Grain Market Outlook for 2015

KSU AgEcon 420

March 25, 2015

Daniel O'Brien, Extension Ag Economist

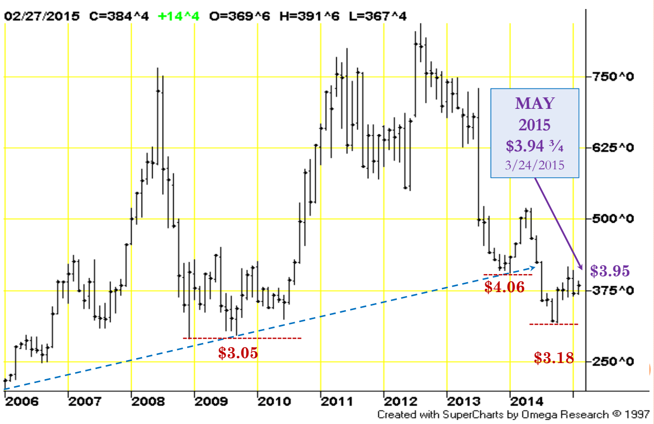
Kansas State University Department of Agricultural Economics

Feedgrain Market

Kansas State University Department of Agricultural Economics

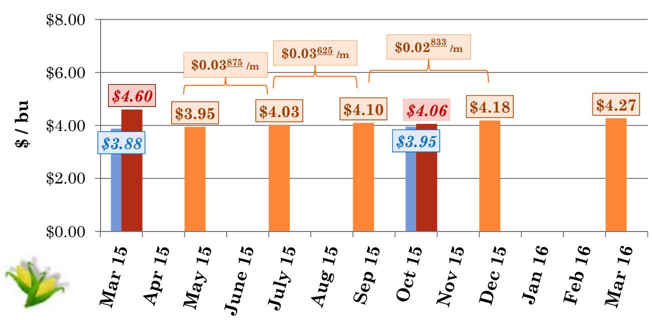
CBOT Corn Futures

Monthly Chart: January 2006 – February 2015 + 3/23/2015



Corn Futures - Feedgrain Cash$

Hutchinson, Kansas Local Elevators March 24, 2015



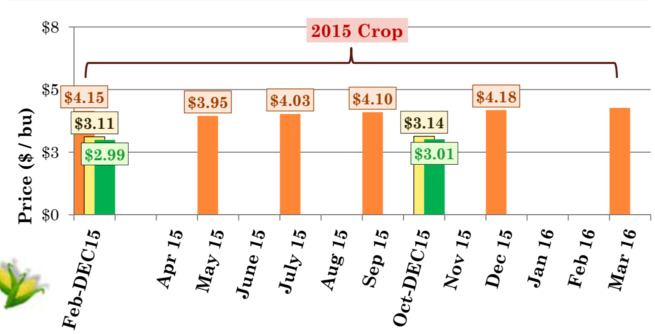
Feed Grain Market "Drivers"

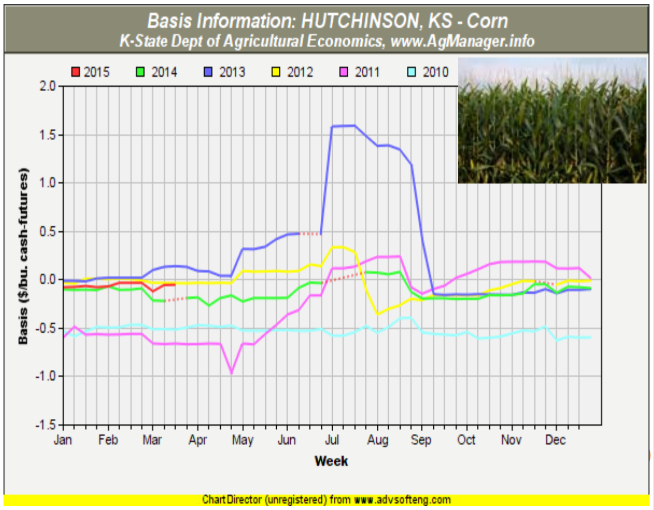
- A large 2014 U.S. corn crop & higher end stocks caused Kansas cash bids to ⇩ ($3.75-$3.88 /bu)
- ⇧ **World Corn/Coarse Grain** Supplies & Ending Stocks in "current" 2014/15
- **In Question**: Prospects for higher prices from late-March through Summer & Fall 2015???

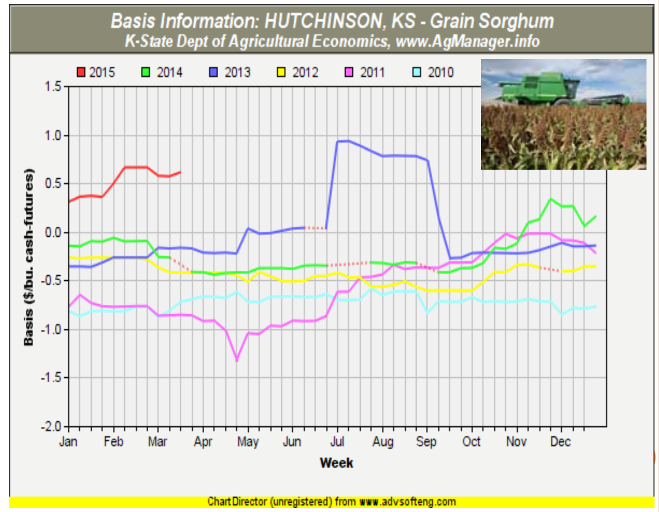
Q?: Will questions about 2015 U.S. corn planted acres & crop development *boost prices* seasonally in the spring-summer period?

Corn Futures & Crop Insurance

Crop Revenue price Calculations, March 23, 2015







U.S. Corn Supply-Demand

USDA WASDE Report: March 10, 2015 (Million Bushels)

	2012/13	2013/14	2014/15
Planted Ac. (mln.)	97.3	**95.4**	90.6
Harvested Ac (mln.)	87.4	**87.5**	83.1
Yield (bu./ac.)	123.4	**158.1**	171.0
Beginning Stocks	989	**821**	1,232
Imports	160	**36**	25
Production	10,755	**13,829**	14,216
Total Supplies	11,904	**14,686**	15,472
Ethanol	4,641	**5,134**	5,200
Other FSI	1,397	**1,367**	1,395
Exports	730	**1,917**	1,800
Feed & Residual	4,315	**5,036**	5,300
Total Use	11,083	**13,454**	13,695
End Stocks *(%S/U)*	*(7.4%)* 821	*(9.2%)* 1,232	*(13.0%)* 1,777
U.S. Avg. Farm $	*$6.89*	*$4.46*	*$3.50-$3.90*

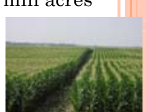
U.S. Corn 2015/16 Forecasts

USDA 2015 Ag Outlook Forum Forecasts & KSU Estimates

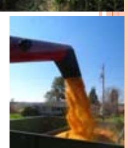
	2015/16 USDA	2015/16 KSU-45%	2015/16 KSU-55%
Planted Ac. (mln.)	*-1.6 ma* 89.0	*-2.5 ma* 88.1	*-2.5 ma* 88.1
Harvested Ac (mln.)	*-1.6 ma* 81.5	*-2.4 ma* 80.7	*-2.4 ma* 80.7
Yield (bu./ac.)	*-4.2 bu* 166.8	*-4.2 bu* 166.8	*-8.7 bu* 162.3
Beginning Stocks	1,777	1,777	1,777
Imports	25	25	25
Production	13,595	13,462	13,095
Total Supplies	15,397	15,264	14,897
Ethanol	5,225	5,200	5,150
Other FSI	1,410	1,410	1,410
Exports	1,850	1,800	1,750
Feed & Residual	5,275	5,250	5,200
Total Use	13,760	13,660	13,510
End Stocks *(%S/U)*	*(11.9%)* 1,637	*(11.7%)* 1,604	*(10.3%)* 1,387
U.S. Avg. Farm $	***$3.70***	***$3.95***	***$4.25***

U.S. Corn Supplies: 2014-2015

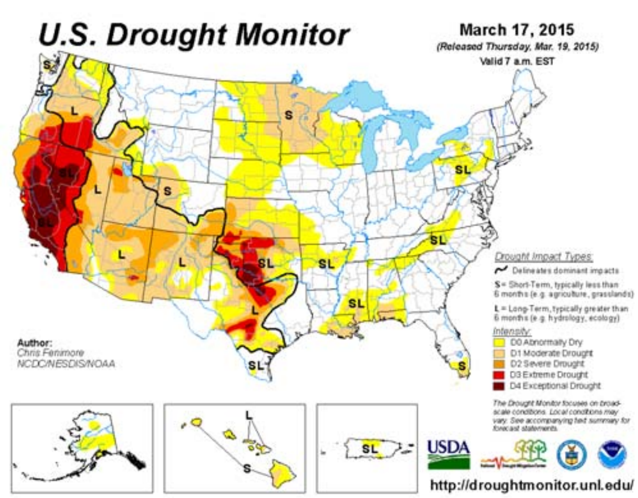
- **Planted Area**^{2015} = 88.1^{KSU} (90.0^{USDA}) mln acres
  - vs 90.6 mln ac^{2014}
- **Harvested Area**^{2015} = 80.1^{KSU} (81.5^{USDA}) mln acres
  - vs 83.1 mln ac^{2014}

