

2023 Corn Markets & Strategies

'Winning-The-Game' Grain Marketing Workshop

Beloit, Kansas

Monday, February 27, 2023

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Corn Market Perspective

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Department of Agricultural Economics

Forecasted planted acres for 23/24 above 22/23, *except for cotton*

Crop (mil. acres)	2018	2019	2020	2021	2022	2023F	%Δ
Corn	88.9	89.7	90.7	93.3	88.6	91.0	2.7%
Soybeans	89.2	76.1	83.4	87.2	87.5	87.5	0.0
Wheat	47.8	45.5	44.5	46.7	45.7	49.5	8.2%
All cotton	14.1	13.7	12.1	11.2	13.8	10.9	-20.8%
Rice	2.9	2.6	3.0	2.5	2.2	2.5	12.5%
Sorghum	5.7	5.3	5.9	7.3	6.3	6.5	2.8%

Corn Market Outlook

	2021/22	2022/23	2023/24	Change yr/yr
Area planted (mil acres)	93.3	88.6	91	2.4
Area harvested (mil acres)	85.3	79.2	83.1	3.9
Yield (bu/acre)	176.7	173.3	181.5	8.2
Million bushels				
Beginning stocks	1,235	1,377	1,267	(110)
Production	15,074	13,730	15,085	1,355
Imports	24	50	25	(25)
Total supply	16,333	15,157	16,377	1,220
Domestic use (total)	12,484	11,965	12,290	325
-Feed and residual	5,718	5,275	5,600	325
-Food, seed, and industrial	6,766	6,690	6,690	-
--Ethanol and byproducts	5,326	5,250	5,250	-
Exports	2,471	1,925	2,200	275
Ending stocks	1,377	1,267	1,887	620
Stocks-to-use (percent)	9.2	9.1	13.0	3.9
Average farm price (\$/bushel)	6.00	6.70	5.60	(1.10)

- Production boosted with larger area planted and trend yields
- Domestic feed and residual use rebounding with higher supplies
- Higher exports
- Ethanol use unchanged at 5.25 billion bushels with steady gasoline consumption
- Ending stocks projected up
- Price forecast lower

Sorghum Market Outlook

	2021/22	2022/23	2023/24	Change yr/yr
Area planted (mil acres)	7.3	6.3	6.5	0.2
Area harvested (mil acres)	6.5	4.6	5.7	1.1
Yield (bu/acre)	69	41.1	69.2	28.1
	Million bushels			
Beginning stocks	20	47	25	(22)
Production	448	188	394	206
Imports	-	-	-	-
Total supply	468	235	419	184
Domestic use (total)	127	120	155	35
-Feed and residual	81	70	105	35
-Food, seed, and industrial	45	50	50	-
Exports	294	90	230	140
Ending stocks	47	25	34	9
Stocks-to-use (percent)	11.2	11.9	8.8	(3.1)
Average farm price (\$/bushel)	5.94	6.90	5.60	(1.30)

- Production boosted with return to normal yield and larger area
- Feed and residual use higher with larger crop
- Exports seen bouncing back based on larger supplies
- Stocks rebuilding slightly

Soybean Market Outlook

	2021/22	2022/23	2023/24	Change yr/yr
Area planted (mil acres)	87.2	87.5	87.5	0
Area harvested (mil acres)	86.3	86.3	86.7	0.4
Yield (bu/acre)	51.7	49.5	52	2.5
	Million bushels			
Beginning stocks	257	274	225	(49)
Production	4,465	4,276	4,510	234
Imports	16	15	15	-
Total supply	4,738	4,566	4,750	184
Crush	2,204	2,230	2,310	80
Exports	2,158	1,990	2,025	35
Total use	4,464	4,340	4,461	121
Ending stocks	274	225	290	65
Stocks-to-use (percent)	6.1	5.2	6.5	1.3
Average farm price (\$/bushel)	13.30	14.30	12.90	(1.40)

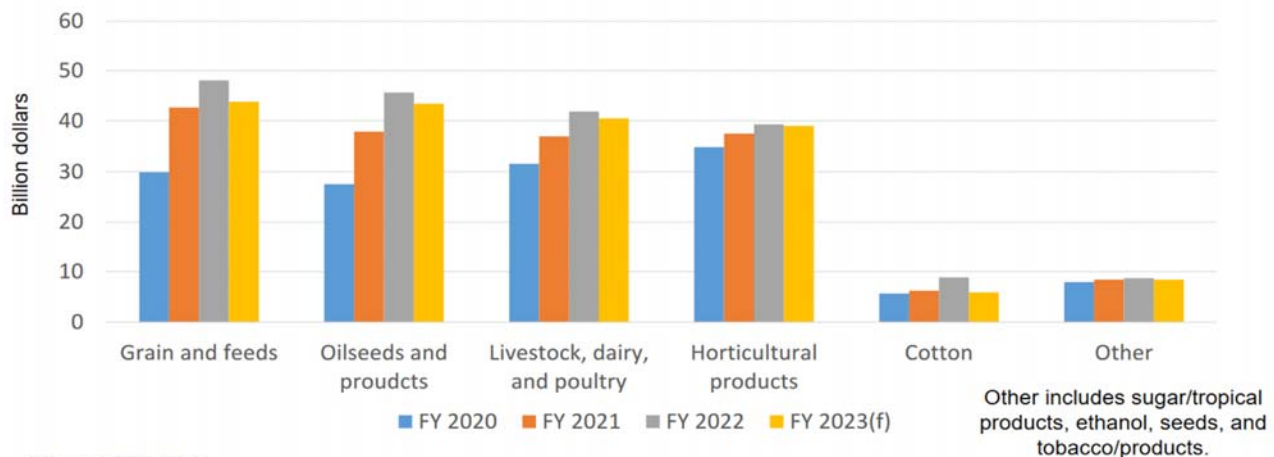
- Production up mainly on return to trend yield
- Growth in crush to support larger soyoil use
- Exports up slightly
- Stocks larger
- Price forecast lower

Wheat Market Outlook

	2021/22	2022/23	2023/24	Change yr/yr
Area planted (mil acres)	46.7	45.7	49.5	3.8
Area harvested (mil acres)	37.1	35.5	38.4	2.9
Yield (bu/acre)	44.3	46.5	49.2	2.7
Million bushels				
Beginning stocks	845	698	568	(130)
Production	1,646	1,650	1,887	237
Imports	95	120	120	-
Total supply	2,587	2,468	2,575	107
Domestic use (total)	1,088	1,125	1,142	17
-Food use	972	975	977	2
-Seed use	58	70	65	(5)
-Feed and residual	59	80	100	20
Exports	800	775	825	50
Total use	1,888	1,900	1,967	67
Ending stocks	698	568	608	40
Stocks-to-use (percent)	37.0	29.9	30.9	1.0
Average farm price (\$/bushel)	7.63	9.00	8.50	(0.50)

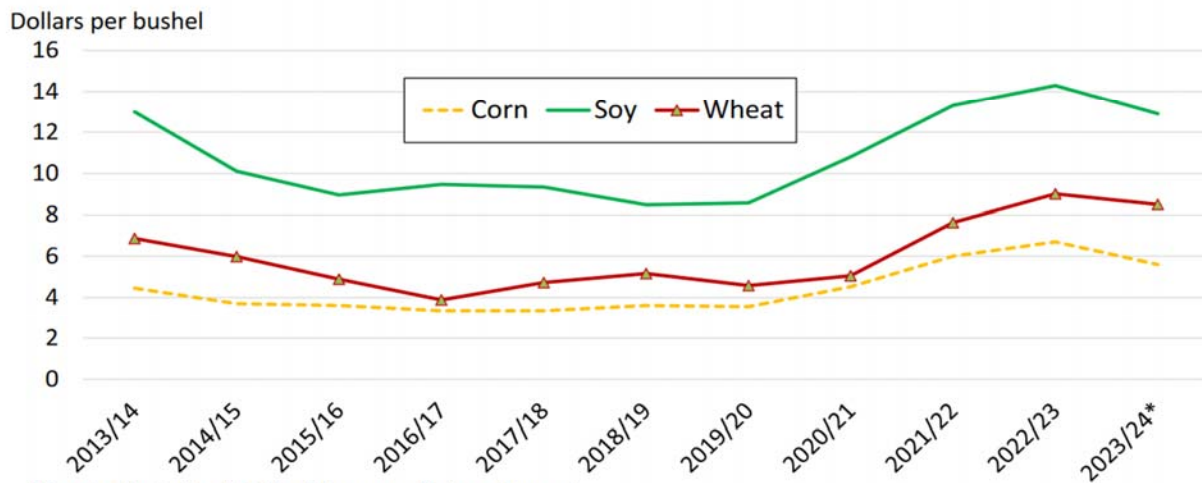
- Area up on strong price incentives
- Yield back to trend
- Slow growth in food use
- Feed and residual up with larger supplies
- Exports up, but still relatively low
- Stocks rebounding slightly

FY 23 Exports Forecast Down for Most Commodities, But Remain High Relative to Historical Levels



Source: ERS/FAS.

Projected 3-Crop Prices Lower, but Still Elevated



Questions to Consider Moving Forward

- Does drought in the Great Plains continue?
- What will spring planting conditions be like?
- What will Ukraine be able to produce and export?
- Will we continue to see strength in the U.S. dollar?
- What other global supply shocks will we see? Weather in South America?

Corn Market Outlook ²⁰²³ in Kansas, the U.S. & Globally

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1) “Tight!” 2023 Global Corn, Oilseed & Wheat Stocks

- *The importance of South America’s 2023 corn & soybean crops!!*
- Occurring &/or Anticipated in 2023:
 - Drought in Argentina & *large crops* in Brazil
 - *Smaller Crops & Exports* from Ukraine & *uncertainty* re: China

World Corn Production

Country or Region	2021/2022 estimate	2022/2023 forecast	Change from January 12	Change from 2021/2022
----- Million Tons -----				
World	1,216.0	1,151.4	-4.6	-64.6
United States	382.9	348.8	--	-34.1
Foreign	833.1	802.6	-4.6	-30.5
Argentina	49.5	47.0	-5.0	-2.5
Brazil	116.0	125.0	--	9.0
Mexico	26.8	27.6	--	0.8
Canada	14.6	14.5	--	-0.1
European Union	71.0	54.2	--	-16.8
Serbia	6.0	5.4	--	-0.6
FSU-12	63.7	46.4	0.1	-17.3
Ukraine	42.1	27.0	--	-15.1
Russia	15.2	14.0	--	-1.2
South Africa	16.1	16.7	--	0.6
China	272.6	277.2	--	4.6
India	33.6	32.0	--	-1.6

-- No change.

