

EL NIÑO/SOUTHERN OSCILLATION (ENSO)

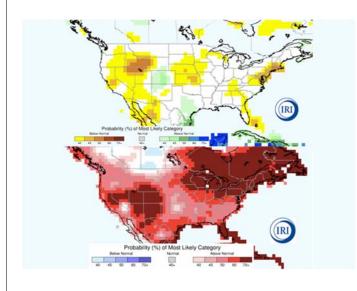
Diagnostic Discussion; Climate Prediction Center / NCEP / NWS, April 11, 2024

□ A <u>transition from El Niño to ENSO-neutral</u> is likely by **April-June 2024** (85% chance), with the odds of <u>La Niña developing</u> by **June-August 2024** (60% chance)

DTN Ag Weather Forum: How Could a Developing La Nina Affect Corn Yields? 3/18/2024 Bryce Anderson, Ag Meteorologist Emeritus, @BAndersonDTN (Twitter)

- With La Nina indicated to form by mid to late summer, there is a notable potential decline in corn production from levels posted in <u>USDA's 2024 Outlook Forum</u>.
- The <u>Outlook Forum</u> projected U.S. corn production at **15.04 bb in 2024**. Applying that 7% potential decline in production in 2010 and 2020 to the <u>2024 USDA Outlook Forum</u> numbers for corn would give a total corn production number of **13.99 bb** -- 1.05 bb less than the <u>Outlook Forum projection</u>. That, in turn, would mean that the **total U.S. corn supply** would be **less** than the projected record total supply of 17.237 bb that the Outlook Forum noted.
 - o La Nina settling in during the last half of the growing season in the analog years of 2010 and 2020 was significant in its *shaving of U.S. corn production* & suggests that there could be some corn yield & production downgrading as the 2024 season progresses.

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Ag Weather Forum How Could a Developing La Nina Affect Corn Yield? 3/18/2024 | 9:49 AM CDT By Bryce Anderson, Ag Meteorologist Emeritus Connect with Bryce: © @BAndersonDTN

Public & private seasonal forecasts, such as the International Climate & Research Institute (IRI), call for "warm to hot" weather & "drier-than-usual" conditions in the central U.S. during the corn-filling period of July, August & September because of a forming La Nina event in the Pacific Ocean. (IRI graphic)

https://www.dtnpf.com/agriculture/web/ag/news/article/2024/03/18/developing-la-nina-affect-corn-yield-2

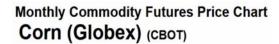




CME Corn Futures Lead & Deferred Contracts

Closing Prices as of Tuesday, May 28, 2024





\$4.75

\$4.00

\$3.00

2004

2006

2008

TFC Commodity Charts

13

150.00

2024



2018

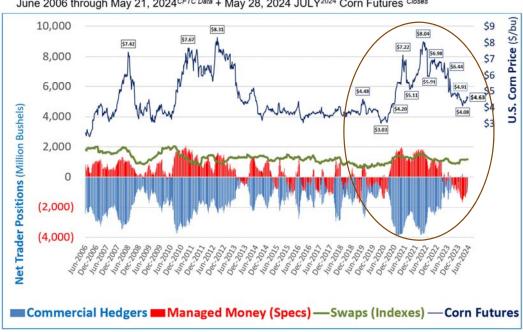
2020

2022

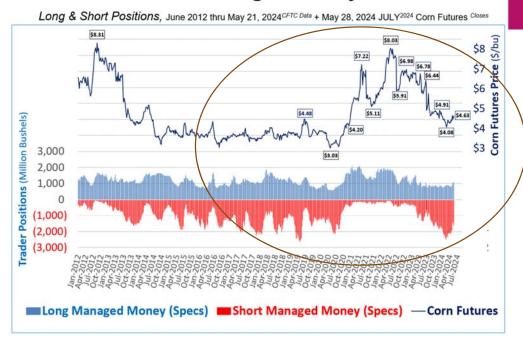
Corn Futures-Net Position of Traders

June 2006 through May 21, 2024 CFTC Data + May 28, 2024 JULY Corn Futures Closes

2012

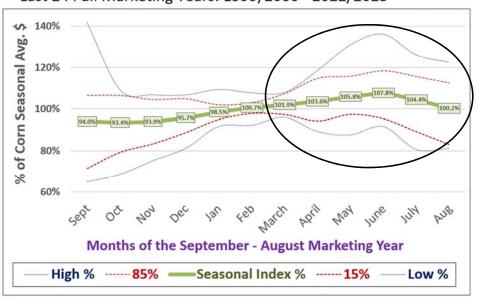






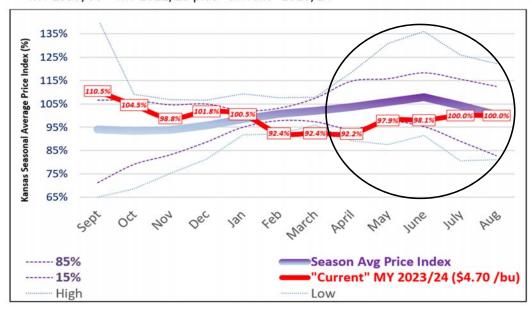
Corn Seasonal Price Index Kansas

Last 24 Full Marketing Years: 1999/2000 - 2022/2023



U.S & Kansas Corn Seasonal \$'s

MY 1999/00 - MY 2022/23 plus "Current" 2023/24 as of 5/28/2024 - Futures Estimate