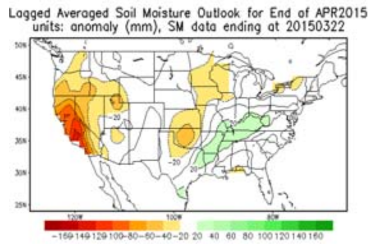


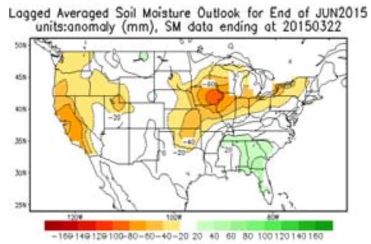
- **Yield**^{2015} = 162.3^{KSU} (166.8^{USDA}) bu/ac
  - vs 171.0 bu/ac^{2014} (record)



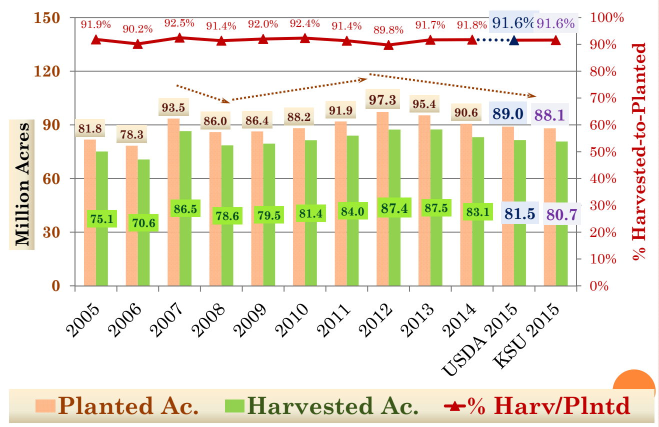
- **Production**^{2015} = 13.1^{KSU} (13.6^{USDA}) bln bu
  - vs 14.216 bln bu^{2014} (record)
- **Total Supply**^{2015} = 14.9^{KSU} (15.4^{USDA}) bln bu
  - vs 15.472 bln bu^{2014} (record)





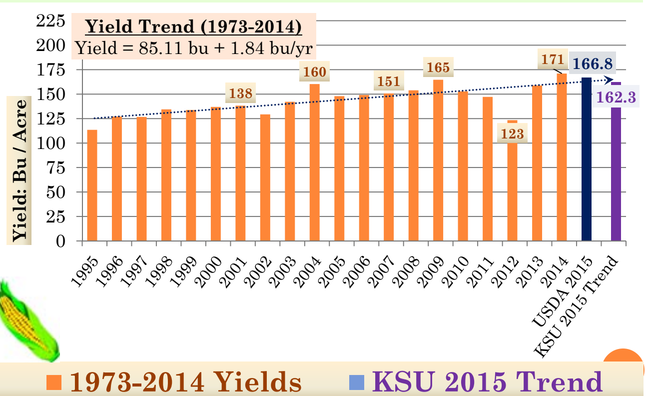


U.S. Corn Acreage

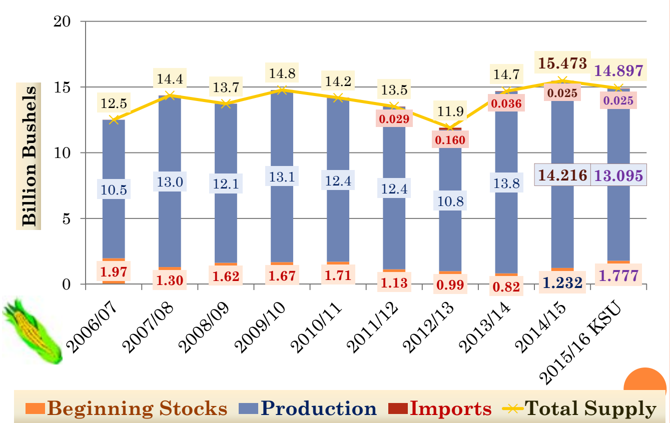


U.S. Corn Yields

USDA 2014 = 171.0 bu/ac; 2015 Trend[1973-2014] = 162.3



U.S. Corn Total Supplies



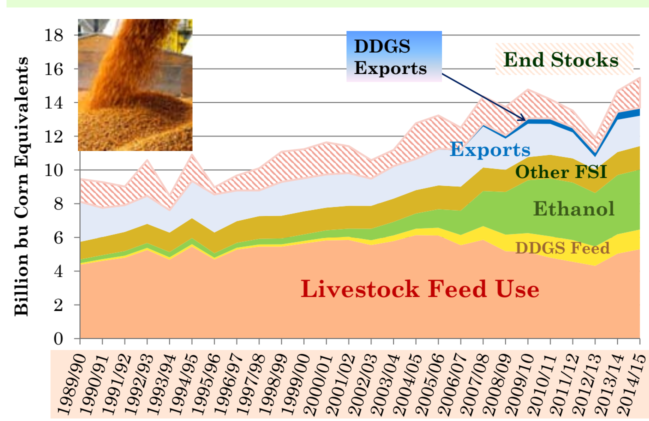
U.S. Corn Use in MY 2014/15

- **Ethanol** – 5.200 bln bu. (1.3%⇧)
  - *"Blend wall" / RFS / Exports?*

- **Other FSI** – 1.395 bb (⇧2%)
- **Exports** – 1.800 bb (⇩6%)
  - ⇩ vs 1.917 bb in MY 2013/14

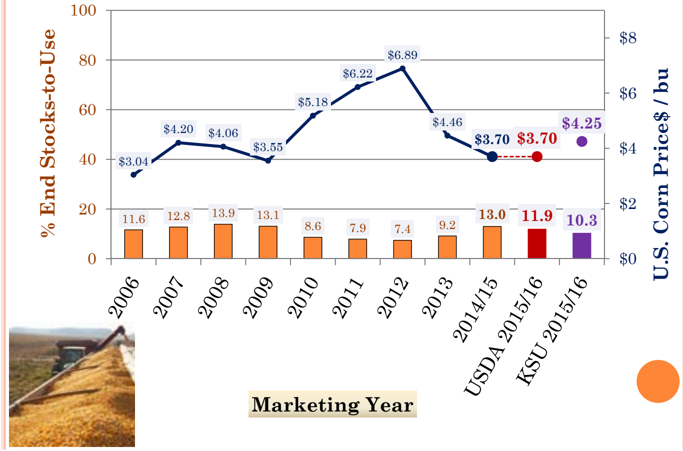
- **Feed+Residual** – 5.300 bb (⇧5%)
  - ⇧ vs 5.036 bb in MY 2013/14
- **Total Use** – 13.695 bb (⇧2%)
  - ⇧ vs 13.454 bb in MY 2013/14 (old record)

U.S. Corn Use - With est. DDGS #s



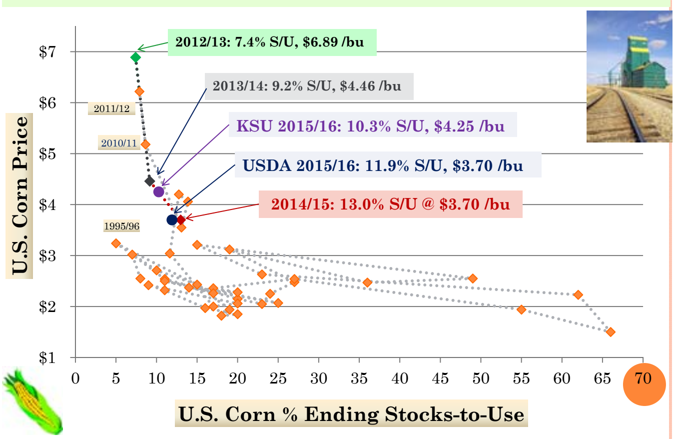
U.S. Corn End Stocks & %S/U

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



U.S. Corn $ vs % Stocks-to-Use

MY 1973/74-2015/16 March 10, 2014 USDA Reports & KSU Forecast



U.S. Sorghum Supply-Demand

USDA WASDE Report: March 10, 2015

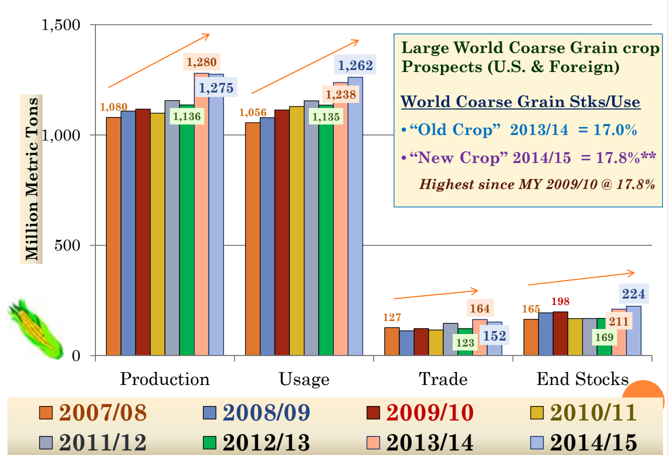
	2012/13	2013/14	2014/15
Planted Ac. (mln.)	6.3	**8.1**	**7.1**
Harvested Ac (mln.)	5.0	**6.6**	**6.4**
Yield (bu./ac.)	49.6	**59.6**	**67.6**
Beginning Stocks	23	**15**	**34**
Imports	10	**0**	**0**
Production	248	392	433
Total Supplies	280	**408**	**467**
Food, Seed, Indust.	95	**70**	**30**
Exports	76	**212**	**300**
Feed & Residual	94	**92**	**110**
Total Use	265	**374**	**440**
End Stocks ***(%S/U)***	*(5.7%)* 15	*(9.1%)* 34	*(6.1%)* 27
U.S. Avg. Farm $	*$6.33*	*$4.28*	*$3.70-$4.10*