February 8, 2023

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Argentina Corn Supply-Demand

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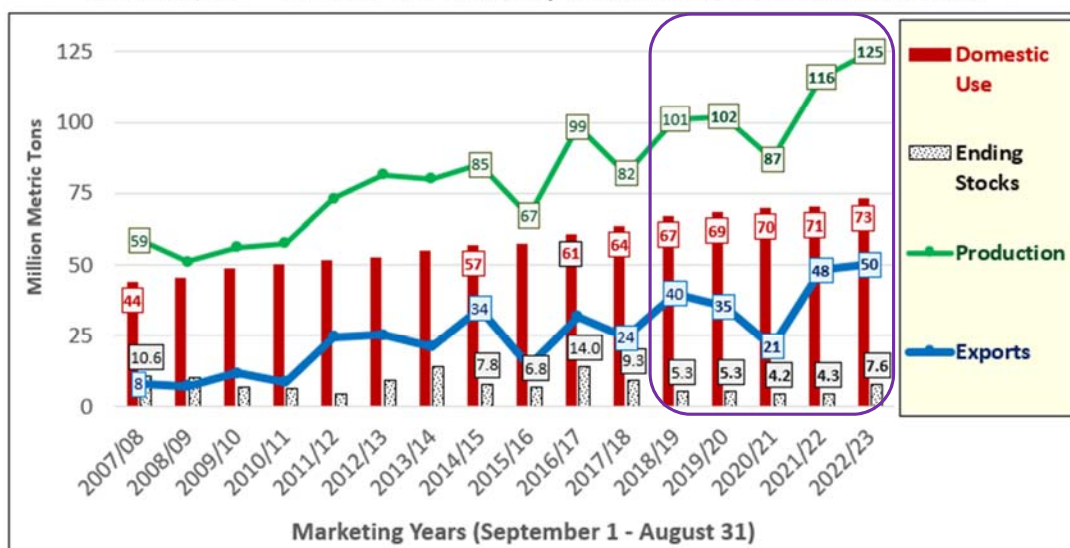
MY 2007/08 – “Current” MY 2022/23, as of the February 8, 2023 USDA WASDE report



Brazil Corn Supply-Demand

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MY 2007/08 – “Current” MY 2022/23, as of the February 8, 2023 USDA WASDE report



South America Corn-Soybean Calendar

□ South America Planting Influences ⇒ *"Bid for Acres"*

• Brazil & Argentina Corn & Soybean Crop Calendar

○ Brazil

- Corn: 1st crop *Planting* – October-December ⇒ Harvest: February-June
- Soybeans: *Planting* – October-December ⇒ Harvest: March-June
- Corn: 2nd crop *Planting* – January-February ⇒ Harvest: March-June

○ Argentina

- Corn: *Planting* – mid September-December ⇒ Harvest: mid March-early June
- Soybeans: 1st crop *Planting* – November-December ⇒ Harvest: Late March-early May
- Soybeans: 2nd crop *Planting* – December-early Jan. ⇒ Harvest: mid April – mid June

Ukraine Corn Supply-Demand

MY 2007/08 – "Current" MY 2022/23, as of the February 8, 2023 USDA WASDE report



China Corn Supply-Demand

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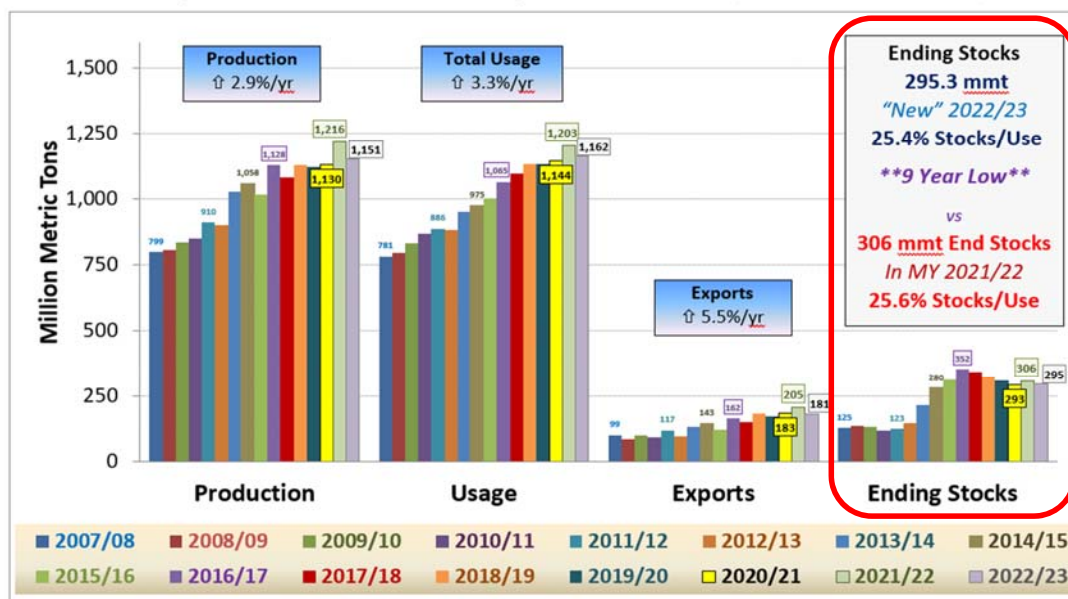
MY 2007/08 – “Current” MY 2022/23, as of the February 8, 2023 USDA WASDE report



World Corn Supply-Demand

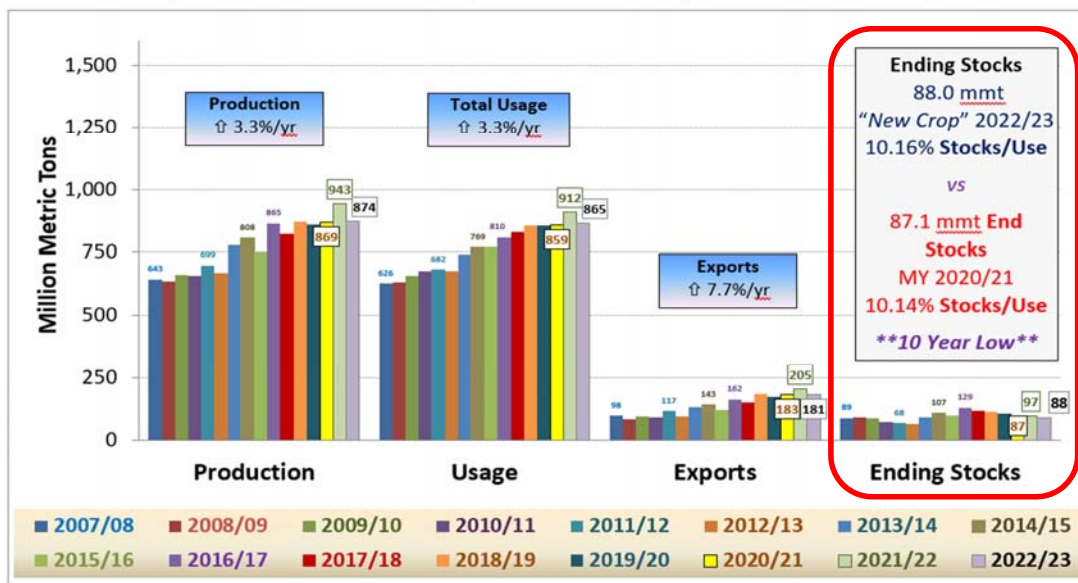
18

MY 2007/08 – “Current” MY 2022/23 as of the February 8, 2023 USDA WASDE Report



"World Less-China" Corn Supply-Demand

MY 2007/08 – "Current" MY 2022/23 as of the February 8, 2023 USDA WASDE Report



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

MY 2007/08 through "Current" MY 2022/23, as of the February 8, 2023 USDA WASDE report.



2) Carryover impact of the Crop Production damage in the Western-Central Plains during 2022-2023

- *Western Kansas / OK / TX / NE*

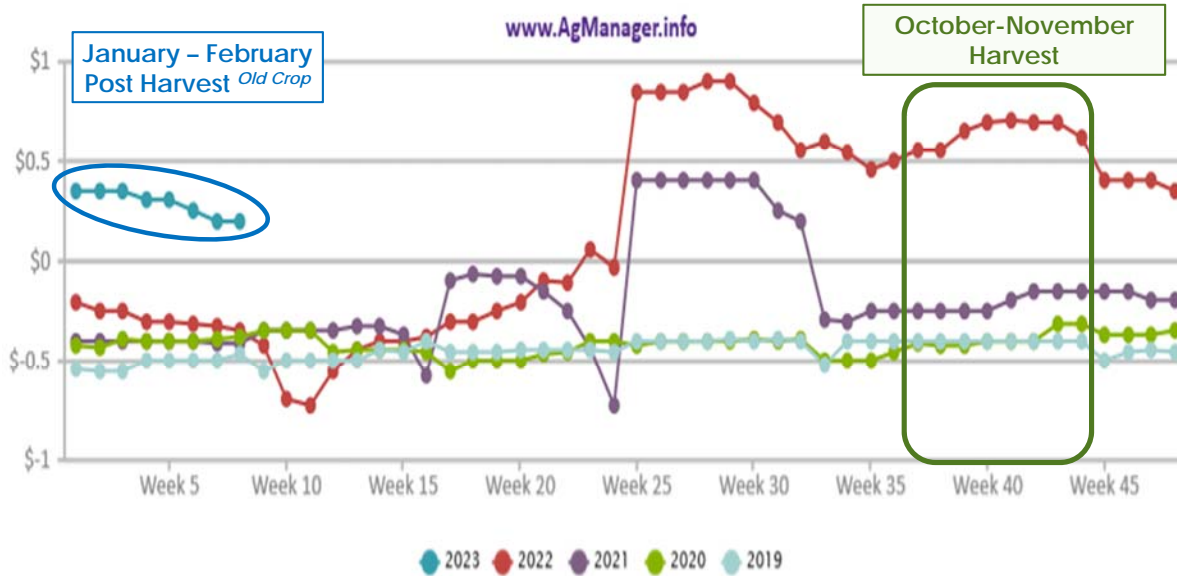
→ Stronger Corn & Soybean **BASIS** throughout the U.S. Corn Belt

► Q? 2023 U.S. Corn, Soybean & Wheat Production?

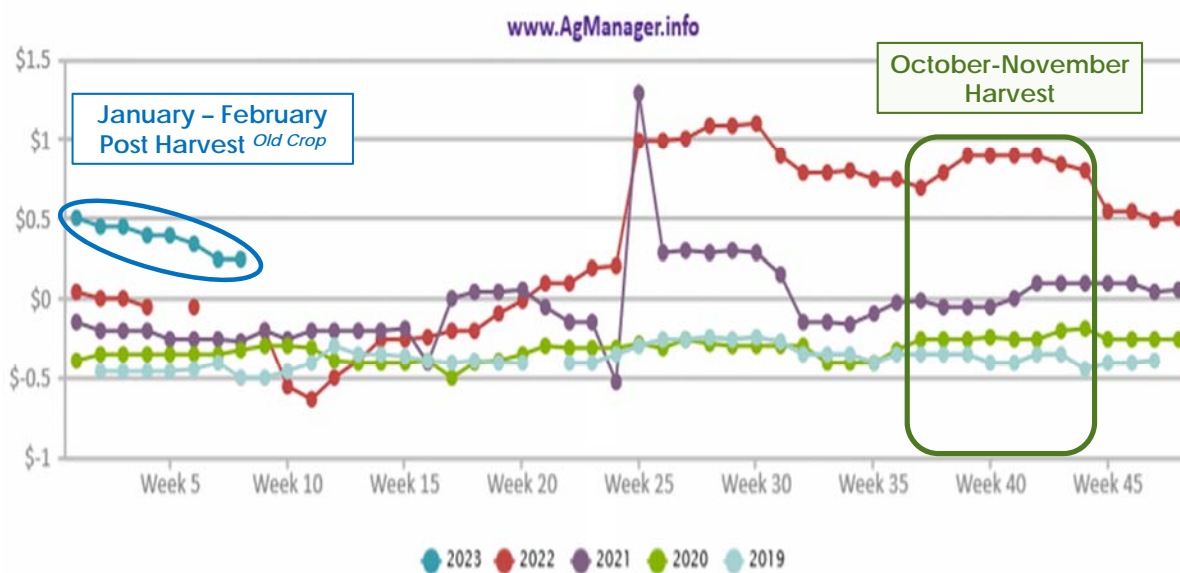
→ *Seasonal risk in Spring-Summer 2023 – Still dry in some areas*

Kansas Cash & Futures Prices						
Date						
2/24/2023 Market Closes						
Grain Futures Contracts	Closing \$					
MAR 2023 Corn ^(2023 Lead contract)	\$6.5000					
DEC 2023 Corn ^(2023 Harvest Contract)	\$5.7625					
2/24/2023 Market Closes	Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
	<i>Representing the highest bids available at each location</i>					
Cash Market Spot & FC Bids	Colby ^{Area}	Salina ^{Area}	Topeka ^{Area}	Garden City ^{Area}	Hutchinson ^{Area}	Columbus ^{Area}
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
Corn Spot Cash\$	\$7.10	\$6.99	\$6.85	\$7.75	\$7.40	\$7.20
Corn Spot Cash Basis	\$0.60	\$0.49	\$0.35	\$1.25	\$0.90	\$0.70
Corn Harvest FC\$: Fall ²⁰²³	\$5.66	\$5.61	\$5.46	\$6.31	\$5.76	\$5.51
Corn Harvest FC\$ Basis	(\$0.10)	(\$0.15)	(\$0.30)	\$0.55	(\$0.00)	(\$0.25)