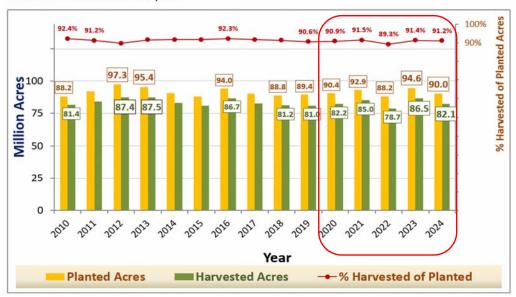
U.S & Kansas Corn Seasonal \$'s

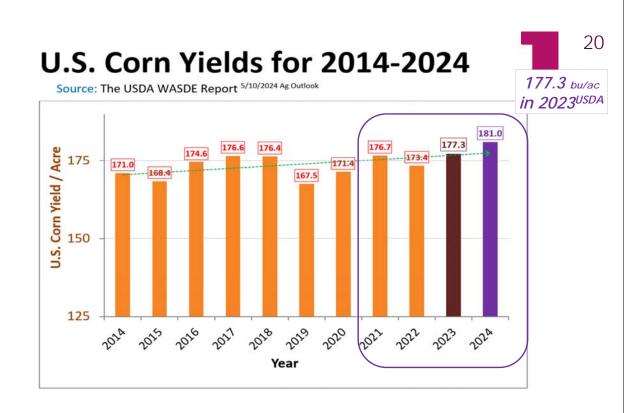
MY 1999/00 - MY 2022/23 plus "Current" 2023/24 & "New" 2024/25 as of 5/28/2024