U.S. Sorghum 2015/16 Forecasts

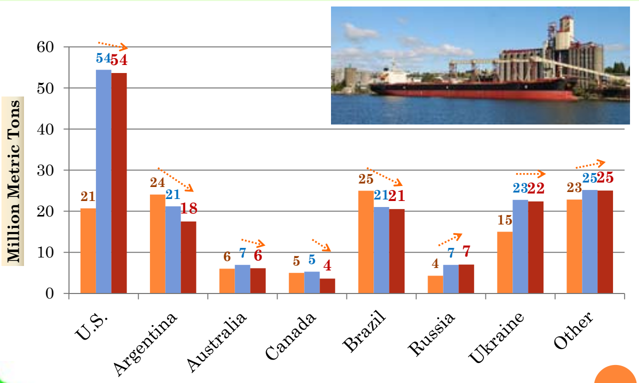
USDA 2015 Ag Outlook Forum Forecasts & KSU Estimates

	2015/16 KSU-A		2015/16 KSU-B	
Planted Ac. (mln.)	*+928K*	8.061	*+1,162K*	8.300
Harvested Ac (mln.)	*+317K*	6.718	*+505K*	6.906
Yield (bu./ac.)	*-1.6 bu*	66.0	*-1.6 bu*	66.0
Beginning Stocks		27		27
Imports		0		0
Production		443		456
Total Supplies		470		483
Food, Seed, & Industrial		30		30
Exports		300		310
Feed & Residual		100		100
Total Use		430		440
End Stocks ***(%S/U)***		*(9.3%)* 40		*(9.7%)* 43
U.S. Avg. Farm $		***$4.25***		***$4.15***

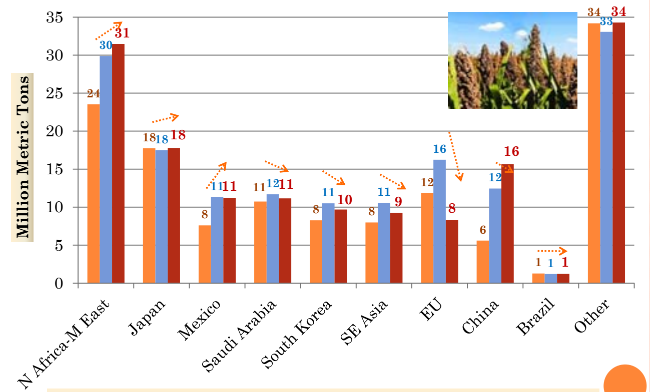
World Coarse Grain S-D



Coarse Grain Exporters

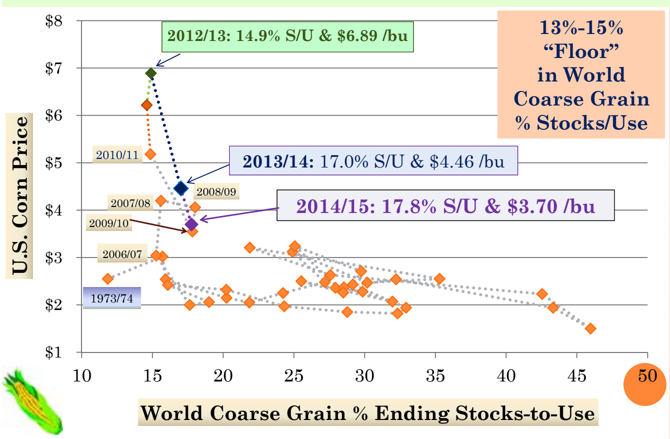


Coarse Grain Importers



U.S. Corn$ vs World Coarse Grain %S/U

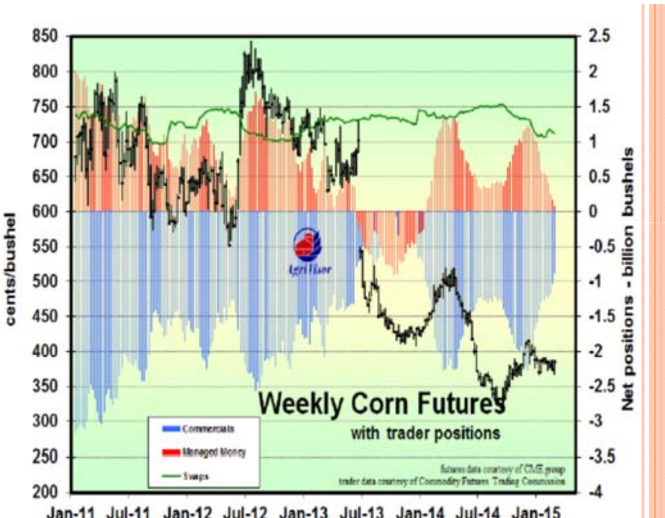
MY 1973/74 - 2014/15 March 10, 2015 USDA WASDE

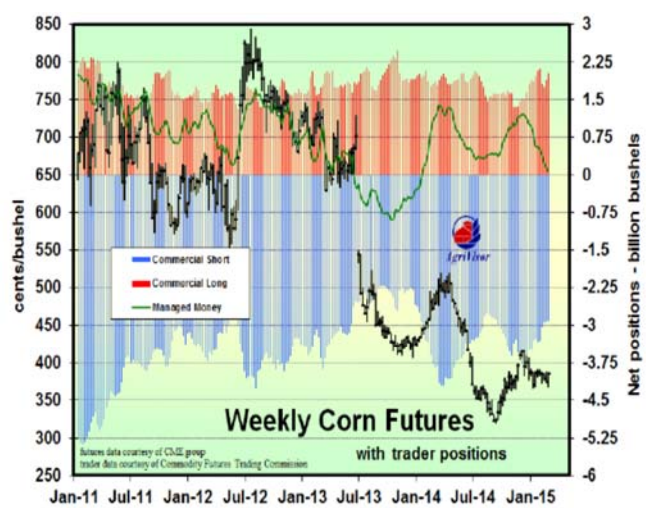


Feedgrain Market Prospects

- **Spring-Summer 2015 Feedgrain Market Prospects?**
  - A "**storage-till-Spring**" market – holding grain & look for opportunities
  - *U.S. seems "at risk" to dry crop conditions in the summer of 2015*

- **Uncertain U.S. Crops in 2015**
  - 2015 Corn & Sorghum Planted Acres?
  - DEC 2015 corn ≈ $4.15 /bu (FC ≈ $4.00)
- **Will U.S. Grain Sorghum Exports Remain Strong through fall 2015?**