BELOIT, KS: Corn Basis - CVA COOP



DOWNS, KS: Corn Basis - SCOLAR GRAIN CO



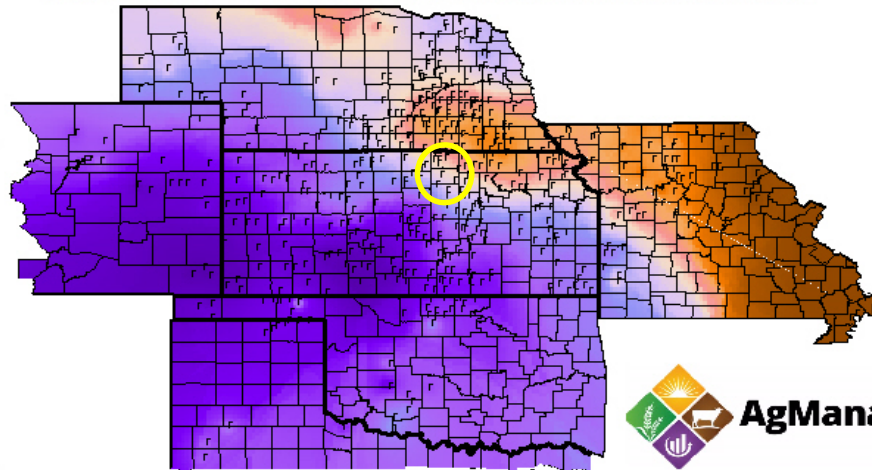
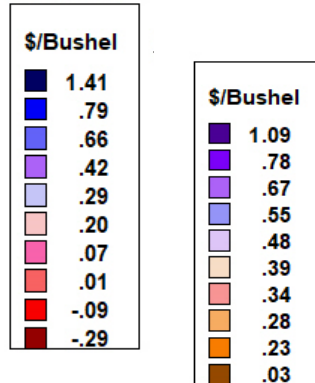
Corn Basis, 02-22-2023

25

Corn Basis Deviation, 02-22-2023

Basis Deviation = Current Basis - 3 Year Average Basis (2020, 2021, 2022)

CBT Mar
Futures
Price: \$6.74



Grain Market Outlook 2023

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3) Continuance of dry La Nina Weather Pattern in 2023???

- “La Nina is expected to continue into winter, with equal chances of La Nina & ENSO-neutral during January-March 2023. In February-April 2023, there is a 71% Chance of ENSO-neutral.”

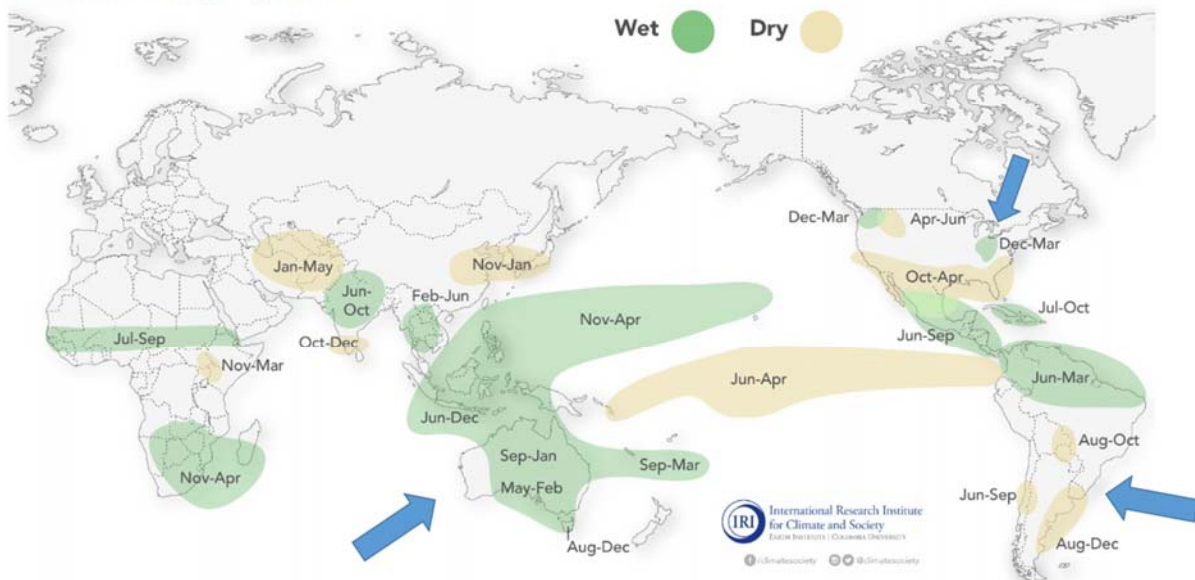
U.S. Climate Prediction Center / NCEP January 3, 2023

- “La Nina is breaking down, and an El Nino is forecast to emerge in 2023. Returning after several years, an El Nino can completely change the weather patterns for the weather seasons of 2023 & 2024.”

Severe Weather Europe, Andrej Flis January 11, 2023

'Triple Dip' La Niña coming to an end

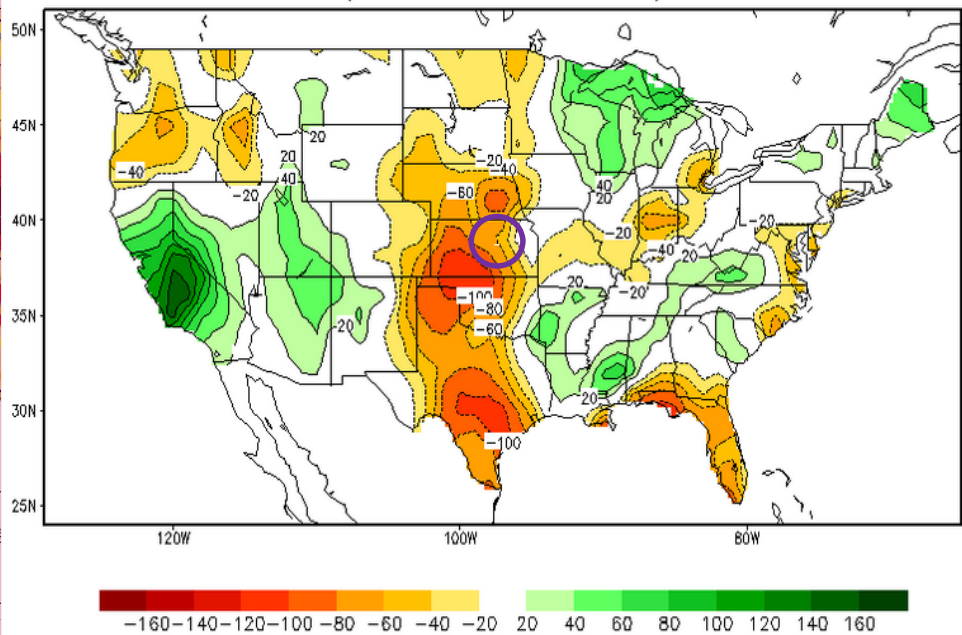
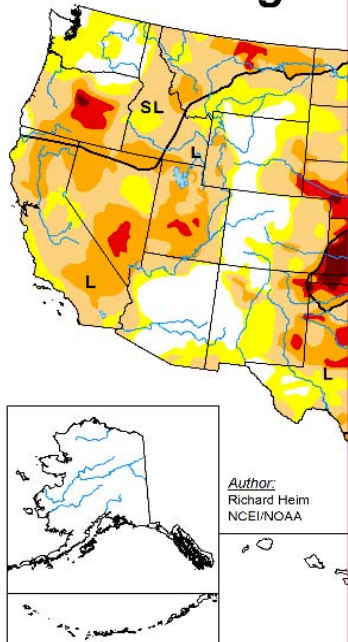
La Niña and rainfall patterns



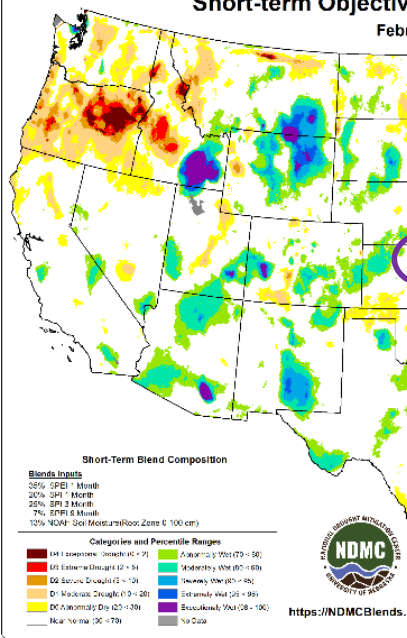
U.S. Drought Monitor

February 21, 2023
Predicted Soil Moisture Anomaly (mm)
(24Feb2023-03Mar2023)

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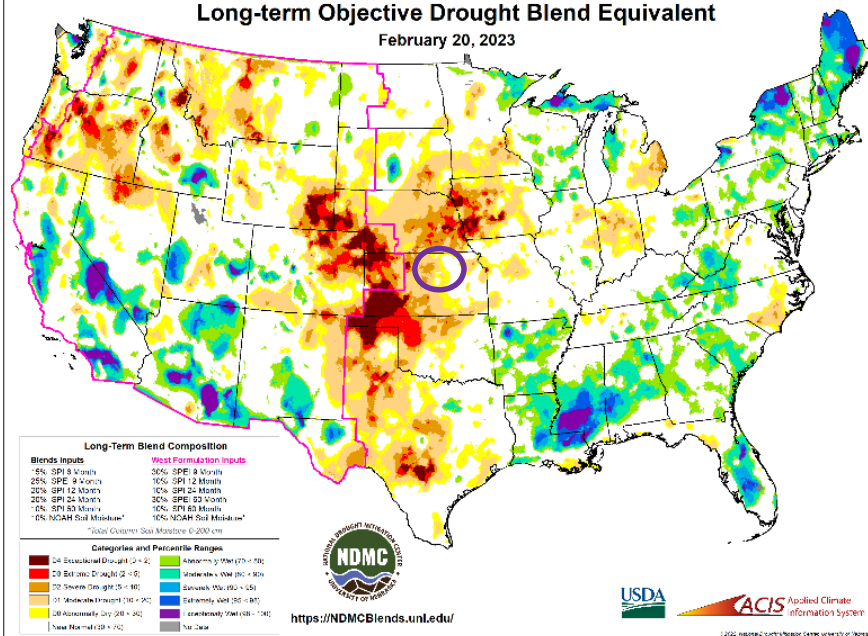