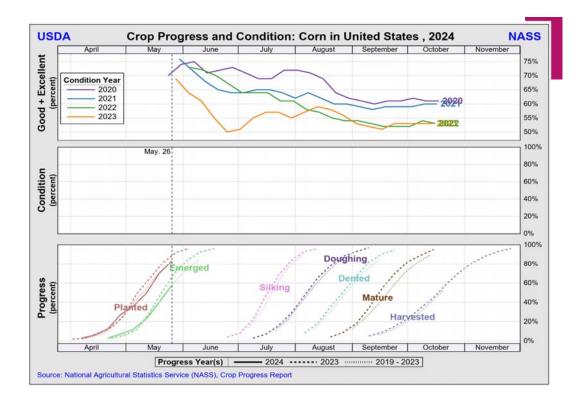


U.S. Corn Acres for 2010-2024

Sources: USDA WASDE Report 5/10/2024

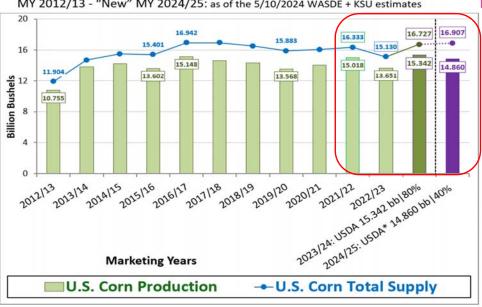






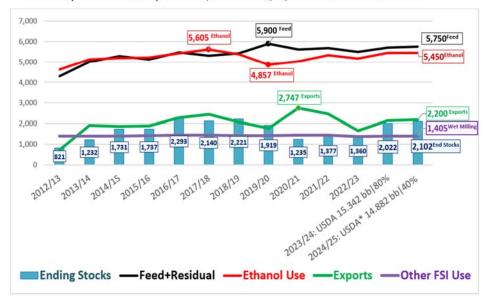
U.S. Corn Production & Supplies

MY 2012/13 - "New" MY 2024/25: as of the 5/10/2024 WASDE + KSU estimates



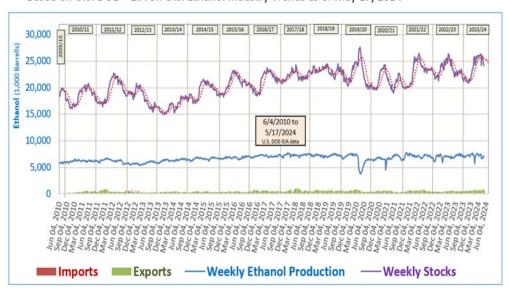
U.S. Corn Use & Ending Stocks

MY 2012/13 thru "New Crop" MY 2024/25 as of the 5/10/2024 WASDE + KSU estimates



U.S. Ethanol Production & Stocks Weekly

Based on U.S. DOE - EIA on U.S. Ethanol Industry Trends as of May 17, 2024





May 29, 2024

US #2 Yellow Corn -Bulk							
Sale Type	Basis (¢/bu)	Basis Change	Price (\$/Bu)	Price Change	Average	Year Ago	
Bid	-25.00N to 15.00N	UNCH	4.3750-4.7750	DN 0.0225	4.6021	6.3350	
Bid	-18.00N to 15.00N	UNCH	4.4450-4.7750	DN 0.0225	4.5606	6.3756	
Bid	-3.00N to 18.00N	UNCH-UP 6	4.5950-4.8050	DN 0.0225-UP 0.0375	4.6808	6.4092	
Bid	-15.00N to 25.00N	UNCH	4.4750-4.8750	DN 0.0225	4.7041	6.6409	
Bid	20.00N to 80.00N	UNCH	4.8250-5.4250	DN 0.0225	5.1625	6.6000	
Bid	-55.00N to -30.00N	UNCH	4.0750-4.3250	DN 0.0225	4.2083	6.0067	
Bid	-43.00N to 10.00N	UNCH	4.1950-4.7250	DN 0.0225	4.4964	6.4560	
Bid	-25.00N to -10.00N	UNCH	4.3750-4.5250	DN 0.0225	4.4625	6.2925	
Bid	-8.00N to 35.00N	UNCH	4.5450-4.9750	DN 0.0225	4.7497	6.6736	
Bid	-30.00N to -10.00N	UNCH	4.3250-4.5250	DN 0.0225	4.4583	6.2900	
Bid	-40.00N to 4.00N	UNCH-UP 3	4.2250-4.6650	DN 0.0225-UP 0.0075	4.3381	6.4677	
Bid	-40.00N to -18.00N	UNCH	4.2250-4.4450	DN 0.0225	4.3500	5.9920	
	Bid	Bid -25.00N to 15.00N Bid -18.00N to 15.00N Bid -3.00N to 18.00N Bid -15.00N to 25.00N Bid 20.00N to 80.00N Bid -55.00N to -30.00N Bid -43.00N to 10.00N Bid -25.00N to -10.00N Bid -8.00N to 35.00N Bid -30.00N to 10.00N	Sale Type Basis (c/bu) Basis Change Bid -25.00N to 15.00N UNCH Bid -18.00N to 15.00N UNCH-UP 6 Bid -3.00N to 18.00N UNCH-UP 6 Bid -15.00N to 25.00N UNCH Bid 20.00N to 80.00N UNCH Bid -55.00N to -30.00N UNCH Bid -43.00N to 10.00N UNCH Bid -25.00N to -10.00N UNCH Bid -8.00N to 35.00N UNCH Bid -30.00N to -10.00N UNCH Bid -40.00N to 4.00N UNCH-UP 3	Sale Type Basis (c/bu) Basis Change Price (\$/Bu) Bid -25.00N to 15.00N UNCH 4.3750-4.7750 Bid -18.00N to 15.00N UNCH 4.4450-4.7750 Bid -3.00N to 18.00N UNCH-UP 6 4.5950-4.8050 Bid -15.00N to 25.00N UNCH 4.4750-4.8750 Bid 20.00N to 80.00N UNCH 4.8250-5.4250 Bid -55.00N to -30.00N UNCH 4.0750-4.3250 Bid -43.00N to 10.00N UNCH 4.1950-4.7250 Bid -25.00N to -10.00N UNCH 4.3750-4.5250 Bid -8.00N to 35.00N UNCH 4.5450-4.9750 Bid -30.00N to -10.00N UNCH 4.3250-4.5250 Bid -40.00N to 4.00N UNCH-UP 3 4.2250-4.6650	Sale Type Basis (c/bu) Basis Change Price (\$/Bu) Price Change Bid -25.00N to 15.00N UNCH 4.3750-4.7750 DN 0.0225 Bid -18.00N to 15.00N UNCH 4.4450-4.7750 DN 0.0225 Bid -3.00N to 18.00N UNCH-UP 6 4.5950-4.8050 DN 0.0225-UP 0.0375 Bid -15.00N to 25.00N UNCH 4.4750-4.8750 DN 0.0225 Bid 20.00N to 80.00N UNCH 4.8250-5.4250 DN 0.0225 Bid -55.00N to -30.00N UNCH 4.0750-4.3250 DN 0.0225 Bid -43.00N to 10.00N UNCH 4.1950-4.7250 DN 0.0225 Bid -25.00N to -10.00N UNCH 4.3750-4.5250 DN 0.0225 Bid -8.00N to 35.00N UNCH 4.5450-4.9750 DN 0.0225 Bid -30.00N to -10.00N UNCH 4.3250-4.5250 DN 0.0225 Bid -40.00N to 4.00N UNCH-UP 3 4.2250-4.6650 DN 0.0225-UP 0.0075	Sale Type Basis (C/bu) Basis Change Price (\$/Bu) Price Change Average Bid -25.00N to 15.00N UNCH 4.3750-4.7750 DN 0.0225 4.6021 Bid -18.00N to 15.00N UNCH 4.4450-4.7750 DN 0.0225 4.5606 Bid -3.00N to 18.00N UNCH-UP 6 4.5950-4.8050 DN 0.0225-UP 0.0375 4.6808 Bid -15.00N to 25.00N UNCH 4.4750-4.8750 DN 0.0225 4.7041 Bid 20.00N to 80.00N UNCH 4.8250-5.4250 DN 0.0225 5.1625 Bid -55.00N to -30.00N UNCH 4.0750-4.3250 DN 0.0225 4.2083 Bid -43.00N to 10.00N UNCH 4.1950-4.7250 DN 0.0225 4.4964 Bid -25.00N to -10.00N UNCH 4.3750-4.5250 DN 0.0225 4.7497 Bid -8.00N to 35.00N UNCH 4.5450-4.9750 DN 0.0225 4.7497 Bid -30.00N to -10.00N UNCH 4.3250-4.5250 DN 0.0225 4.4583 Bid -40.00	

U.S. Corn Exports: MY 2012/13 thru "Current" MY 2023/24

Based on USDA FAS Weekly Export reports through 5/16/2024



U.S. Corn Stocks & % Stocks-to-Use

MY 2012/13 - "New" MY 2024/25 as of the 5/10/2024 WASDE + KSU estimates



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

MY 2012/13 - "New" MY 2024/25 as of the 5/10/2024 WASDE + KSU estimates



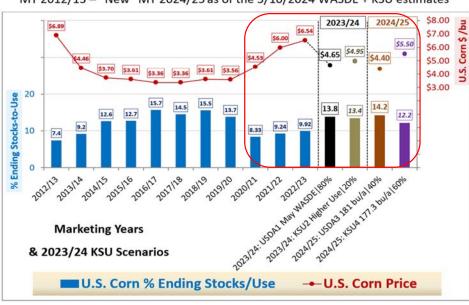
U.S. Corn Supply-Demand Balance Sheet

"Current" MY 2023/24 & "New" 2024/25 as of the 5/10/2024 WASDE + KSU Ests. 5/28/2024

ltem	A. USDA #1 "Current" MY 2023/24 = 177.3 bu/ac 2.172 mb Ending Stocks	B. KSU #2 "Current" MY 2023/24 "Higher Ethanol, Exports" + 25 mb Ethanol & + 25 mb Exports	C. USDA #3 "New Crop" MY 2024/25 USDA May 2024 WASDE 181 bu/acre Yield 2.102 bb Ending Stocks	D. KSU #4 "New Crop" MY 2024/25 Historic Max U.S. Yield 177.3 bu/acre Yield 1.798 bb Ending Stocks
% Probability of Occurring (KSU)	80%KSUest	20%KSUest	40%KSUest	60%KSUest
Planted Area (million acres)	94.641	94.641	90.036	90.036
Harvested Area (million acres)	86.513	86.513	82.099	82.099
Yield / harvested acre (bu/ac)	177.3	177.3 Million Bushels	181.0	-3.7 bu/ac 177.3
Production (million bu.)	15,342	15,342	14,860	-304 mb 14,556
Total Supply (million bu.)	16,727	16,727	16,907	-304 mb 16,603
Ethanol for fuel Use (million bu.)	5,450	+25 mb 5,475	5,450	5,450
Exports (million bu.)	2,150	+ 25 mb 2,175	2,200	2,200
Total Use (million bu.)	14,705	+50 mb 14,755	14,805	14,805
Ending Stocks (million bu.)	2,022	-50 mb 1,972	2,102	-304 mb 1,798
% Ending Stocks-to-Use	13.75%	13.36%	14.20%	12.15%
U.S. Corn Average Farm Price (S/bushel)	\$4.65 USDA \$4.70 KSU 5/28/2024	\$4.95 KSU \$4.70 KSU 5/28/2024	\$4.40 USDA \$4.96 KSU 5/28/2024	\$5.50 KSU \$4.96 KSU 5/28/2024