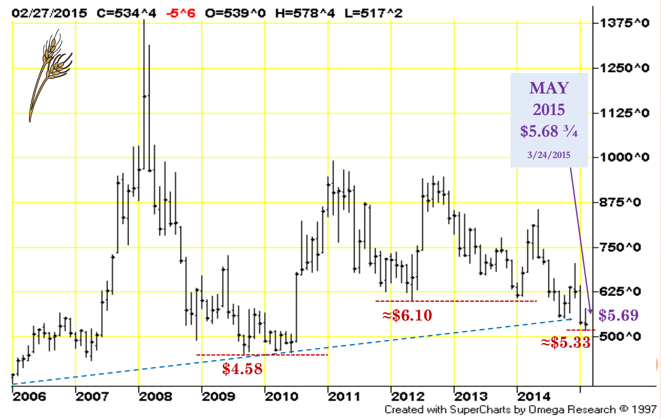




Wheat Market

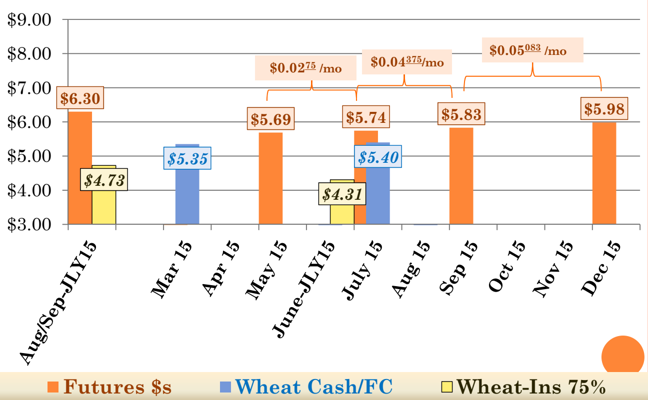
Kansas City Wheat Futures

Monthly Chart: January 2006 – February 2015 + 3/24/2015



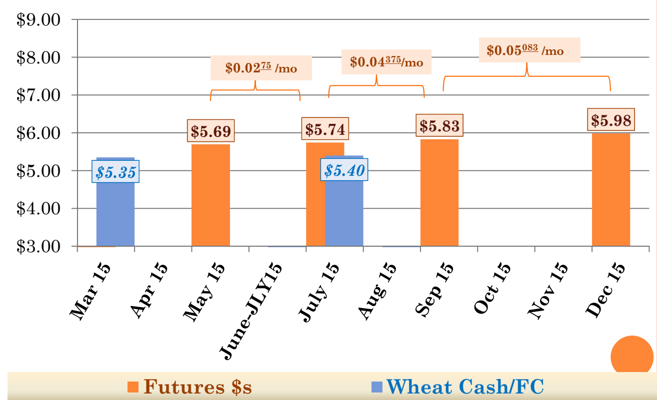
KS Wheat Futures & Cash$

Hutchinson, Kansas Cash, FC & Insurance $'s, March 24, 2015



KS Wheat Futures & Cash$

Hutchinson, Kansas Cash, FC $'s, March 24, 2015



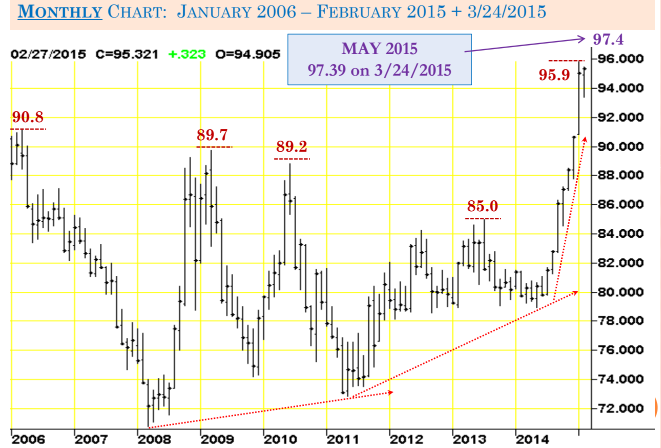
Wheat Market "Drivers"

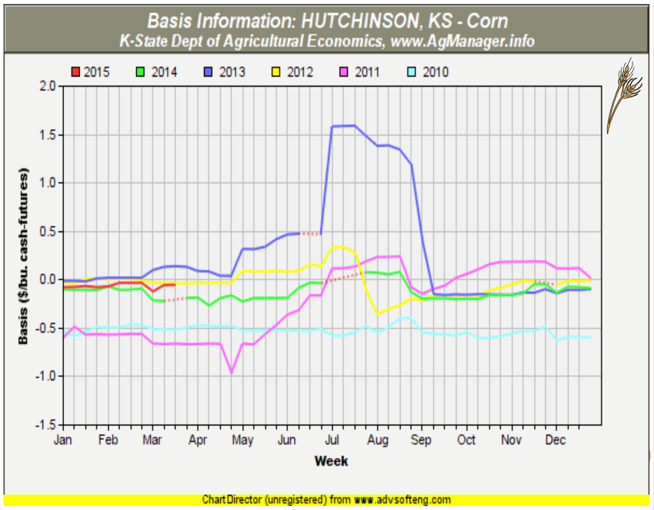
- Growing "new crop" MY 2014/15 World wheat supplies & end stocks have caused cash prices to decline ($5.31-$5.55 /bu in Hutchinson, KS area)
- **U.S. Issues**: 2015 winter & spring wheat crops, weak exports, & lower wheat feeding
- **World Issues**: Growing Supplies & Stocks
  → *Will a surprise "disruption" happen in 2015/16?*

Q?: Will the USD$⇧ trend continue, causing lower U.S. wheat exports?

U.S. Dollar Index (ICE Futures)

Monthly Chart: January 2006 – February 2015 + 3/24/2015





U.S. Wheat Supply-Demand March 2015

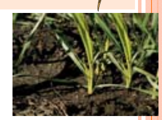
	2012/13	2013/14	2014/15
Planted Acres (mln.)	55.3	56.2	56.8
Harvested Ac. (mln.)	48.8	45.3	46.4
Yield (bu./ac.)	46.2	47.1	43.7
Beginning Stocks	743	718	590
Production	2,252	2,135	2,026
Imports	123	169	160
Total Supplies	3,118	3,021	2,776
Food & Seed	1,018	1,029	1,035
Exports	1,012	1,176	900
Feed & Residual	370	226	150
Total Use	2,400	2,431	2,085
End Stocks (%S/U)	(29.9%) 718	(24.3%) 590	(33.1%) 691
U.S. Ave. Farm $	*$7.77*	*$6.87*	*$5.90-$6.10*

U.S. Wheat MY 2015/16 Forecasts

	USDA MY 2015/16	KSU 2015/16 Trend Yield-60%	KSU 2015/16 Low Yield-40%
Planted Ac. (mln.)	55.5	55.5	55.5
Harvested Ac (mln.)	47.0	46.7	46.7
Yield (bu./ac.)	45.2	45.9	43.5
Beginning Stocks	691	691	691
Production	2,125	2,142	2,030
Imports	150	150	155
Total Supplies	2,966	2,983	2,876
Food & Seed Use	1,039	1,039	1,039
Exports(Wildcard!**	975	1,050	1,025
Feed & Residual	190	165	160
Total Use	2,204	2,254	2,224
End Stocks (%S/U)	(34.6%) 762	(32.3%) 769	(29.3%) 519
U.S. Avg. Farm $	*$5.10*	*$5.75*	*$6.25*

U.S. Wheat Supplies in 2015/16

- **Planted Area^{2015}** = 55.5^{USDA} mln acres
  - vs 56.8 mln ac^{2014}

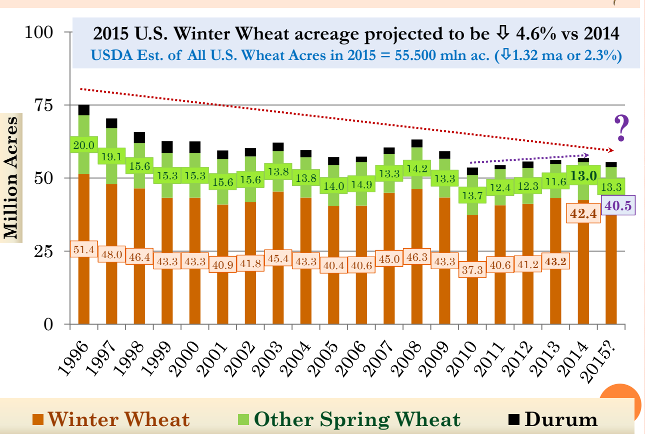


- **Harvested Area^{2015}** = 46.7^{KSU} (47.0^{USDA}) mln acres
  - vs 46.4 mln ac^{2014}

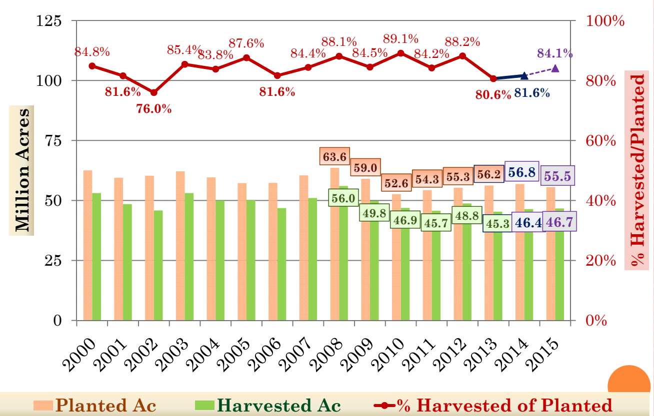
- **Yield^{2015}** = 43.5 - 45.9^{KSU} (45.2^{USDA}) bu/ac
  - vs 43.7 bu/ac^{2014}
- **Production^{2015}** = 2.0-2.14^{KSU} (2.125^{USDA}) bln bu
  - vs 2.026 bln bu^{2014}

- **Total Supply^{2015}** = 2.9-3.0^{KSU} (3.0^{USDA}) bln bu
  - vs 2.776 bln bu^{2014}

U.S. Wheat Seeded Acreage

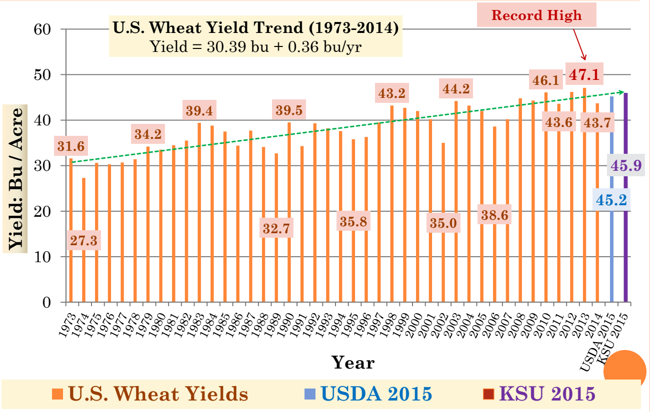


U.S. Wheat Acreage

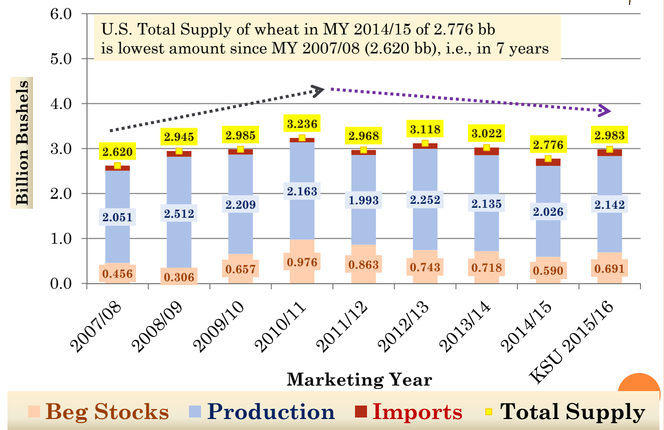


U.S. Wheat Yields

U.S. 2014 = 43.7 bu/ac USDA2015 = 45.2 KSU2015 = 45.9



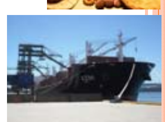
U.S. Wheat Total Supplies



2014/15 U.S. Wheat Use

- **Food Use** – 960 Million bu. (⇧0.8%)
  - Driven by population & milling quality

