percent				
Stocks/use	15.1	32.5	-0.4	17.4	
		Cents	per pound		
Average market price	68.00	55.0/65.0		-8.00	

World Cotton Supply and Use

	Change				
	2016/17	2017/18	from	Change from	
	estimate	forecast	September 12	2016/17	
	Million Bales				
Beginning stocks	96.7	89.6	0.00	-7.1	
Production	106.6	120.9	0.11	14.3	
Total Supply	203.3	210.4	0.11	7.1	
Consumption	113.7	118.0	0.26	4.3	
Trade	37.4	38.2	0.44	0.8	
Ending Stocks	89.6	92.4	-0.16	2.8	
Addendum:					
China Ending Stocks	48.4	39.5		-9.0	



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