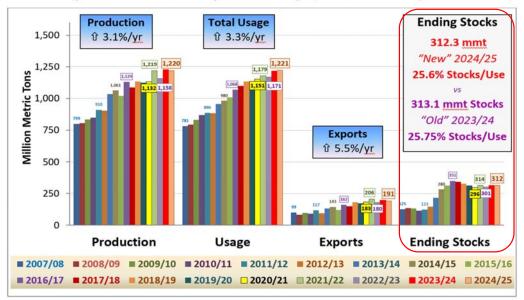
U.S. Corn % Stocks/Use vs Corn \$

MY 2012/13 - "New" MY 2024/25 as of the 5/10/2024 WASDE + KSU estimates



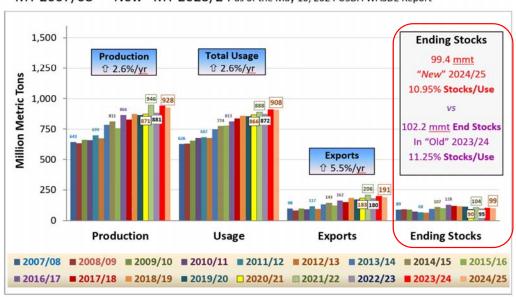
World Corn Supply-Demand

MY 2007/08 - "New" MY 2024/25 as of the May 10, 2024 USDA WASDE Report



"World Less-China" Corn Supply-Demand

MY 2007/08 - "New" MY 2023/24 as of the May 10, 2024 USDA WASDE Report



World vs World Less-China Corn % Stocks-to-Use

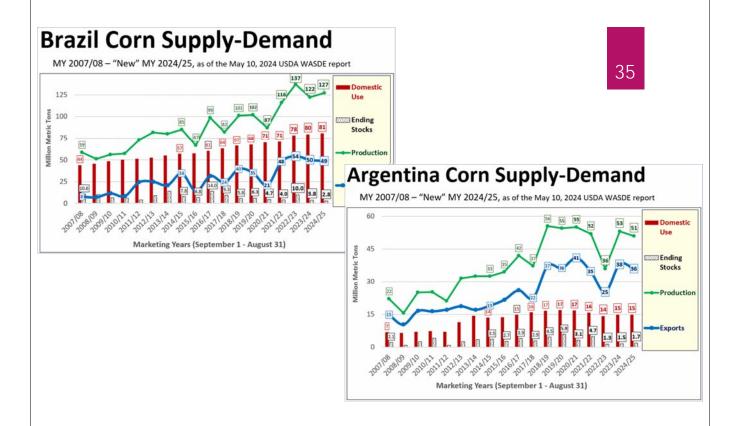
MY 2007/08 through "New" MY 2024/25, as of the May 10, 2024 USDA WASDE report



China Corn Supply-Demand

MY 2007/08 - "Current" MY 2023/24, as of the April 11, 2024 USDA WASDE report

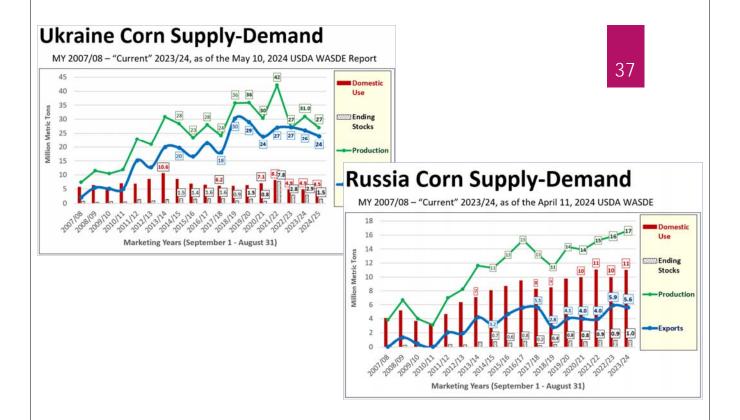




South America Corn Supply-Demand

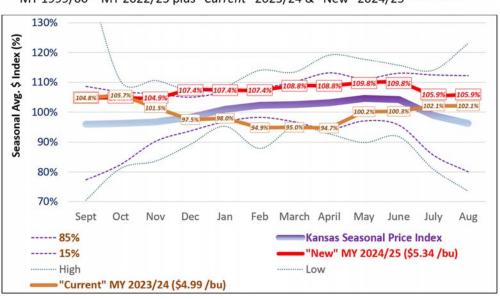
MY 2007/08 - "New" 2024/25, as of the May 10, 2024 USDA WASDE





Kansas Sorghum Seasonal Prices

MY 1999/00 - MY 2022/23 plus "Current" 2023/24 & "New" 2024/25 as of 5/28/2024



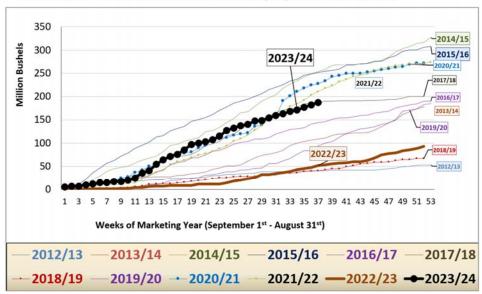
U.S. Sorghum Acres

Years 2010 - 2024 as of the USDA Prospective Plantings 3/28/2024 & WASDE 5/10/2024