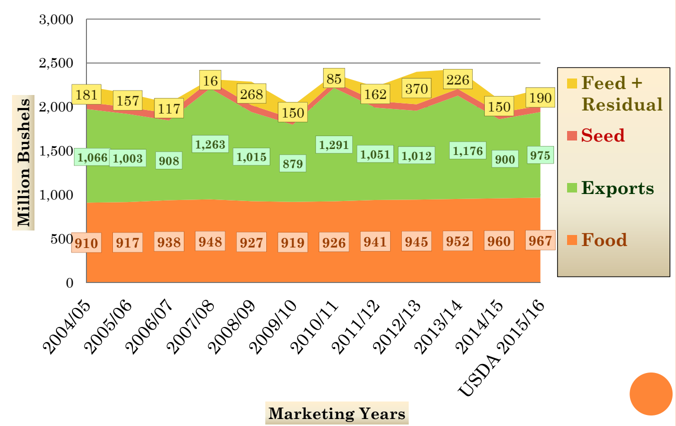
- **Exports** – 900 mln bu. (⇩23%)
  - Strong World competition, ⇧ USD$



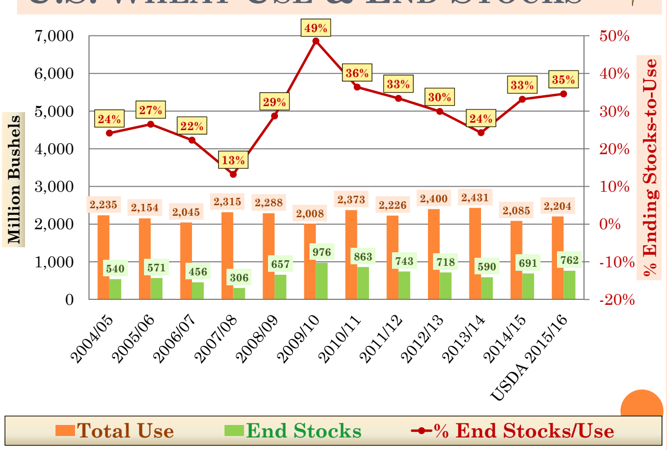
- **Feed+Residual** – 150 mb (⇩34%)
  - ⇩ versus last 2 years (⇧ feedgrains)

- **Total Use** – 2.085 Billion bu. (⇩14%)
  - ⇩ 315-346 mln bu./year vs last 2 yrs