Short-term Objective Drought Blend Equivalent

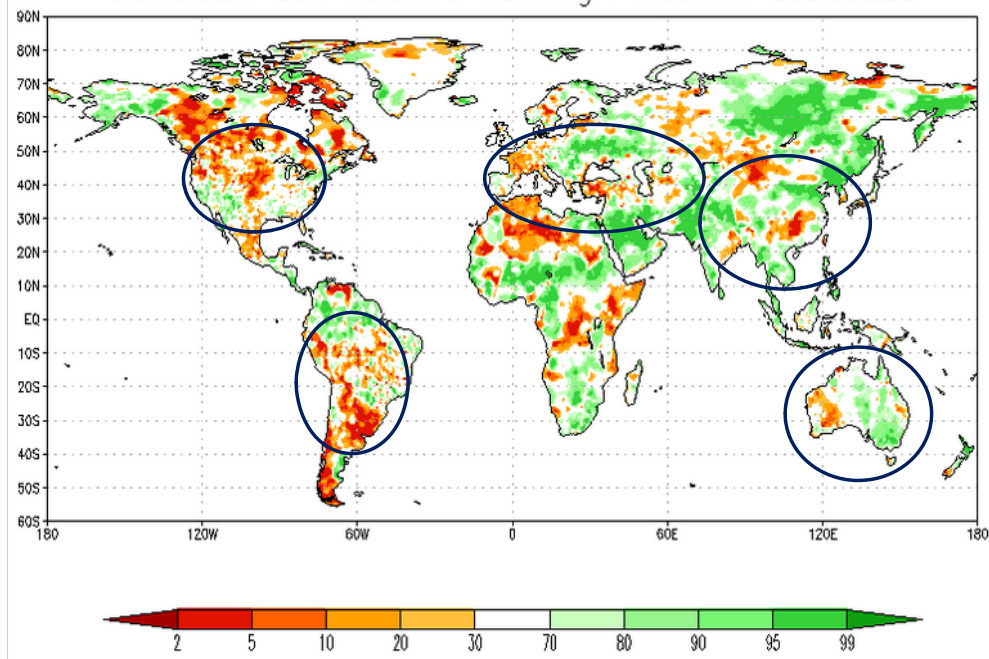


Long-term Objective Drought Blend Equivalent

February 20, 2023



Calculated Soil Moisture Ranking Percentile 20230223



4) Moderating Fertilizer \$'s & other Crop Input costs

- Lower natural gas \$'s, but continued supply-chain challenges*



Iowa Production Cost Summary

AMS Livestock, Poultry and Grain Market News
IA Dept. of Agr Market News

February 21, 2023

Product	Unit	Offer	Average	Change
Anhydrous Ammonia	Per Ton	1,175.00 – 1,200.00	1,191.00	DN 8.55
Urea 46-0-0	Per Ton	650.00 – 796.00	740.50	DN 24.75
Liquid Nitrogen 32-0-0	Per Ton	525.00 – 628.00	587.67	DN 30.33
MAP (Monoammonium Phosphate 11%N 52%P)	Per Ton	725.00 – 1,025.00	872.00	DN 35.50
Potash (Red) 0-0-60	Per Ton	520.00 – 875.00	676.00	DN 99.83
Farm Diesel < 1000 gallons	Per Gallon	3.35 – 3.40	3.38	DN 0.16
Propane (LP Gas) < 1000 gallons	Per Gallon	1.79 – 2.15	1.97	UP 0.04

\$NATGAS Natural Gas - Continuous Contract (EOD) CME

24-Feb-2023

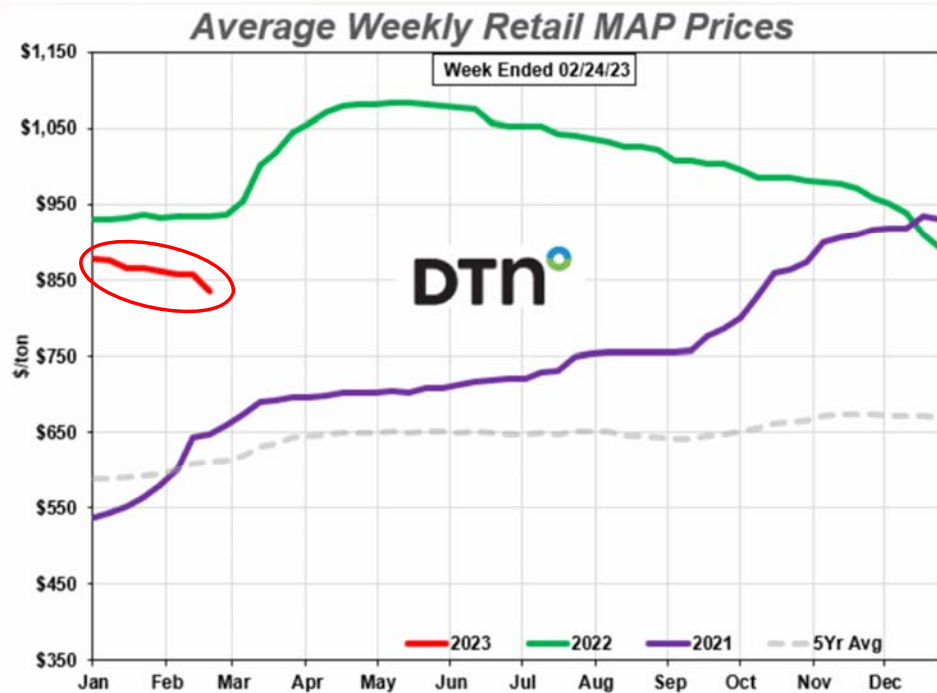
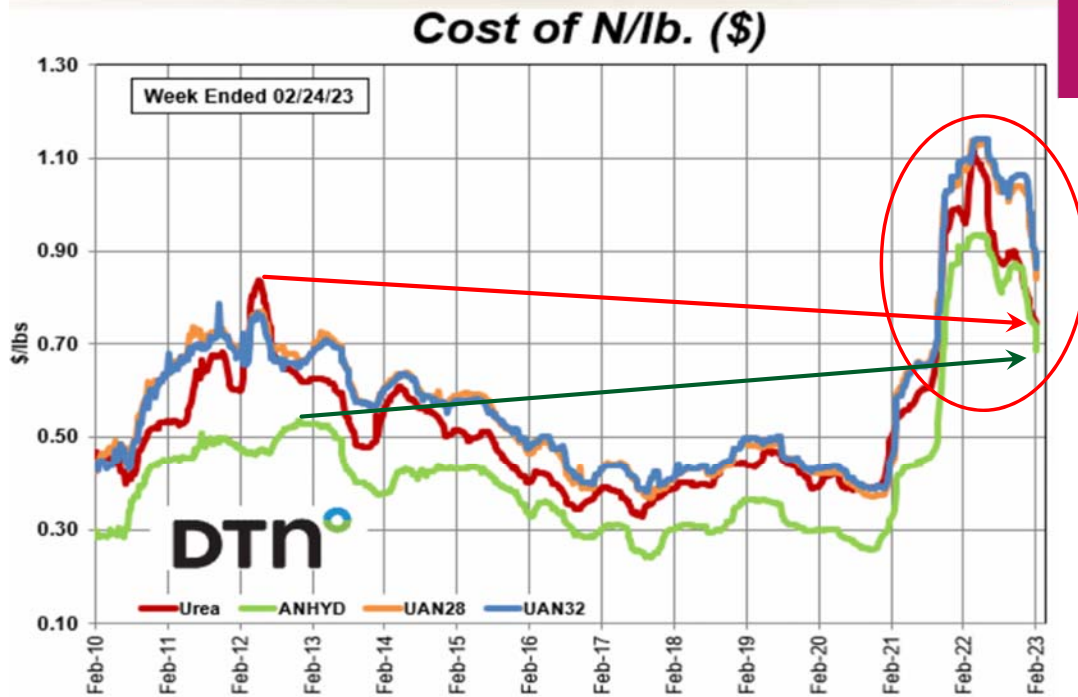
Open 2.31 High 2.59 Low 2.11 Close 2.55 Volume 75.1M Chg +0.27 (+12.00%)▲

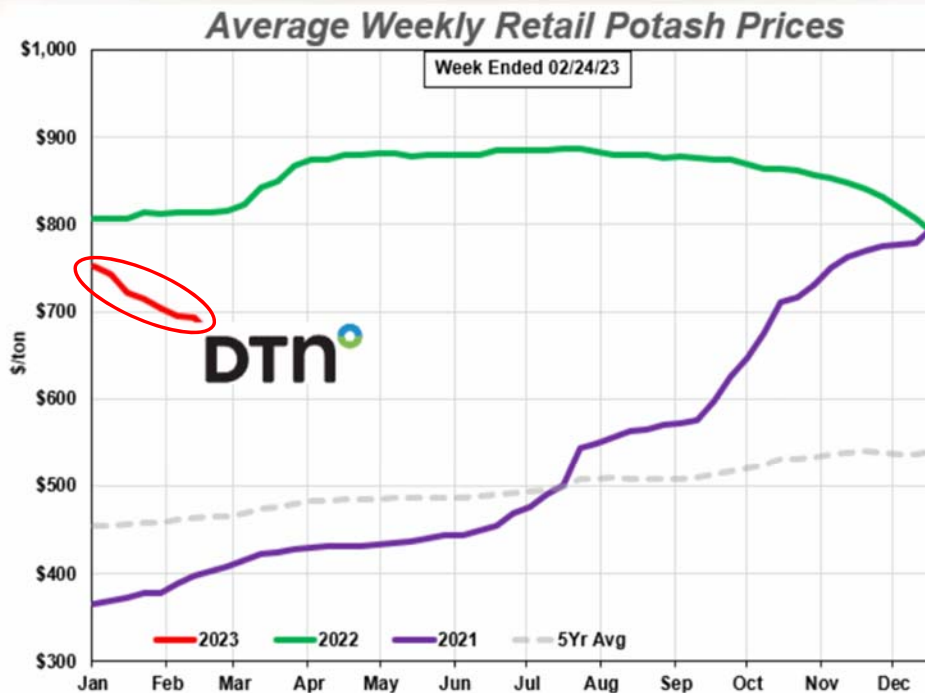
\$NATGAS (Weekly) 2.55

MA(3) 2.45

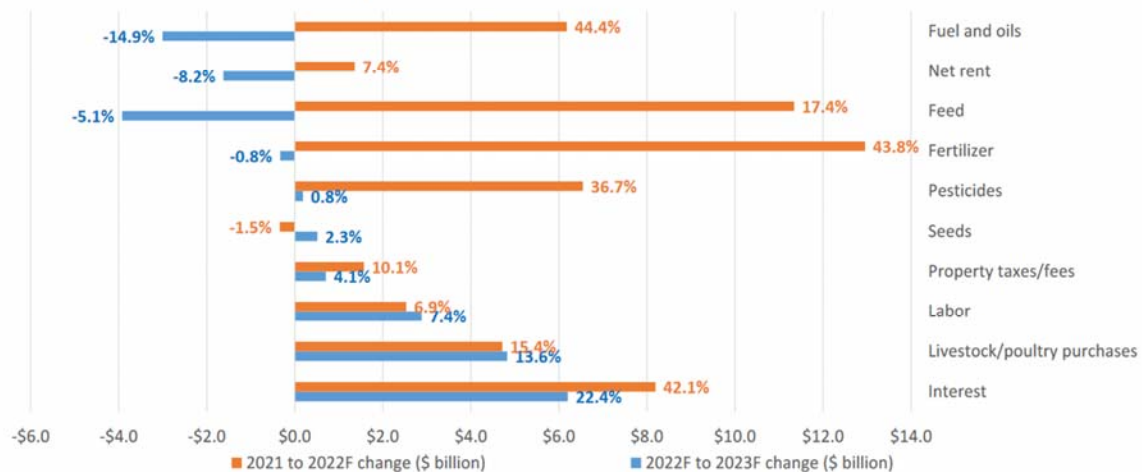
MA(9) 3.04







General moderating of changes in expenses expected over 2022-2023 compared to 2021-2022



Data source: USDA, Economic Research Service, Farm Income and Wealth Statistics
Data as of February 7, 2023. F = Forecast

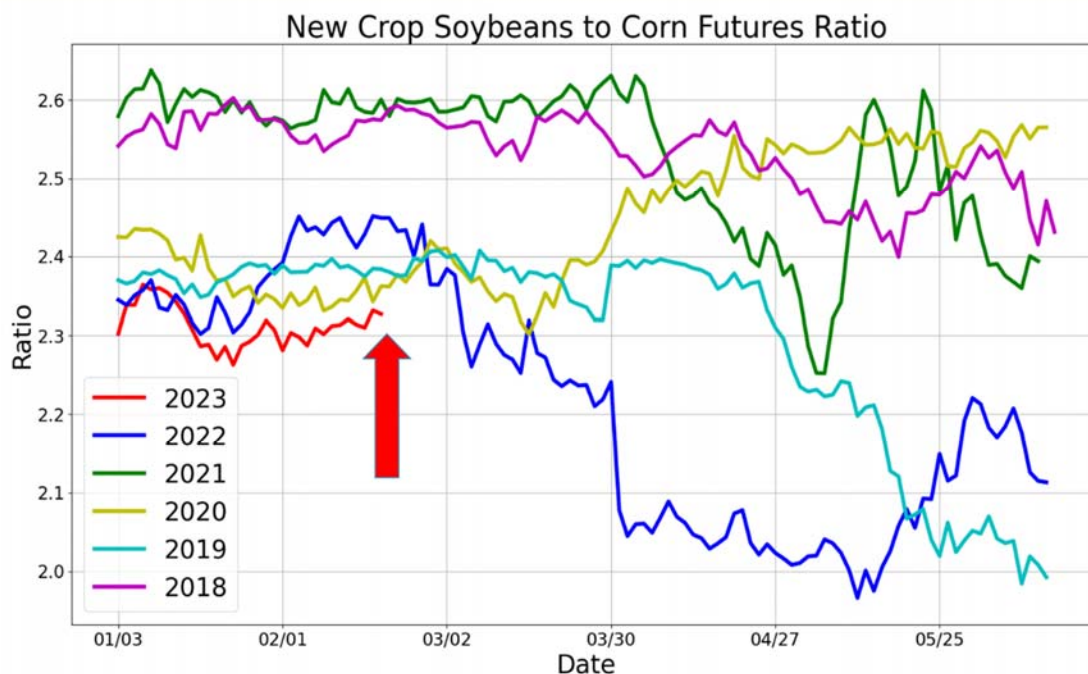
Note: percent year over year change over shown in call-out boxes