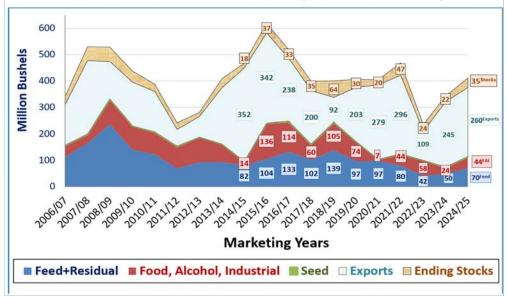
U.S. Grain Sorghum Exports

MY 2012/13 - "Current" MY 2023/24 as of May 16, 2024 - via USDA FAS



U.S. Sorghum Use & End Stocks

MY 2006/07 - "New" 2024/25 as of the May 10, 2024 WASDE Report

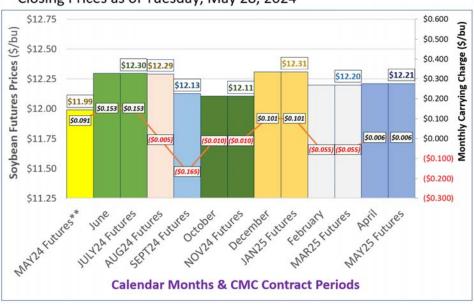






CME Soybean Futures Lead & Deferred Contracts

Closing Prices as of Tuesday, May 28, 2024





ZS - Soybeans (Globex) - Monthly Chart

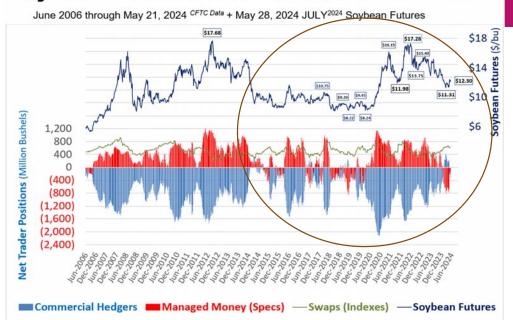


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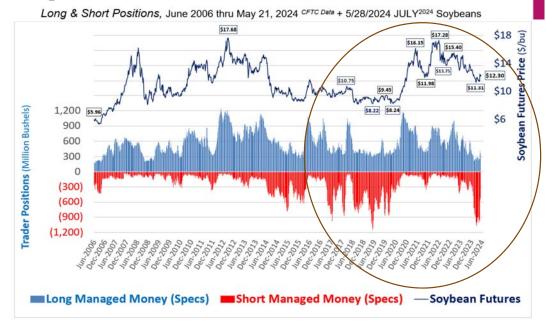




Soybean Futures-Net Position of Traders

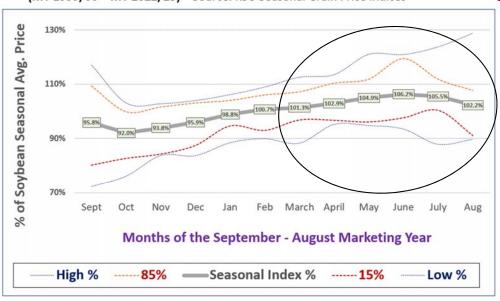


Soybean Futures - Managed Money Traders Specs



Kansas Soybean Seasonal Price Index

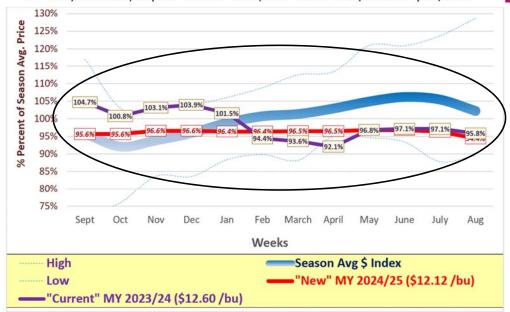
(MY 1999/00 - MY 2022/23) - Source: KSU Seasonal Grain Price Indices



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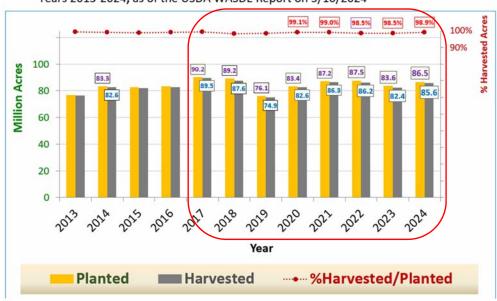
U.S. & KS Soybean Seasonal Prices

MY 1999/00 - 2022/23 plus "Current" 2023/24 & "New" 2024/25 on May 28, 2024



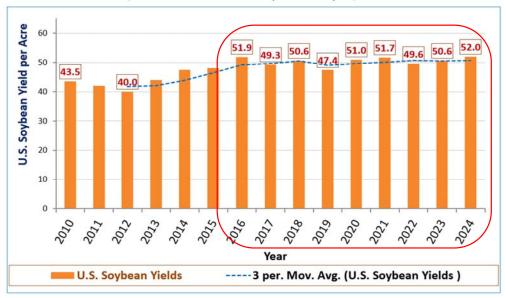
U.S. Soybean Acres for 2013-2024

Years 2013-2024, as of the USDA WASDE Report on 5/10/2024



U.S. Soybean Yields: 2010-2024

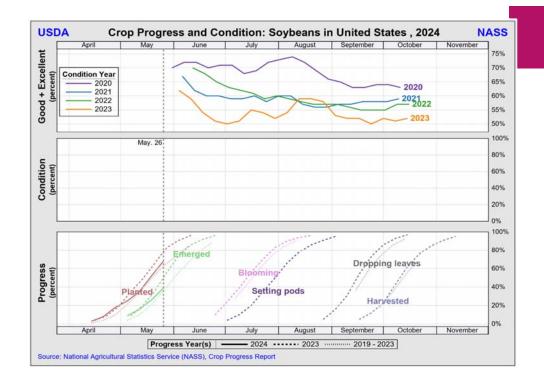
Years 2013-2024, as of the USDA WASDE Report on May 10, 2024