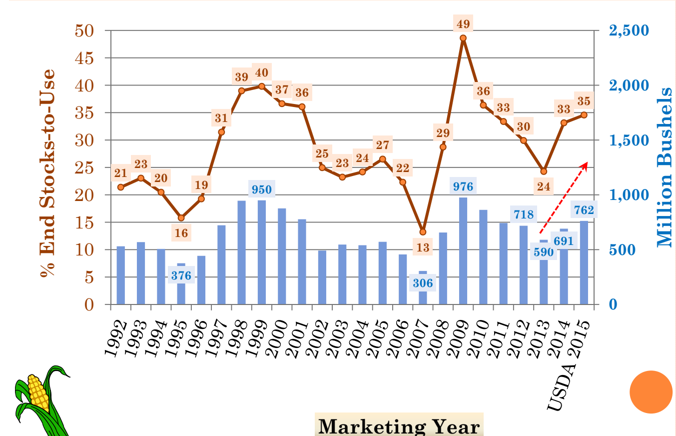
U.S. Wheat Use Since MY 2004/05



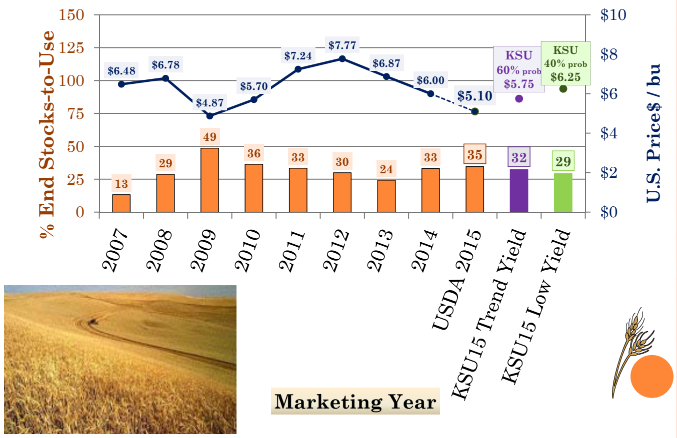
U.S. Wheat Use & End Stocks



U.S. Wheat End Stocks & %S/U

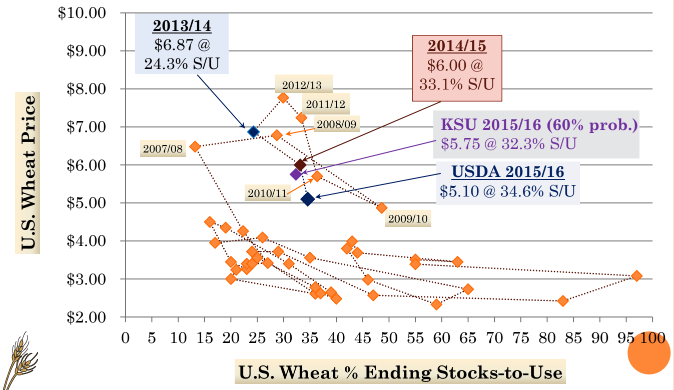


U.S. Wheat % Stx/Use vs Price$

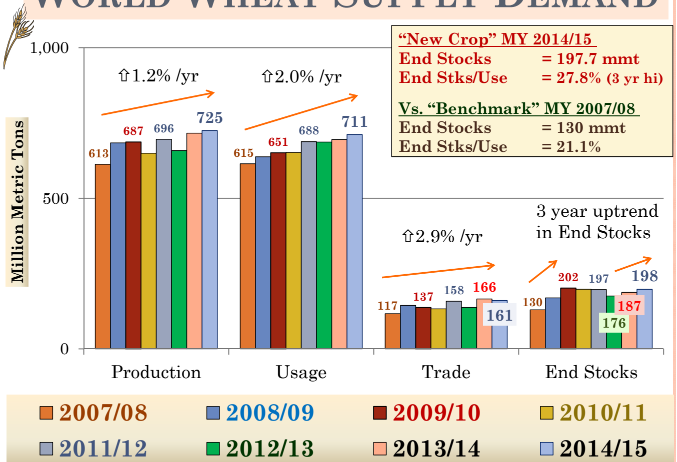


U.S. Wheat $ vs U.S. Stocks-to-Use

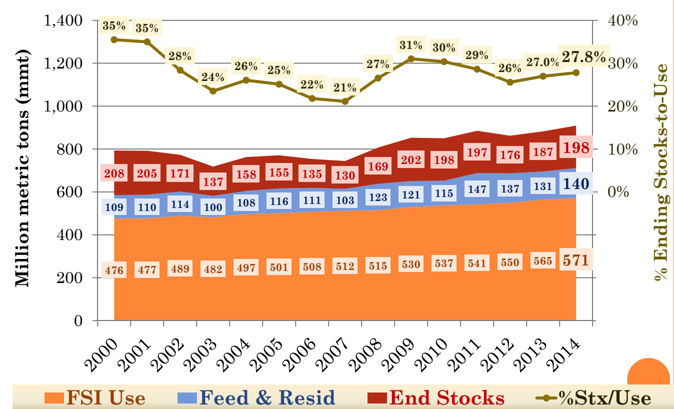
MY 1973/74 – "Next Crop" MY 2015/16



World Wheat Supply-Demand

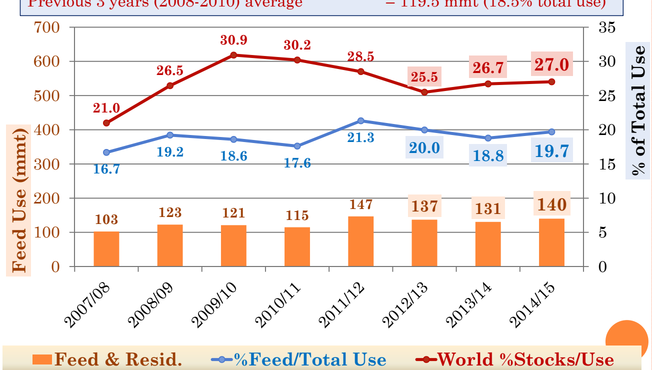


World Wheat Supply-Demand

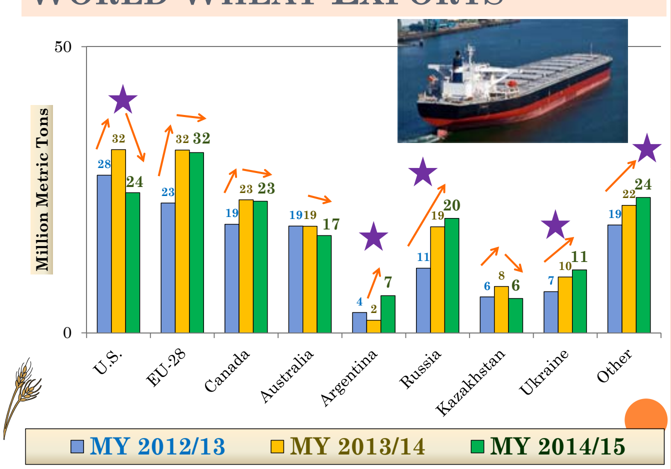


World Wheat Feed Use

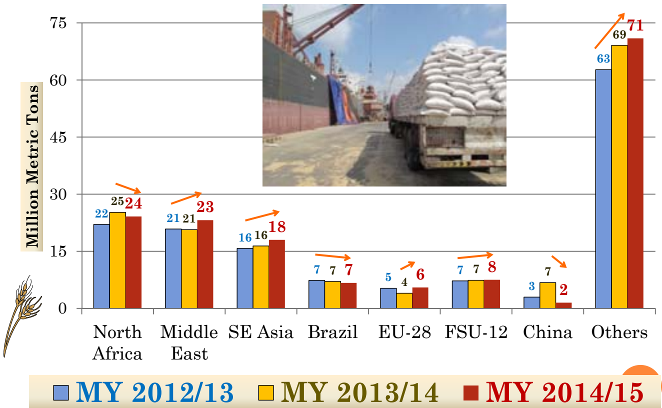
Recent 4 years (2011-2014) wheat feeding avg.	= 138.6 mmt (19.9% total use)
Previous 3 years (2008-2010) average	= 119.5 mmt (18.5% total use)



World Wheat Exports

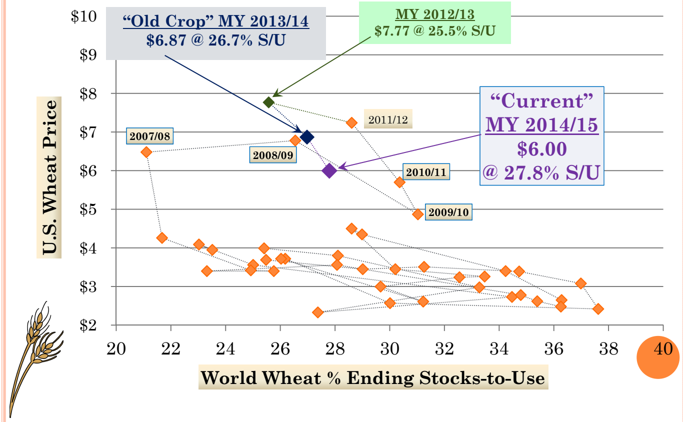


World Wheat Imports



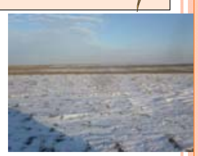
U.S. Wheat $ vs World %Stks/Use

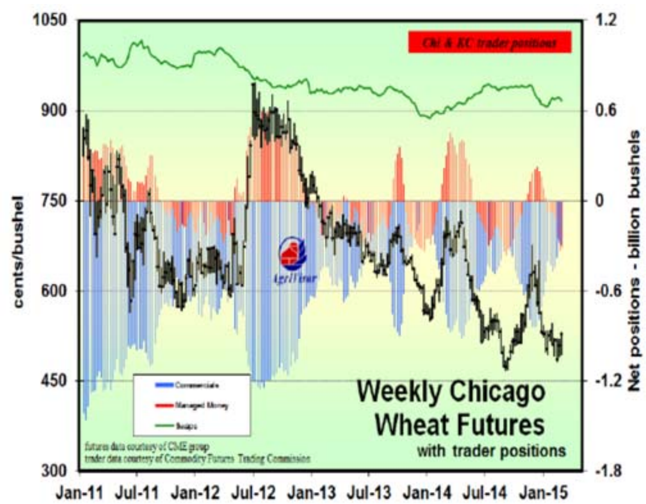
MY 1973/74 – "Current Crop" 2014/15

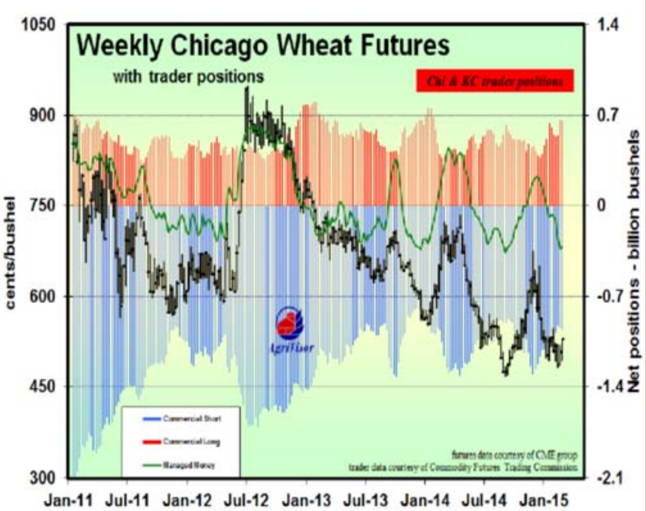


Wheat Market Prospects

- **2015 U.S. Winter Wheat Crop?**
  - Assessing winter freeze damage?
  - Prospects for successful crops in the U.S. Central & Southern Plains ???
- **Risk to World Wheat Exporters' Crops in 2014/15**
  - "*Unanticipated*" wheat crop problems that **MAY & OFTEN DO** occur in major World wheat producing countries
- **Risk of Geopolitical Conflicts**
  - Black Sea, Middle East….





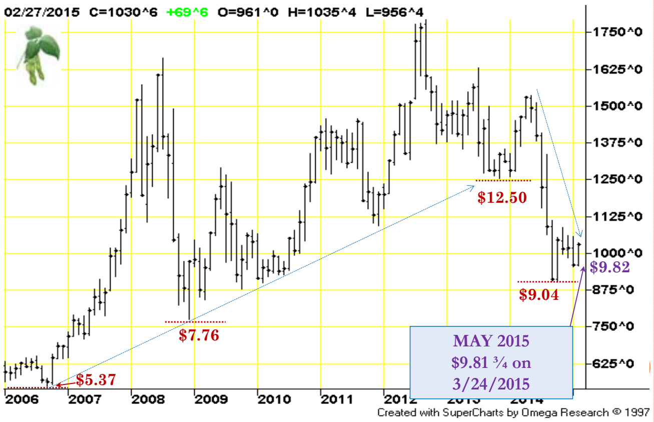


Soybean Markets

Kansas State University Department of Agricultural Economics

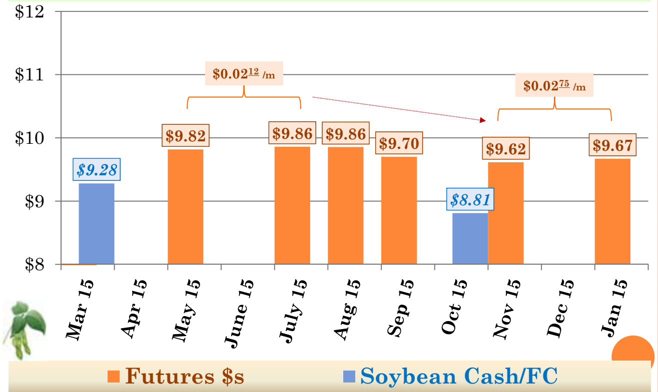
CBOT Soybean Futures

Weekly Chart: December 2005 – January 2015 + 3/24/2015

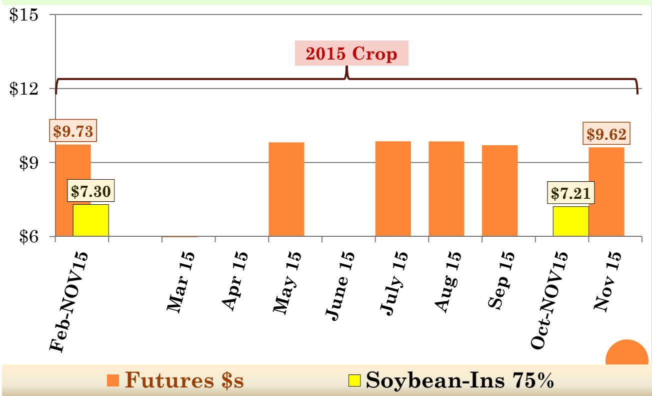


Soybean Futures & Cash$

Hutchinson, Kansas Cash & FC Prices$, March 24, 2015



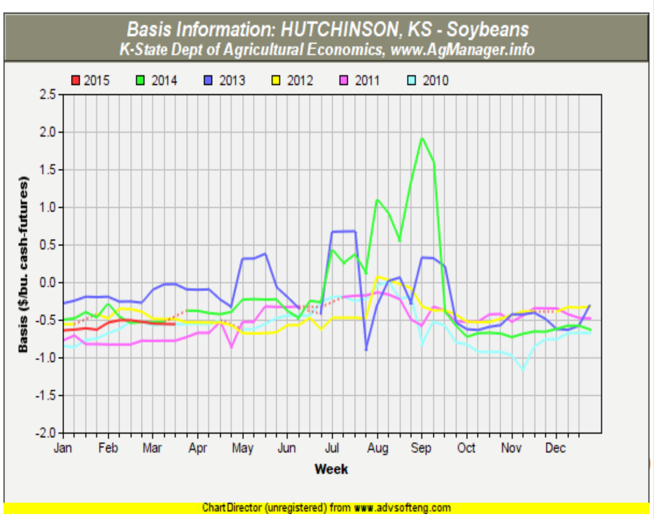
Soybean Futures & Crop Insurance Prices 3/23/2015



Soybean Market "Drivers"

- With a **record large 2014 U.S. soybean crop**, cash prices have ⇩'d to $9.25-$9.36 (Hutchinson, KS)
  - New crop 2015 bids = $8.76-$9.13 /bu
- **World Issues:** Record 2015 South American crop but with some drought problems (may ⇩ in size)
- **U.S. Issues**: Corn vs Soybeans 2015 planted acres
  - ⇒ "Next Crop" MY 2015/16 yield, supply-demand & prices???