What to anticipate in Year 2023

5) 2023 Spring Planting of Feedgrains & Oilseeds

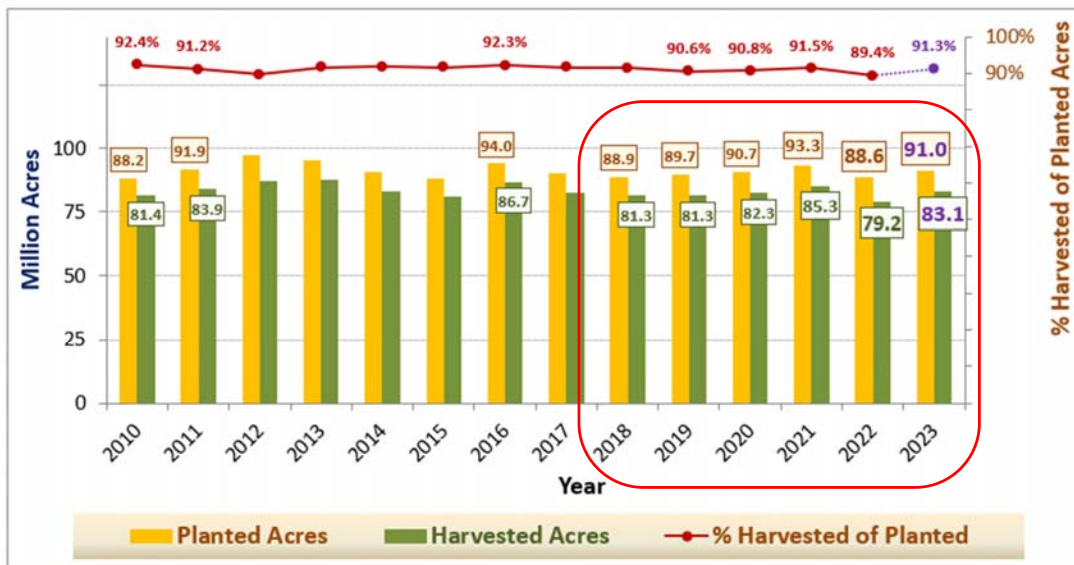
- **"New Crop" 2023 Prices favoring Corn Acres in 2023**
 - **NOV²⁰²³ Soybean futures** @ \$13.70 ½ /bu 2/26/2023 p.m.
 - **DEC²⁰²³ Corn futures** @ \$5.77 ¾ /bu 2/26/2023 p.m.s
 - **2023 "New Crop" Soy/Corn \$ Ratio** = $\$13.70 \frac{1}{2} \div \$5.77 \frac{3}{4} = 2.37$ (vs 2.30 Avg)
- **Plus** lower fertilizer / crop input costs will encourage higher **2023 U.S. Corn Acres** – **≈ 91 million acres**
 - Compared to: 88.6 mln. ac.²⁰²²; 93.3 mln. ac.²⁰²¹; 90.7 mln. ac.²⁰²⁰

+ Soybeans



U.S. Corn Acreage for 2010-2023

As of February 27, 2023 USDA NASS & WASDE Reports



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What to anticipate: Year 2023 (2nd of 3)

6) Are grain markets *at risk* to fall sharply in late 2023?

- With "tight" beginning stocks across these crops – less risk of major declines UNTIL at least late spring – early summer
- THEN the *risk* to grain sellers is that crop markets will discount the possibility of *"short crops"* in 2023

⇒ IF in Summer 2023 U.S. & Foreign crop prospects are *"OK-to-Good"*, THEN grain markets likely *"slide" lower* into Fall 2023

What to anticipate: Year 2023

7) USDA Reports ⇒ *Often a “driver” of grain market volatility*

- WASDE: Jan. 12, 2/8***, 3/8, 4/8, 5/12, 6/9, 7/12, 8/11, 9/12.....
- Planted Area: Prospective Plantings – May 31, Acreage – June 30

➤ “Strong” Demand-Pull for Feedgrains in Kansas 2023

- Summer demand for “New Crop” supplies (i.e. “users scrambling!”)
- *Possibility of strong Summer 2023 Corn Market Volatility IF a short crop happens in 2023* ⇒ What are the odds?

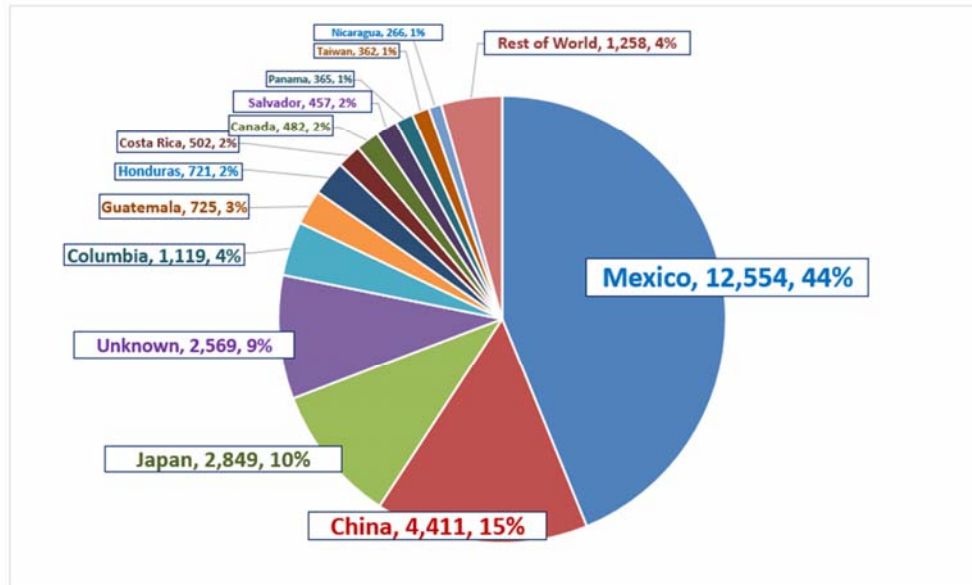
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U.S. Corn Export Outstanding Sales + Shipments

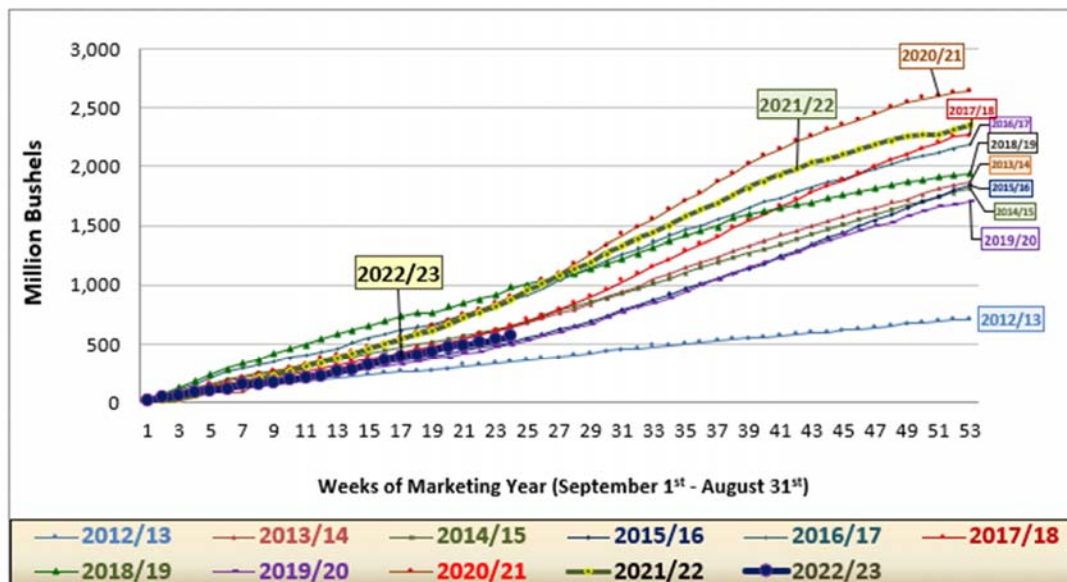
"Current" MY 2022/23 as of the 2/2/2023 USDA U.S. Export Forward Purchases (1,000 mt)



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U.S. Corn Exports: MY 2012/13 thru "New Crop" MY 2022/23

Based on USDA FAS Weekly Export reports through 2/16/2023



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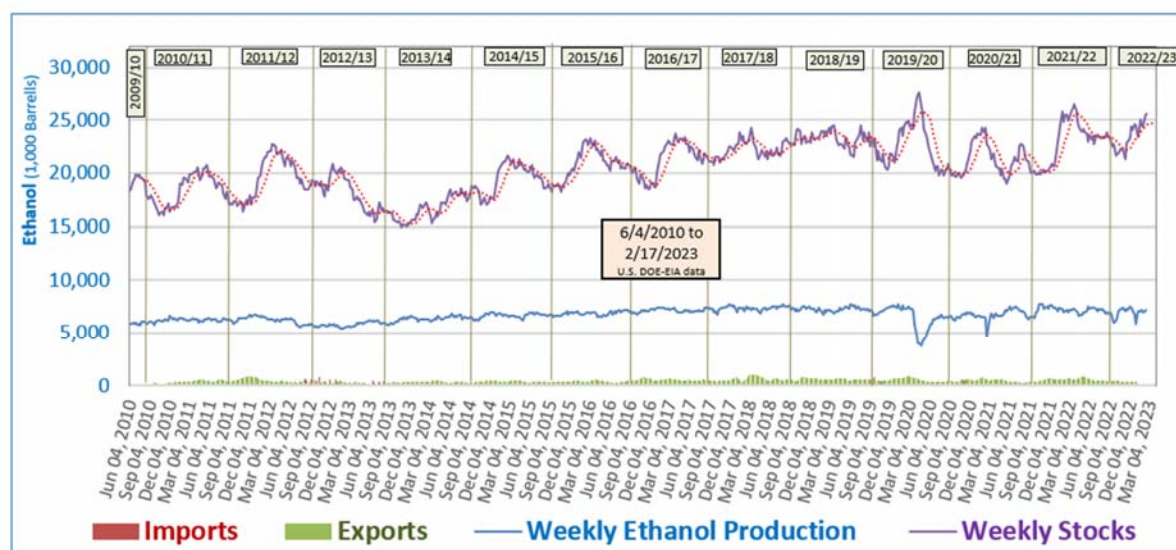
US #2 Yellow Corn -Bulk