U.S. Soybean Production & Supply

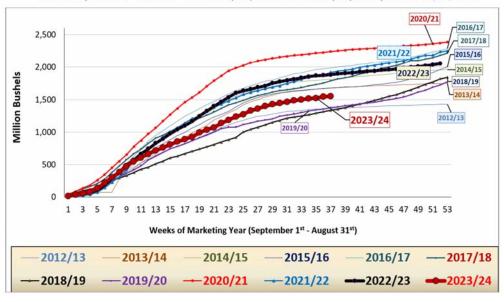
MY 2012/13 thru "New Crop" MY 2024/25 as of the May 10, 2024 WASDE Report





U.S. Soybean Exports

MY 2012/13 thru "Current" MY 2023/24, USDA FAS Weekly Export reports thru 5/16/2024



U.S. Soybean Use & Ending Stocks

MY 2012/13 - "New" 2024/25 as of the USDA May 10, 2024 WASDE Report



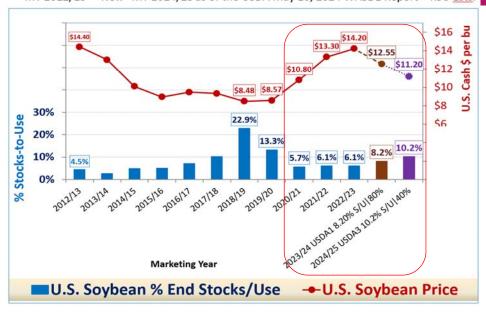
U.S. Soybean Stocks & % Stocks-to-Use

MY 2012/13 - "New" MY 2024/25 as of the USDA May 10, 2024 WASDE Report



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

MY 2012/13 - "New" MY 2024/25 as of the USDA May 10, 2024 WASDE Report + KSU Ests.



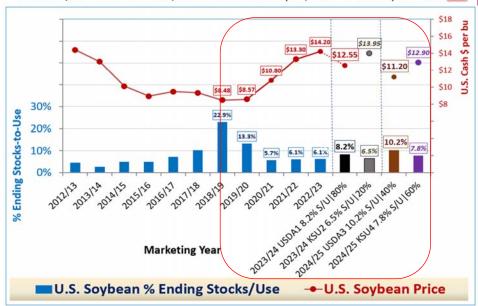
U.S. Soybean Projected S-D "Current" MY 2023/24 & "New" MY 2024/25

"Current" MY 2023/24 & "New" 2024/25 sourced from the May 10, 2024 WASDE Report + KSU Estimates 5/29/2024

ltem (4001)	A. USDA Scenario #1 "Current" MY 2023/24 = 50.6 bu/ac 340 mb Ending Stocks	B. KSU Scenario #2 "Current" MY 2023/24 "Higher Crush, Exports" + 35 mb Democits Crush & + 35 mb Exports	445 mb Ending Stocks	D. KSU Scenario #4 "New" MY 2024/25 = 50.0 bu/ac 334 mb Ending Stocks
% Probability of Occurring (KSU)	80%KSUest	20% ^{KSUest}	40% ^{KSUest}	60%KSUest
Planted Area (million acres)	83.600	83.600	86.510	86.510
Harvested Area (million acres)	82.356	82.356	85.577	85.577
Yield / harvested acre (bu/ac)	50.6	50.6	52.0	50.0
Beginning Stocks (million bushels)	264	264	340	340
Production (million bu.)	4,165	4,165	4,450	(-171 mb) 4,279
Total Supply (million bu.)	4,454	4,454	4,805	(-171 mb) 4,634
Domestic Crushings	2,300	(+35 mb) 2,335	2,425	(-30 mb) 2,395
Exports	1,700	(+35 mb) 1,735	1,825	(-30 mb) 1,790
Total Use	4,114	(+70 mb) 4,184	4,360	(-60 mb) 4,300
Ending Stocks	340	(-70 mb) 270	445	(-111 mb) 334
% Ending Stocks-to-Use	8.20%	6.45%	10.21%	7.77%
U.S. Avg. Farm Price (\$/bu)	\$12.55 USDA \$12.60 KSU 5/28/2024	\$13.95 KSU \$12.60 KSU 5/28/2024	\$11.20 USDA \$12.12 KSU 5/28/2024	\$12.90 KSU \$12.12 KSU 5/28/2024

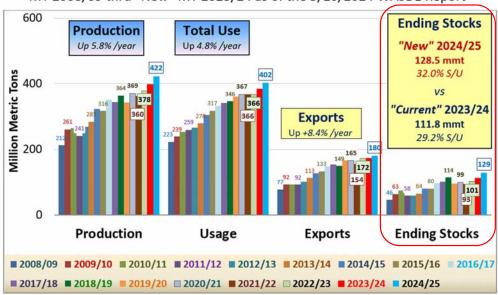
U.S. Soybean % S/U vs U.S. Cash\$

MY 2012/13 - "New" MY 2024/25 as of the USDA May 10, 2024 WASDE Report + KSU Ests.