Q?: ***In 2015 will the soybean crops in either South America or the U.S. fall "short" of expectations & boost prices?***



U.S. Soybean Supply-Demand

USDA WASDE Report – March 10, 2015

	2012/13	2013/14	2014/15
Planted Acres (mln.)	77.2	76.8	83.7
Harvested Acres (mln.)	76.1	76.3	83.1
Yield (bu./ac.)	40.0	44.0	47.8
Beginning Stocks	169	141	92
Imports	41	72	25
Production	3,042	3,358	3,969
Total Supplies	3,252	3,570	4,086
Crushings	1,689	1,734	1,795
Exports	1,317	1,647	1,790
Seed & Residual	105	97	116
Total Use	3,111	3,478	3,701
Ending Stocks	(4.5%) 141	(2.7%) 92	(10.4%) 385
U.S. Avg. Farm $	$14.40	$13.00	$9.45-$10.95

U.S. Soybean 2015/16 Forecasts

	2015/16^USDA	2015/16^KSU No Chg Acres	2015/16^KSU +2 mln Acres
Planted Acres (mln.)	-0.2 83.5	No Chg. 83.7	+2.0 85.7
Harvested Ac. (mln.)	-0.5 82.6	-0.4 82.7	+1.6 84.7
Yield (bu./ac.)	-1.8 46.0	-2.6 45.1	-2.6 45.1
Beginning Stocks	385	385	385
Imports	20	15	15
Production	3,958	3,958	3,895
Total Supplies	4,205	4,1295	4,218
Crushings	1,840	1,820	1,835
Exports *Wildcard*	1,820	1,800	1,815
Seed & Residual	106	110	110
Total Use	3,775	3,730	3,760
Ending Stocks	*(11.4%)* 430	*(10.7%)* 399	*(12.2%)* 458
U.S. Avg. Farm $	$9.00	$10.10	$9.60

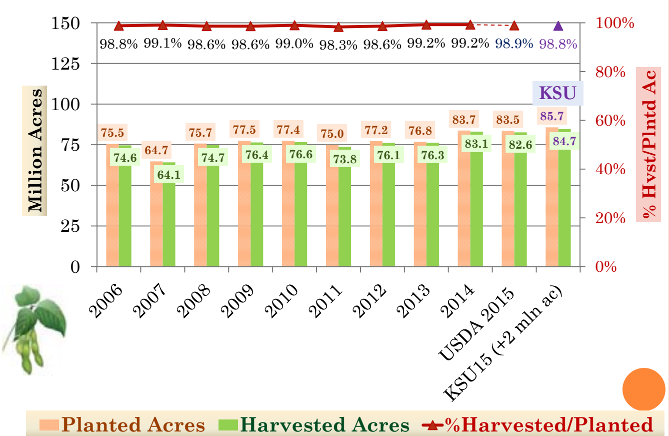
U.S. Soybean Supplies: 2014-2015

- **Planted Area**2015 = 85.7KSU (83.5USDA) mln acres
  - vs 83.7 mln ac2014 (record)
- **Harvested Area**2015 = 84.7KSU (82.6USDA) mln acres
  - vs 83.1 mln ac2014 (record)

- **Yield**2015 = 45.1KSU (46.0USDA) bu/ac
  - vs 47.8 bu/ac2014 (record)
- **Production**2015 = 3.818KSU (3.800USDA) bln bu
  - vs 3.969 bln bu2014 (record)

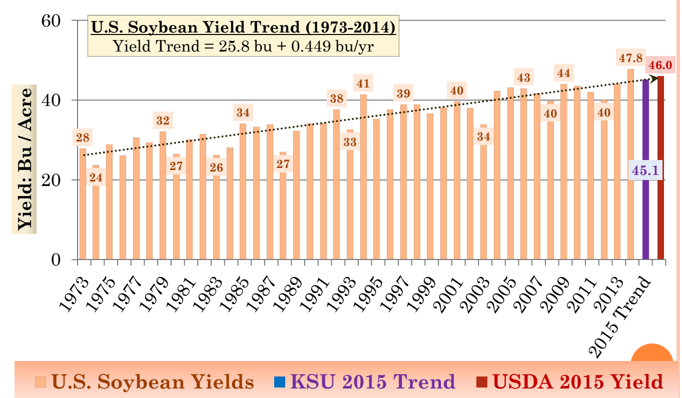
- **Total Supply**2015 = 4.218KSU (4.205USDA) bln bu
  - vs 4.086 bln bu2014 (record)

U.S. Soybean Acreage

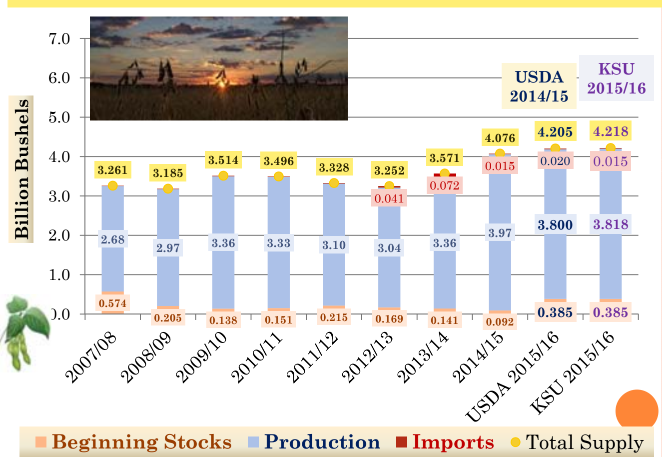


U.S. Soybean Yields

USDA 2014: 47.8 bu/ac, 2015 TrendKSU = 45.1 bu/ac



U.S. Soybean Total Supplies



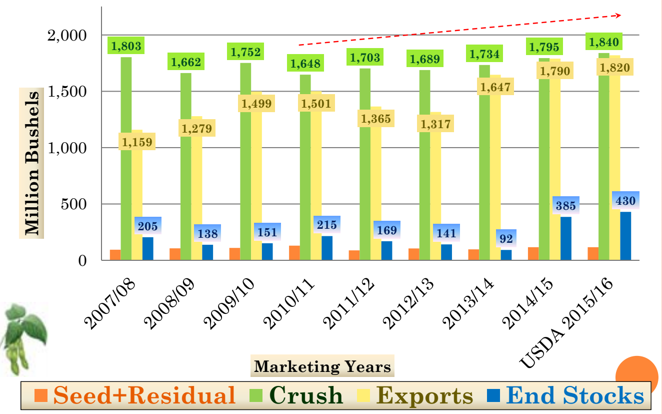
U.S. Soybean Use in MY 2014/15

- **Crush** – 1.795 bln bu. (⇧3.5%)
  - ⇧ Soybean Oil & Meal demand

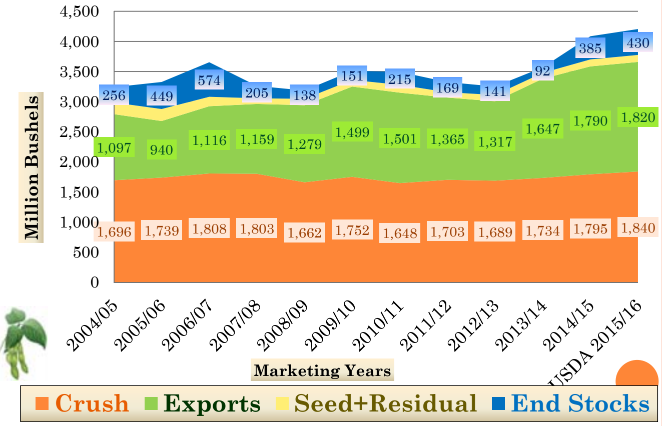
- **Exports** – 1.790 bln bu. (⇧9%)
  - South American Competition
  - Climbing value of $USD

- **Seed & Residual** – 97 mln bu.
- **Total Use** – 3.701 bln bu. (⇧6%)
  - ⇧ Total Use with ⇧ Supply & ⇩ $s