Ethanol Plant

State/Province/Region	Sale Type	Basis (¢/bu)	Basis Change	Price (\$/Bu)	Price Change	Average
Illinois	Bid	-13.00H to 36.00K	UNCH	6.4725-6.9525	DN 0.1375-DN 0.1500	6.6675
Indiana	Bid	-10.00H to 13.00H	UNCH	6.5025-6.7325	DN 0.1375	6.6436
Iowa East	Bid	-15.00H to 13.00K	UNCH	6.4525-6.7225	DN 0.1375-DN 0.1500	6.5761
Iowa West	Bid	5.00H to 50.00H	UNCH	6.6525-7.1025	DN 0.1375	6.9020
Kansas	Bid	30.00H to 70.00K		6.9025-7.2925	DN 0.1375-DN 0.1475	7.1325
Michigan	Bid	-30.00K to -22.00K	UNCH	6.2925-6.3725	DN 0.1500	6.3425
Minnesota	Bid	-25.00H to 29.00H	UNCH	6.3525-6.8925	DN 0.1375	6.6808
Missouri	Bid	-2.00H to 40.00H	UNCH	6.5825-7.0025	DN 0.1375	6.7475
Nebraska	Bid	20.00H to 70.00H		6.8025-7.3025	DN 0.1375-DN 0.1400	6.9882
Ohio	Bid	-10.00H to 3.00K		6.5025-6.6225	DN 0.1375-DN 0.1675	6.5592
South Dakota	Bid	-12.00H to 42.00H	UNCH	6.4825-7.0225	DN 0.1375	6.7248
Wisconsin	Bid	-45.00H to -17.00H	UNCH	6.1525-6.4325	DN 0.1375	6.2775

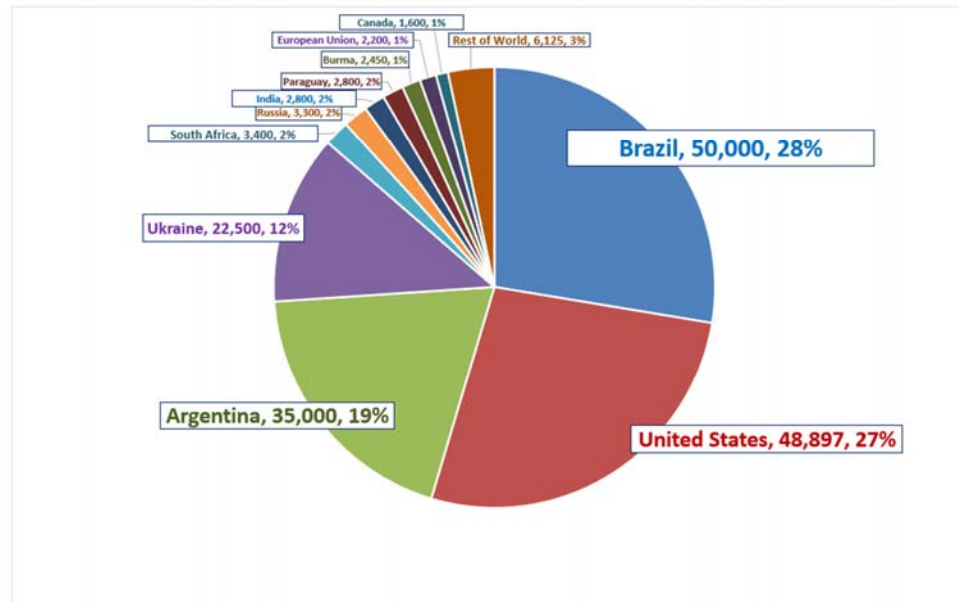
U.S. Ethanol Production & Stocks *Weekly*

Based on U.S. DOE – EIA on U.S. Ethanol Industry Trends as of February 17, 2023



Corn Exporters – Top Countries in “Current” MY 2022/23

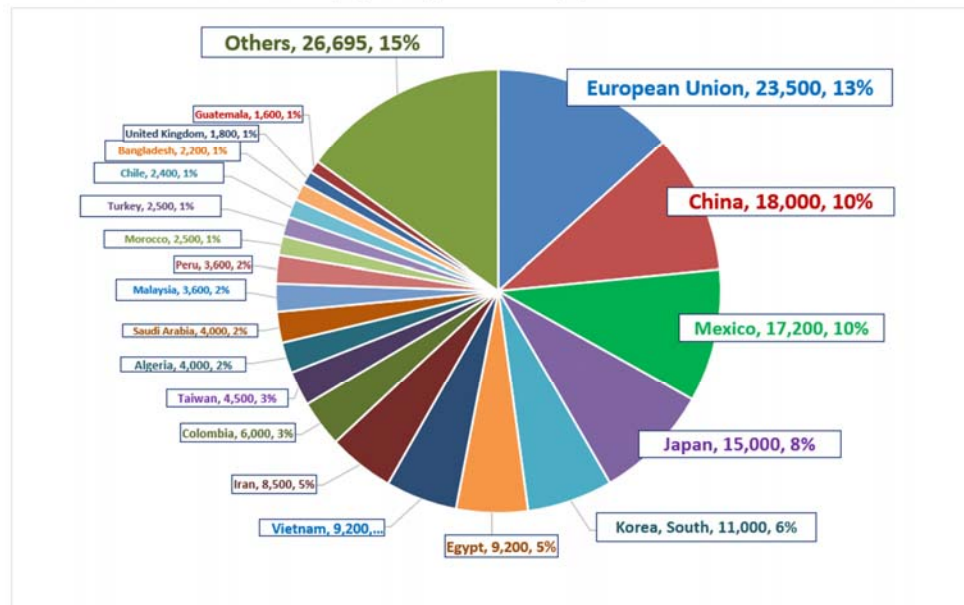
USDA FAS PSD-Online, (1,000 mt); as of February 8, 2023



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Corn Importers - Top Countries: “Current” MY 2022/23

Source: USDA FAS PSD-Online, (1,000 mt); as of February 8, 2023



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U.S. Corn Supply-Demand Balance Sheet

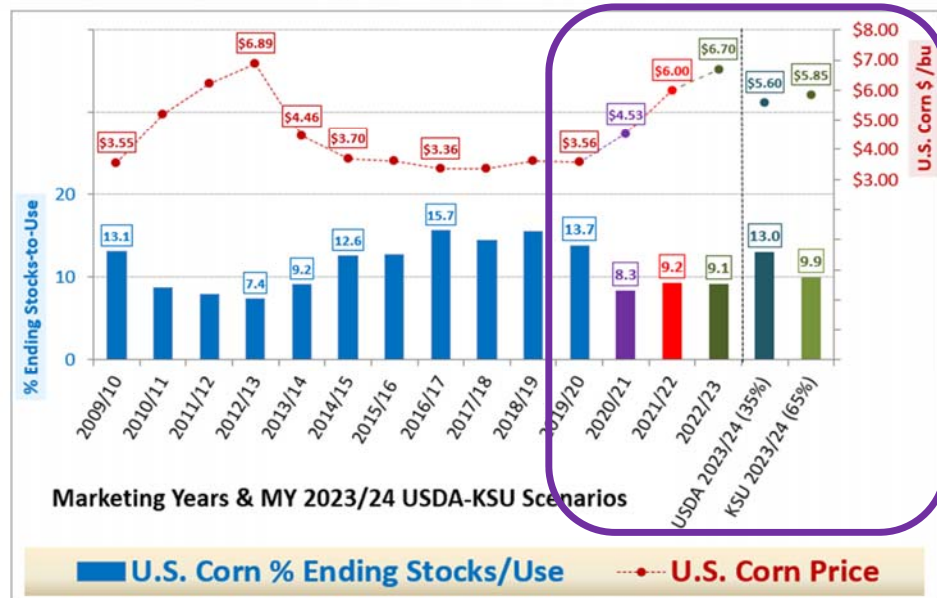
"Current" MY 2022/23 & Proj. "New Crop" MY 2023/24 as of the 2/26/2023 USDA Info. + KSU Ests.

Item	USDA 2022/23 1/12/2023 WASDE 172.3 bu/ac 13,730 bb crop	A. USDA "New Crop" MY 2023/24 Scenario #1 "High Yields" = 181.5 bu/ac 15,265 bb crop	B. USDA "New Crop" MY 2023/24 Scenario #1 "Average Yields" = 176.0 bu/ac 14,802 bb crop
% Probability of Occurring (KSU)	75% ^{KSUest}	35% ^{KSUest}	65% ^{KSUest}
Planted Area (million acres)	88,579	91,000	91,000
Harvested Area (million acres)	79,207	83,100	83,100
% Harvested/Planted Area	91.322%	91.32%	91.32%
Yield / harvested acre (bu/ac)	172.3	181.5	176.0
Million Bushels			
Beginning Stocks (million bushels)	1,377	1,267	1,267
Production (million bu.)	13,730	15,085	14,626
Imports (million bu.)	50.0	25.0	25.0
Total Supply (million bu.)	15,157	16,377	15,918
Ethanol for fuel Use (million bu.)	5,250	5,250	5,250
Food & Industrial Use (million bu.)	1,419.4	1,419.4	1,419.4
Seed Use (million bu.)	30.6	30.6	30.6
Exports (million bu.)	1,925	2,200	2,200
Feed & Residual Use (million bu.)	5,275	5,600	5,600
Total Use (million bu.)	13,890	14,490	14,490
Ending Stocks (million bu.)	1,267	1,887	1,428
% Ending Stocks-to-Use	9.12%	13.02%	9.86%
Days of Supply (% S/U x 365 days)	33.3 days	47.5 days	36.0 days
U.S. Corn Average Farm Price (\$/bushel)	\$6.70 ^{USDA} \$6.61 ^{KSU}	\$5.60 ^{USDA}	\$5.85 ^{KSU}

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

MY 2009/10 – "New Crop" MY 2023/24 as of the February 26, 2023 USDA Info.



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Prices are expected to come down on the strength of the 2022/23 crop

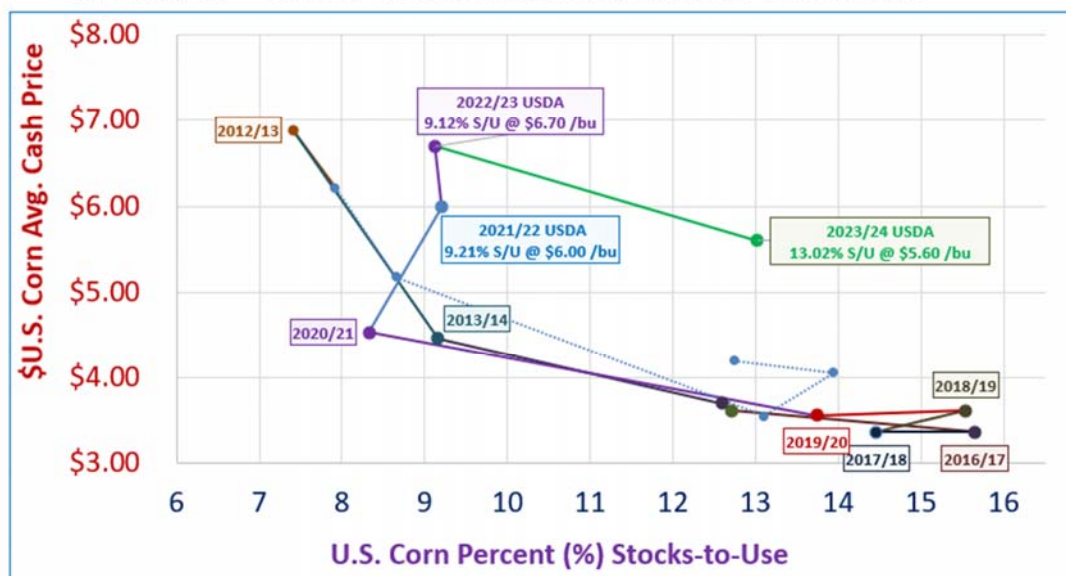
Crop	2012-2016 avg	2017	2018	2019	2020	2021	2022	2023	Δ2023
Corn (\$ / bu.)	4.40	3.36	3.61	3.56	4.53	6.00	6.70	5.60	-16.4%
All Rice (\$ cwt)	13.48	12.90	12.60	13.60	14.40	16.10	19.40	18.40	-5.2%
Sorghum (\$ / bu.)	4.15	3.22	3.26	3.34	5.04	5.94	6.90	5.60	-18.8%
Soybeans (\$ / bu.)	11.18	9.33	8.48	8.57	10.80	13.30	14.30	12.90	-9.8%
Upland Cotton (\$ / lb)	0.68	0.69	0.70	0.60	0.66	0.91	0.83	0.80	-3.6%
Wheat (\$ / bu.)	5.88	4.72	5.16	4.58	5.05	7.63	9.00	8.50	-5.6%
Barley (\$ / bu.)	5.73	4.47	4.62	4.69	4.75	5.31	7.30	--	--
Oats (\$ / bu.)	3.31	2.59	2.66	2.82	2.77	4.55	4.85	--	--

Source: USDA OCE-WAOB, Marketing Year prices, Barley and Oat prices not forecast for the Ag Outlook Forum.