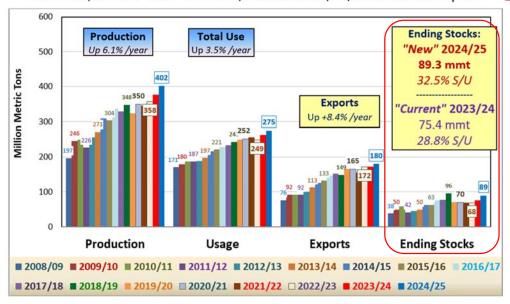
World Soybean Use & End Stocks

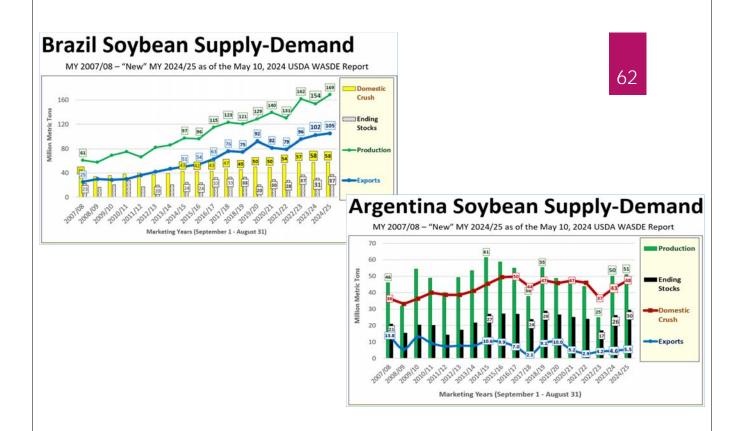
MY 2008/09 thru "New" MY 2023/24 as of the 5/10/2024 WASDE Report



World Less-China Soybean Use & End Stocks

MY 2008/09 thru "New" MY 2023/24 as of the 5/10/2024 WASDE Report



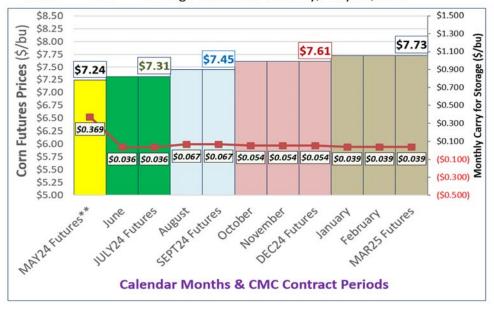


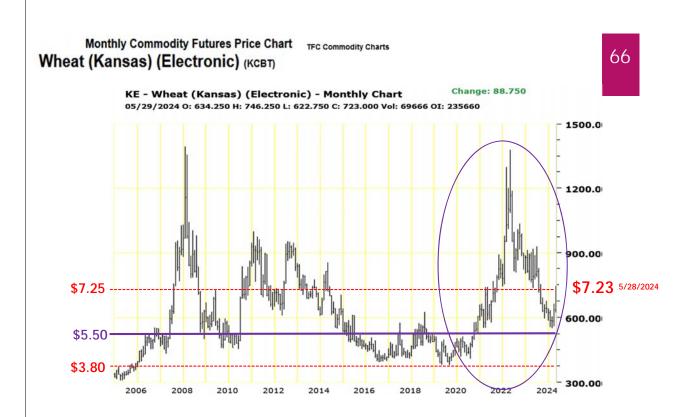




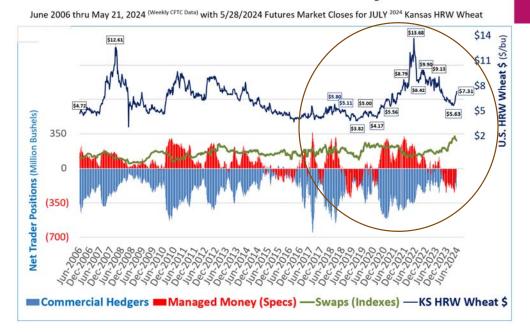
CME KS HRW Wheat Futures Lead & Deferred Contracts

MAR²⁰²⁴ – DEC²⁰²⁴ Closing Prices as of Tuesday, May 28, 2024





KS HRW Wheat CME - Net Position of Traders



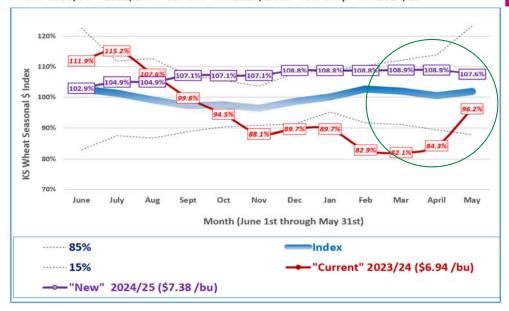
KS HRW Wheat CME - Managed Money Traders Specs



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Hard Red Winter HRW Wheat Seasonal \$'s

MY 1999/00 - 2022/23 + "Current" MY 2023/24 & "New Crop" MY 2024/25 as of 5/28/2024



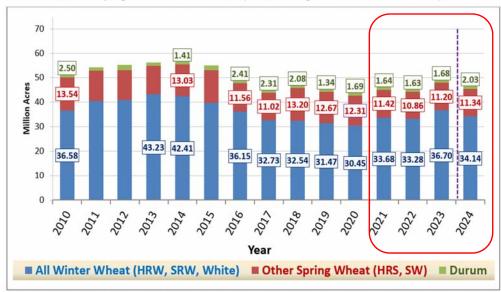
U.S. Wheat Planted & Harvested Acres

(MY 2010/11 - MY 2024/25) - USDA Prospective Plantings 3/28/2024 & WASDE May 10, 2024 Reports



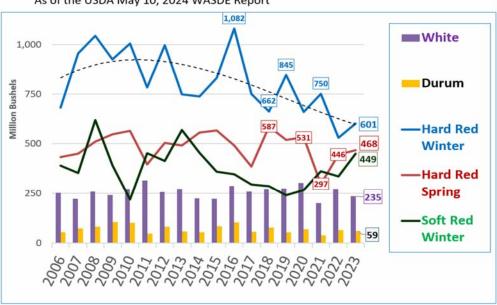
U.S. Wheat Planted Acreage 2010-2024

All Winter, Other Spring & Durum $^{(2010+)}$ – USDA Prospective Plantings $^{3/28/2024}$ & WASDE $^{May\,10,\,2024}$ Reports