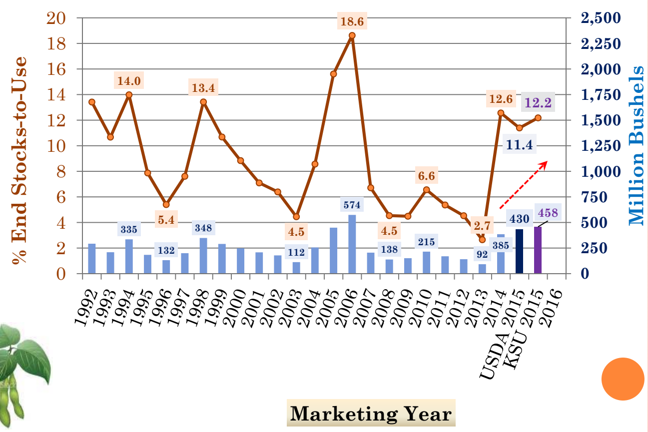
U.S. Soybean Use & End Stocks



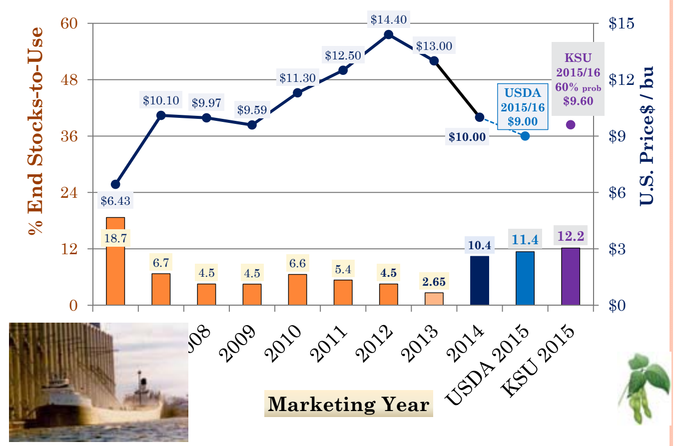
U.S. Soybean Use & End Stocks



U.S. Soybean End Stocks, %S/U

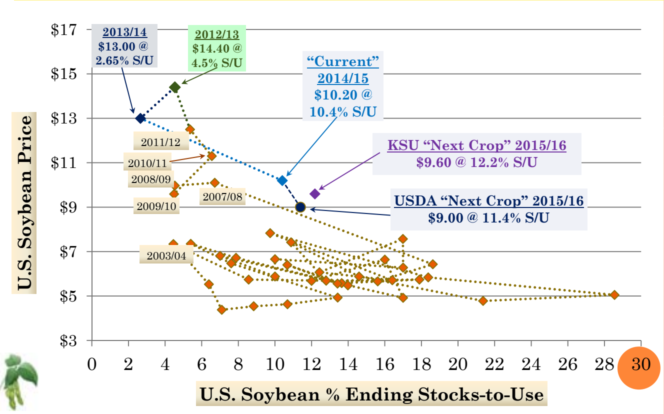


U.S. Soybean %Stx/Use vs Price$

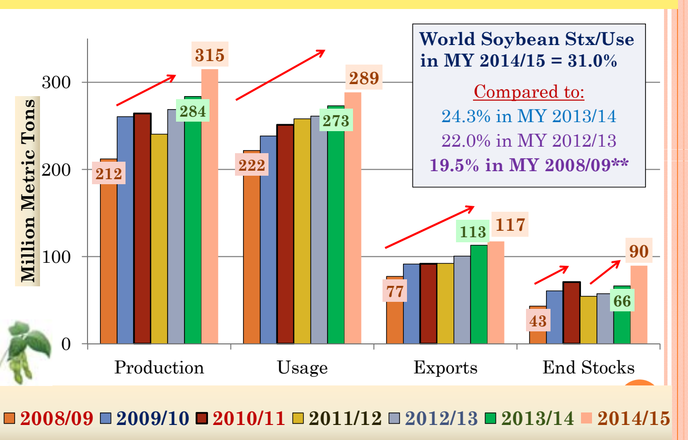


U.S. Soybean $ vs Stx-to-Use

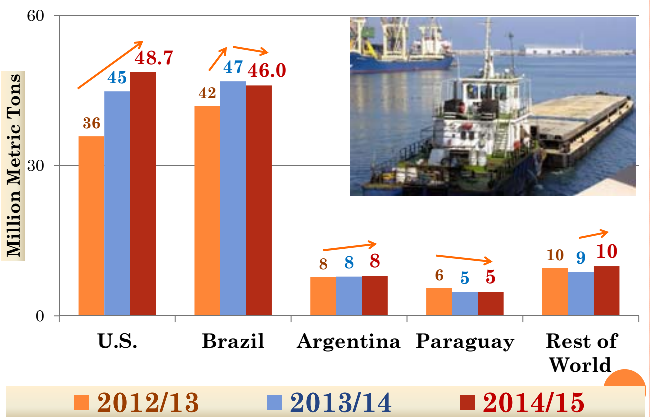
MY 1973/74 – 2014/15 March 10, 2014 WASDE USDA & KSU 2015/16 Forecasts



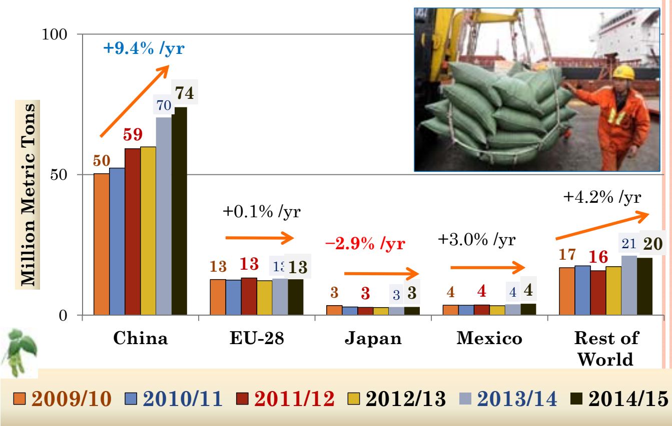
World Soybean Supply-Demand



Soybean Exporter Sales

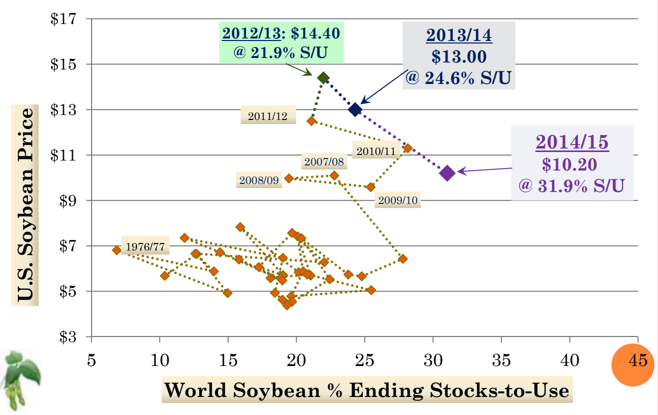


Soybean Importer Purchases



U.S. Soybean$ vs World %Stx/Use

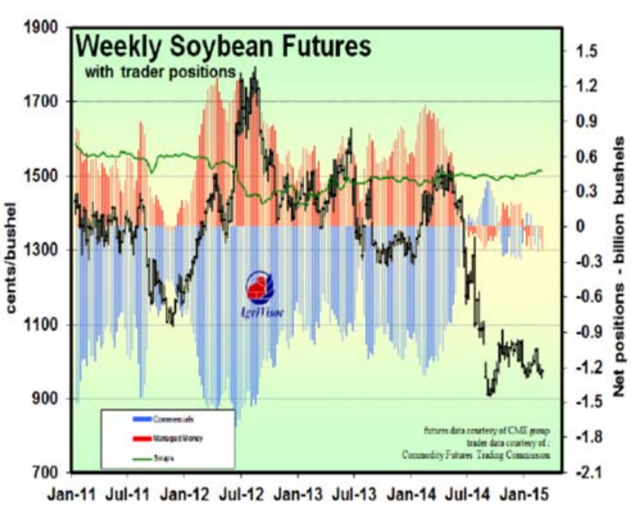
MY 1973/74 – 2014/15 March 10, 2015 USDA Reports

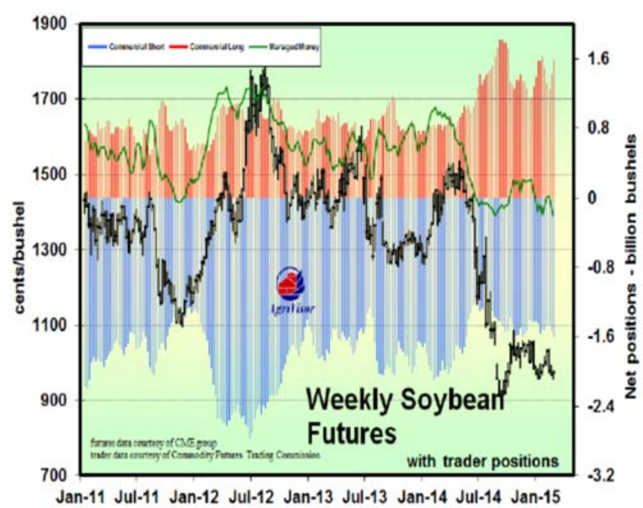


Soybean Market Prospects

- **South America Prospects**
  - Prospects for large crop in 2015 ⇨ driving World $'s in Winter-Spring
  - Low currency values ⇧ Exports

- **Soy Market Prospects-2014/15**
  - A Large Supply year ⇨ Low $'s
  - China demand continuing (?!?!)
- **U.S. Soybean Acres in 2015?**
  - "New Crop" Soy/Corn[2015] Ratio = **2.3**





QUESTIONS?

DANIEL O'BRIEN – EXTENSION AGRICULTURAL ECONOMIST

KANSAS STATE UNIVERSITY

DOBRIEN@KSU.EDU

KSUGRAINS ON TWITTER & FACEBOOK

WWW.AGMANAGER.INFO

KANSAS STATE UNIVERSITY | Department of Agricultural Economics