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

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MY 2007/08 - "Current" MY 2022/23 as of February 26, 2023 USDA Information



Corn Market Prices

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CME Corn Futures ^{2/24/2023 Closes}			
Month	Close	Change	Carry /mo
Mar^{Lead} 23	\$6.50	↓ \$0.10 ¼	---
May 23	\$6.49 ¼	↓ \$0.10	-\$0.00 ³⁷⁵
July 23	\$6.38 ¾	↓ \$0.12	-\$0.05 ²⁵
Sept 23	\$5.90 ¾	↓ \$0.09 ¼	-\$0.24
Dec^{Hvst} 23	\$5.76 ¼	↓ \$0.09 ¼	-\$0.04⁸³³
Mar 24	\$5.84 ½	↓ \$0.08 ¾	+\$0.02 ⁷⁵
May 24	\$5.89 ¼	↓ \$0.08 ¾	+\$0.02 ³⁷⁵
July 24	\$5.91 ¼	↓ \$0.08	+\$0.02

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CME Corn Futures

"Old Crop"
MARCH 2023
OHLC \$'s

\$6.50 /bu

Market Close

Friday,
2/24/2023

ELEC. CORN (@C2023H)



CME Corn Futures

"New Crop"
DEC 2023
OHLC \$'s

\$5.76 1/4 /bu

Market Close

Friday,
2/24/2023

ELEC. CORN (@C2023Z)



CME Corn Futures *Continuous Weekly to 2/24/2023*



CME Corn Futures

Monthly
 "Continuous"
 OHLCs

Dec²⁰⁰⁵
 to
 Feb²⁰²³



Corn Futures Seasonal \$'s & Volatility since 2014

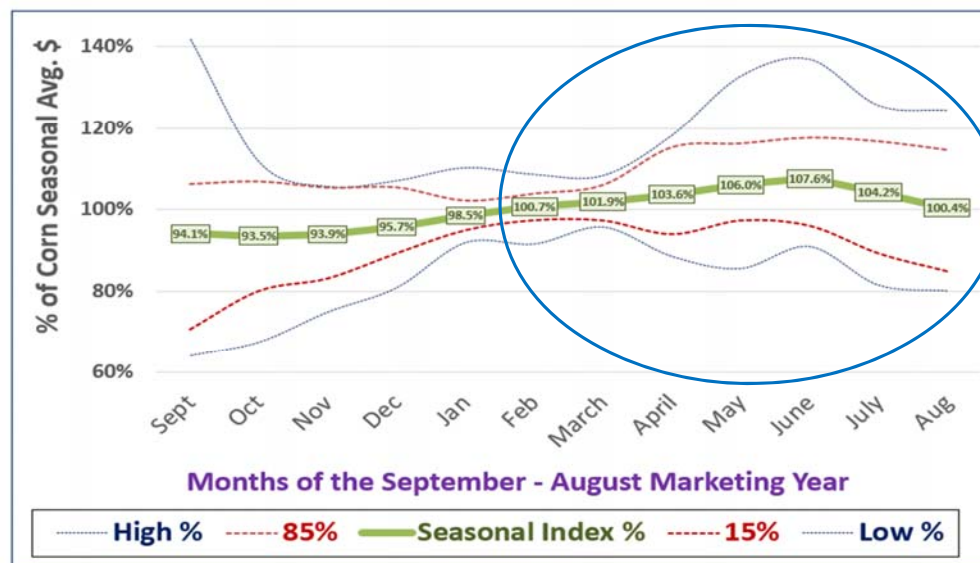
59



Corn Seasonal Price Index *North Central KS*

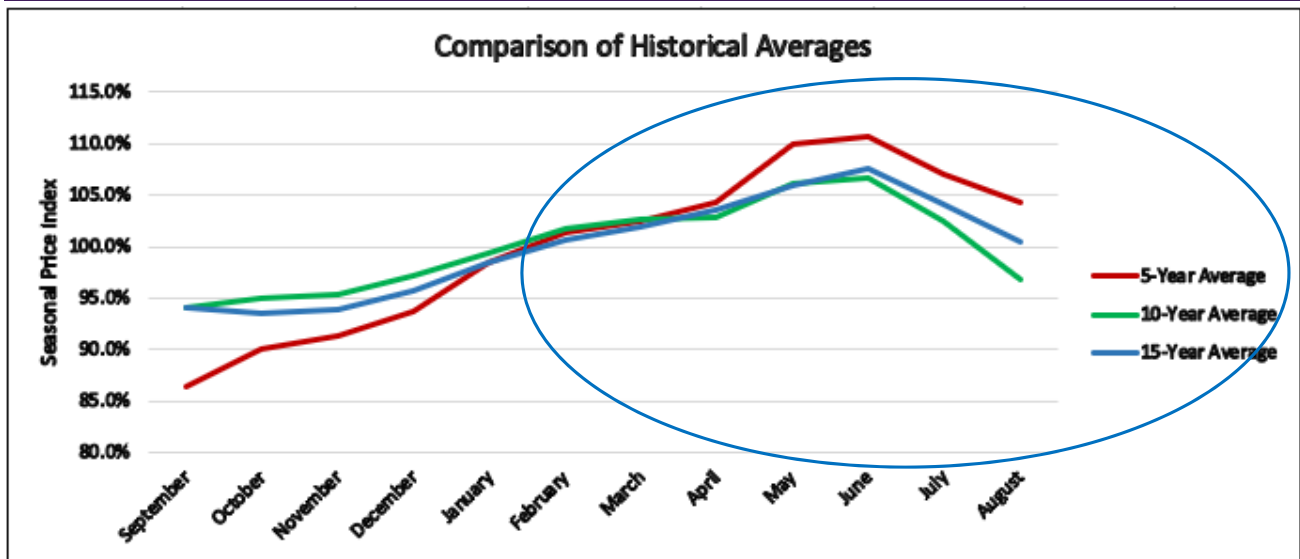
60

Last 23 Full Marketing Years: 1999/2000 through 2021/2022



Changing Seasonal Avg. Corn \$ Indices

For the last 5, 10, & 15 Years in North Central Kansas



Corn Seasonal Prices *Kansas-U.S.*

Long Term Seasonal \$ Trends + MY 2021/22 & "Current" MY 2022/23 As of 2/24/2023



USDA Corn \$ Forecasts:

"Old Crop"

MY 2021/22

= \$6.00 /bu U.S.

"Current"

MY 2022/23

= \$6.70 /bu U.S.

"Old Crop" MY 2021/22 (\$6.12 /bu)

"Current" MY 2022/23 (\$6.51 /bu)

My DTN Cash Bids

Friday, February 24, 2023

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Elevator/Location	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023
AGMARK LLC BELOIT, KS	6.68			---	---	---	---	---	5.44	---
CVA COOP-ASHERVILLE BELOIT, KS	6.63			---	---	---	---	---	5.44	---
CVA COOP GLEN ELDER, KS	6.73			---	---	---	---	---	5.54	---
CVA COOP HUNTER, KS	6.73			---	---	---	---	---	5.58	---
CVA COOP TIPTON, KS	6.73			---	---	---	---	---	5.58	---
RANDALL FARMERS COOP UNION RANDALL, KS	6.63			---	---	---	---	---	5.44	---
RANDALL FARMERS COOP UNION JEWELL, KS	6.63			---	---	---	---	---	5.44	---
SCOLAR GRAIN CO- ADA MINNEAPOLIS, KS	6.78	---	---	---	---	---	---	---	5.53	---
DELPHOS COOPERATIVE ASSOCIATION DELPHOS, KS	6.78	---	---	---	---	---	---	---	5.48	---
SCOLAR GRAIN CO DOWNS, KS	6.68	---	---	---	---	---	---	---	5.53	---
CVA COOP LINCOLN, KS	6.83	---	---	---	---	---	---	---	5.54	---

Elevator
Old Crop
Spot Basis:

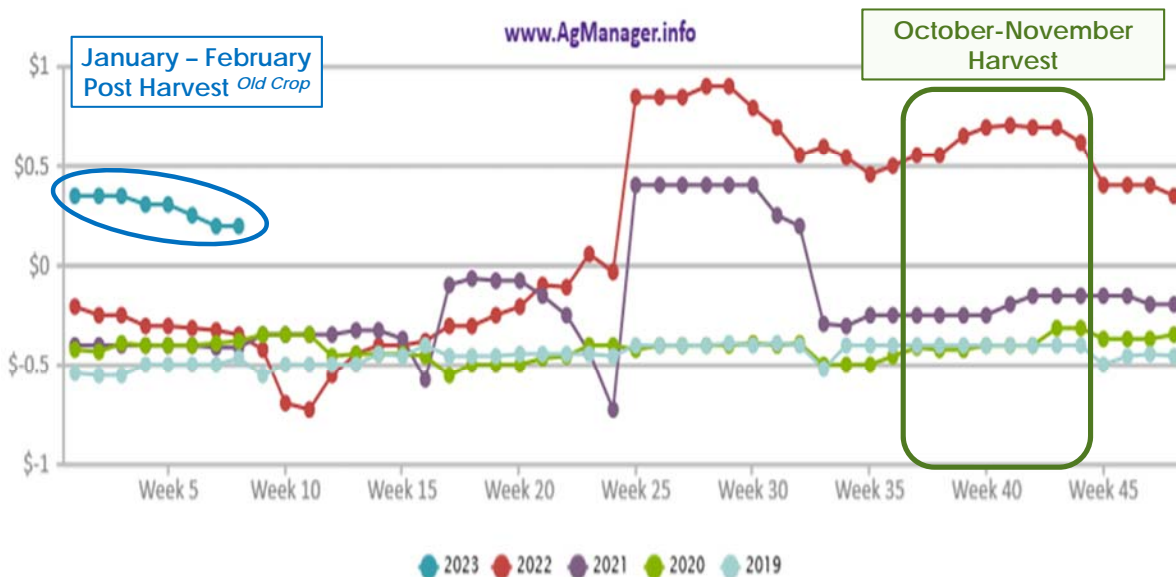
\$0.10 to
\$0.30
Over
MAR²⁰²³

Elevator
New Crop
FC Basis:

\$0.20 to
\$0.35
Under
DEC²⁰²³

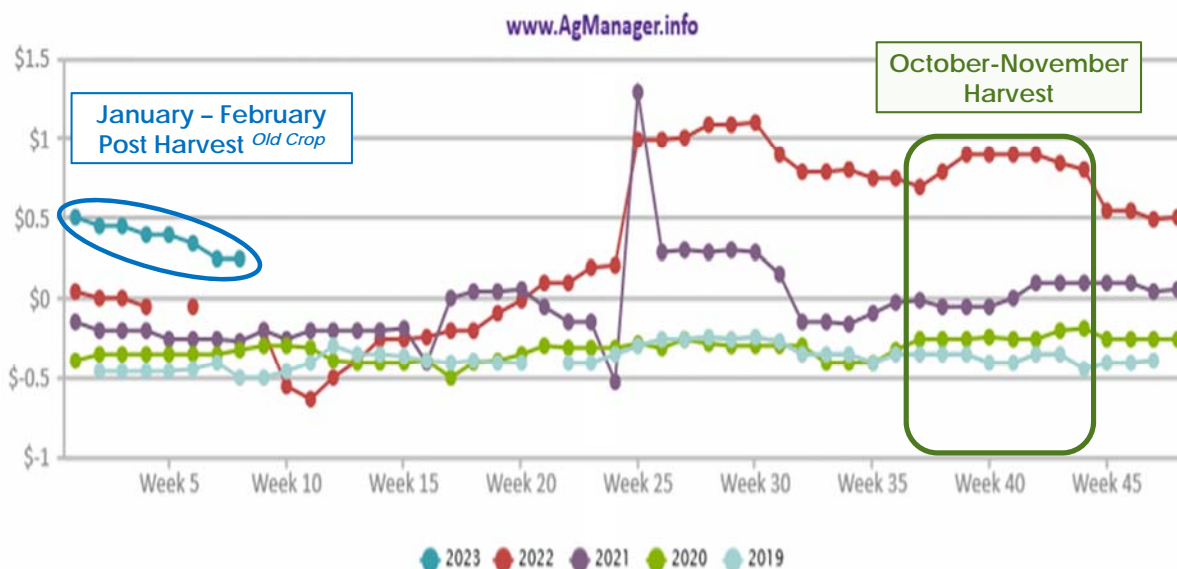
BELOIT, KS: Corn Basis - CVA COOP

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DOWNNS, KS: Corn Basis - SCOLAR GRAIN CO