U.S. Wheat Production by Class

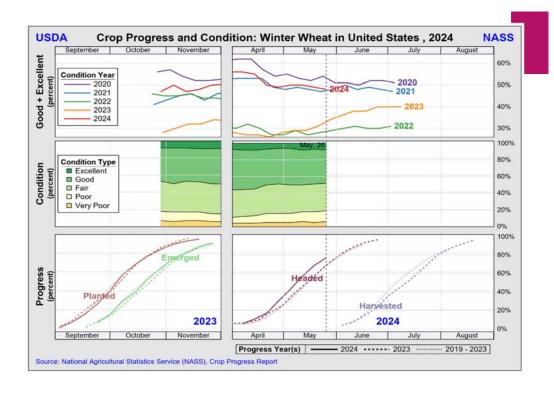
As of the USDA May 10, 2024 WASDE Report

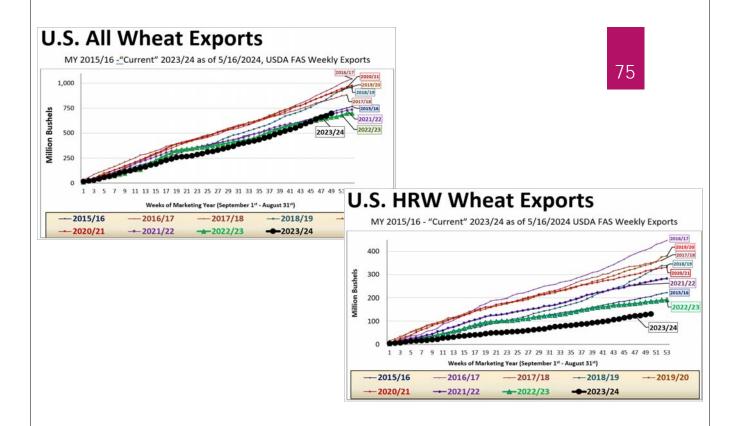


U.S. Wheat Total Supplies

MY 2004/05 - 2024/25 as of the May 10, 2024 USDA WASDE Report







U.S. Wheat Use & Ending Stocks

MY 2012/13 - "New" 2024/25 as of the May 10, 2024 USDA WASDE Report



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

MY 2006/07 - "New" 2024/25 as of the May 10, 2024 USDA WASDE Report



U.S. Wheat % Stocks/Use vs Cash \$'s

MY 2012/13 - "New" 2024/25 as of the May 10, 2024 USDA WASDE Report



U.S. Wheat Market Outcomes "New" MY 2024/25

USDA & KSU Proj. based on the 5/10/2024 WASDE + KSU Scenarios

Item % Probability of Happening ^{KSU est.}	USDA Scenario #1 "New" 2024/25 USDA WASDE May 2024 50% prob	KSU Scenario #2 "New" 2024/25 Lower HRW+HRS Yields: 47 bw/a 36.6% Stocks/Use 15% prob.	KSU Scenario #3 "New" 2024/25 KSU: 850 mb Exports 35.0% Stocks/Use 25% prob	KSU Scenario #4 "New" 2024/25 Lower HRW+HRS Yields: 47 bu/a 850 mb Exports 10% prob.	
Planted Area (million acres)	47.498	47.498	47.498	47.498	
Harvested Area (million acres)	37.996	37.996	37.996	37.996	
Yield / harvested acre (bu/ac)	48.9	47.0	48.9	47.0	
		Million			
Production	1,858	-72 mb 1,786	1,858	-72 mb 1,786	
Total Supply (million bushels)	2,665	-71 mb 2,594	2,665	-71 mb 2,594	
Exports	775	775	+ 75 mb 850	+ 75 mb 850	
Total Use (million bushels)	1,899	1,899	+75 mb 1,974	+75 mb 1,974	
Ending Stocks (million bushels)	766	-71 mb 695	- 75 mb 691	- 146 mb 620	
% Ending Stocks-to-Use	40.34%	36.60%	35.01%	31.41%	
U.S. Wheat Avg. Farm Price (\$/bushel)	\$6.00 Vs \$7.38 /bu. 5/28/2024 KSU-HRW Futures	\$7.30 Vs \$7.38 /bu. 5/78/2024 KSU-HRW Futures	\$7.75 Vs \$7.38 /bu. 5/28/2024 KSU-HRW Futures	\$8.60 Vs \$7.38 /bu. 5/28/2024 KSU-HRW Futures	

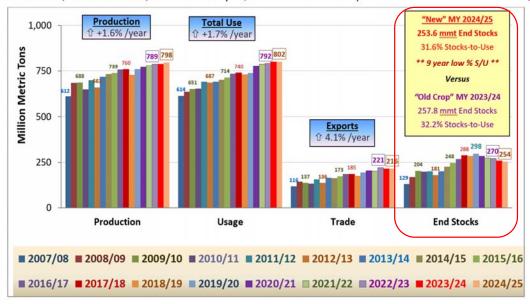
U.S. Wheat % S/U vs U.S. Cash \$'s

MY 2012/13 - "New" 2024/25 as of the May 10, 2024 WASDE + KSU Estimates



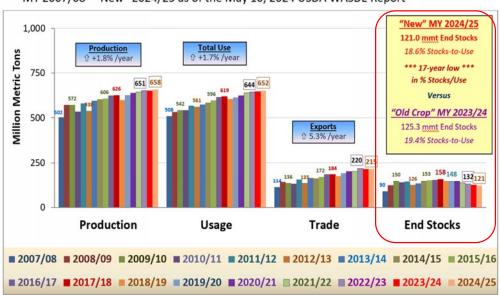
World Wheat Usage & Ending Stocks

MY 2007/08 - "New" 2024/25 as of the May 10, 2024 USDA WASDE Report



"World Less-China" Wheat Usage & End Stocks

MY 2007/08 - "New" 2024/25 as of the May 10, 2024 USDA WASDE Report



World vs "World Less-China" Wheat Stocks & % S/U

MY 2007/08 - "New" MY 2024/25 as of the May 10, 2024 USDA WASDE report