2023 Corn Cost-Return Budget in North Central Kansas

-----Average yields

66

item	unit	price	quantity	amount	Sub-total
INCOME					
Product					
Corn - North Central KS	bu	\$5.97	120.00	\$716.40	\$716.40
--TOTAL INCOME--					\$716.40
DIRECT EXPENSES					
Additional labor					\$0.00
Crop insurance					\$0.81
Custom Operations					\$29.44
Diesel					\$19.32
Fertilizers					\$16.51
Herbicides					\$140.99
Miscellaneous					\$85.36
Operator labor					\$7.86
Repair & Maintenance					\$5.77
Seeds					\$15.32
Interest on operating capital	8% percent on direct expenses				\$74.80
--TOTAL DIRECT EXPENSES--					\$412.04
-----Total direct expenses per bu \$3.43					
FIXED EXPENSES					
Cash rent					\$95.00
Capital recovery (depreciation + interest)					\$54.10
--TOTAL FIXED EXPENSES--					\$149.10
-----Total expenses per bu \$4.68					
RETURNS ABOVE DIRECT EXPENSES					\$304.36
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$155.26

2023 Corn Costs North Central KS

Yield = 120 bu /ac

Total Direct Expenses
= \$3.43 /bu

Total of ALL Expenses
= \$4.66 /bu

2023 Irrigated Corn (center-pivot) Cost-Return Budget

-----North Central Kansas (Average yields)

67

Item	unit	price	quantity	amount	Sub-total
INCOME					
Product					
Corn - North Central KS	bu	\$5.97	240.00	\$1,432.80	\$1,432.80
--TOTAL INCOME--					\$1,432.80
DIRECT EXPENSES					
Additional labor					\$0.81
Crop insurance					\$17.53
Custom Operations					\$29.76
Diesel					\$22.91
Fertilizers					\$265.29
Herbicides					\$110.63
Irrigation energy (NG)					\$53.20
Irrigation labor					\$8.10
Miscellaneous					\$12.10
Operator labor					\$8.39
Repair & Maintenance					\$23.50
Seeds					\$133.02
Interest on operating capital		8% percent on direct expenses			\$27.41
--TOTAL DIRECT EXPENSES--					\$712.66
-----Total direct expenses per bu \$2.97					
FIXED EXPENSES					
Cash rent					\$195.00
Capital recovery (depreciation + interest)					\$251.62
--TOTAL FIXED EXPENSES--					\$446.62
-----Total expenses per bu \$4.83					
RETURNS ABOVE DIRECT EXPENSES					\$720.14
RETURNS ABOVE TOTAL SPECIFIED EXPENSES					\$273.52

2023 Corn Costs NC Kansas Irrigated

Yield = 240 bu /ac

Total Direct Expenses
= \$2.97 /bu

Total of ALL Expenses
= \$4.83 /bu

2023 Preharvest Marketing Plan

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Preharvest Marketing Plan



Objective: Buy crop insurance to protect my production risk and price ____ % of my anticipated crop (based on APH yield) or _____ bushels.

Price _____ bushels at \$ _____ cash price (\$ _____ - _____ futures)
(contract month) _____
using _____

Price _____ bushels at \$ _____ f/ _____ c, or by _____, 2023, using _____

Price _____ bushels at \$ _____ f/ _____ c, or by _____, 2023, using _____

Price _____ bushels at \$ _____ f/ _____ c, or by _____, 2023, using _____

Price _____ bushels at \$ _____ f/ _____ c, or by _____, 2023, using _____

Price _____ bushels at \$ _____ f/ _____ c, or by _____, 2023, using _____

Price _____ bushels at \$ _____ f/ _____ c, or by _____, 2023, using _____

Plan starts on _____. **Completed by** _____.

Ignore decision dates and make no sale if prices are lower than \$ _____
_____ (month/commodity) futures / \$ _____ local cash price.

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Sample Pre-Harvest Marketing Plan



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Objective: Buy crop insurance to protect production risk and price 75% of our 67,000-bushel APH **(50,000 bu.)**.

Using five, Increments

Price 10,000 bushels at \$4.30 December futures/\$4.15 cash
or by April 15

Price 10,000 bushels at \$4.50 fut./4.35 cash, or by May 15

Price 10,000 bushels at \$4.60 fut./4.45 cash, or by Jun 15

Price 10,000 bushels at \$4.75 fut./4.60 cash, or by Jul 15

Price 10,000 bushels at \$5.00 fut./4.85 cash, or by Aug 15

Plan starts on January 1, 2023.

Ignore decision dates and make no sale if prices are lower than
\$4.00 local cash price.

Exit all options positions by October 1



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What Would YOU Change?

50% is
Plenty!

Objective: Buy crop insurance to protect production risk and price 75% of our 67,000-bushel APH (50,000 bu.).

Using five increments

Price 10,000 bushels at \$4.30 December futures/\$4.15 cash
or by April 15

Price 10,000 bushels at \$4.50 fut./4.35 cash, or by May 15

Price 10,000 bushels at \$4.60 fut./4.45 cash, or by Jun 15

Price 10,000 bushels at \$4.75 fut./4.60 cash, or by Jul 15

Price 10,000 bushels at \$5.00 fut./4.85 cash, or by Aug 15

Plan starts on January 1, 2022.

Ignore decision dates and make no sale if prices are lower than \$4.00 local cash price.

Exit all options positions by October 1

**Different prices,
increments, dates?**

**What's Your
Price Outlook?**

WINNING THE GAME

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✓ What's a Realistic Max Price Target?

Let's start with the seasonals

Preharvest: On average, 25% of KS corn is harvested by the last week of September; and 25% of KS milo by mid-October.

Fifteen Years: CME December Corn Futures				
2008/22	Jan 1 Price	Preharvest Max Price	Change	Percent Change
2008	\$4.80	\$7.88	\$3.08	64%
2009	\$4.56	\$4.73	\$0.17	4%
2010	\$4.45	\$5.22	\$0.77	17%
2011	\$5.53	\$7.75	\$2.23	40%
2012	\$5.90	\$8.39	\$2.49	42%
2013	\$5.92	\$5.94	\$0.01	0%
2014	\$4.48	\$5.13	\$0.65	14%
2015	\$4.20	\$4.52	\$0.32	8%
2016	\$3.77	\$4.49	\$0.72	19%
2017	\$3.84	\$4.15	\$0.31	8%
2018	\$3.87	\$4.27	\$0.40	10%
2019	\$3.98	\$4.69	\$0.70	18%
2020	\$4.05	\$4.05	\$0.00	0%
2021	\$4.35	\$6.37	\$2.02	46%
2022	\$5.48	\$7.66	\$2.18	40%

WINNING THE GAME

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2023	\$6.07	\$6.07	\$0.00	0%
------	--------	--------	--------	----

Let's put'em in order of "Change"

Fifteen Years: CME December Corn Futures

	2008/22	Jan 1 Price	Preharvest Max Price	Change	Percent Change
33% of the time; prices rise \$2.00 or more (>40%)	2008	\$4.80	\$7.88	\$3.08	64%
	2012	\$5.90	\$8.39	\$2.49	42%
	2011	\$5.53	\$7.75	\$2.23	40%
	2022	\$5.48	\$7.66	\$2.18	40%
	2021	\$4.35	\$6.37	\$2.02	46%
67% of the time; prices rise \$0.40 or more (>10%)	2010	\$4.45	\$5.22	\$0.77	17%
	2016	\$3.77	\$4.49	\$0.72	19%
	2019	\$3.98	\$4.69	\$0.70	18%
	2014	\$4.48	\$5.13	\$0.65	14%
	2018	\$3.87	\$4.27	\$0.40	10%
87% of the time; prices rise \$0.17 or MORE	2015	\$4.20	\$4.52	\$0.32	8%
	2017	\$3.84	\$4.15	\$0.31	8%
	2009	\$4.56	\$4.73	\$0.17	4%
13% of the time; there was no change	2013	\$5.92	\$5.94	\$0.01	0%
	2020	\$4.05	\$4.05	\$0.00	0%

WINNING THE GAME

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Preharvest Marketing Plan

WINNING THE GAME

Objective: Buy crop insurance to protect my production risk and price 50 % of my anticipated crop (based on APH yield) or 60,000 bushels.

Price 5,000 bushels at \$ \$5.90 cash price (\$ _____ - DEC 2023 futures) (contract month) using FC, Hedge, Basis Contract

Price 5,000 bushels at \$ \$6.15 f/ \$5.95 c, or by 3/15/23, 2023, using FC, Hedge, Basis Contract

Price 10,000 bushels at \$ \$6.40 f/ \$6.20 c, or by 4/15/23, 2023, using FC, Hedge, Basis Contract

Price 10,000 bushels at \$ \$6.65 f/ \$6.45 c, or by 5/15/23, 2023, using FC, Hedge, Basis Contract

Price 10,000 bushels at \$ \$6.90 f/ \$6.70 c, or by 6/1/23, 2023, using FC, Hedge, Basis Contract

Price 10,000 bushels at \$ \$7.15 f/ \$6.95 c, or by 6/15/23, 2023, using FC, Hedge, Basis Contract

Price 10,000 bushels at \$ \$7.40 f/ \$7.20 c, or by 7/15/23, 2023, using FC, Hedge, Basis Contract

Plan starts on February 14, 2023. Completed by July 15, 2023.

Ignore decision dates and make no sale if prices are lower than \$ \$5.00 Cost+ Minimum \$??? (month/commodity) futures / \$ \$??? local cash price.

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Sample Pre-Harvest Corn Marketing Plan

1

Objective: Buy up crop insurance coverage to 80% to protect production risk; and preharvest price 80% of APH.

Using five increments

Price 20% at \$6.10 December futures, or by March 15

Price 20% at \$6.30 December futures, or by April 15

Price 20% at \$6.90 December futures, or by May 15

Price 30% at \$7.50 December futures, or by June 15

Price 10% at \$8.25 December futures, or by July 15

Ignore decision dates and make no sale if prices are lower than **\$5.50 local cash price.**

Exit all options positions prior to Harvest



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Preharvest Marketing Plan



Objective: Buy crop insurance to protect my production risk and price 50 % of my anticipated crop (based on APH yield) or 60,000 bushels.

Price 5,000 bushels at \$ \$5.90 cash price (\$ - DEC 2023 futures) (contract month) using FC, Hedge, Basis Contract

Price 5,000 bushels at \$ \$6.15 f/ \$5.95 c, or by 3/15/23, 2023, using FC, Hedge, Basis Contract

Price 10,000 bushels at \$ \$6.40 f/ \$6.20 c, or by 4/15/23, 2023, using FC, Hedge, Basis Contract

Price 10,000 bushels at \$ \$6.65 f/ \$6.45 c, or by 5/15/23, 2023, using FC, Hedge, Basis Contract

Price 10,000 bushels at \$ \$6.90 f/ \$6.70 c, or by 6/1/23, 2023, using FC, Hedge, Basis Contract

Price 10,000 bushels at \$ \$7.15 f/ \$6.95 c, or by 6/15/23, 2023, using FC, Hedge, Basis Contract

Price 10,000 bushels at \$ \$7.40 f/ \$7.20 c, or by 7/15/23, 2023, using FC, Hedge, Basis Contract

Plan starts on February 14, 2023. Completed by July 15, 2023.

Ignore decision dates and make no sale if prices are lower than \$ \$5.00 Cost+ Minimum \$??? (month/commodity) futures / \$ \$??? local cash price.

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Questions?

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