

Corn Markets 2022



KANSAS STATE
UNIVERSITY

Department of Agricultural Economics



Key Dates Coming Up re: Grain Markets

- **January 12th** – **USDA Annual Crop Summary, WASDE, Stocks, Wheat Seedings**
- February 9th – **USDA WASDE**
- February 24-25 – **USDA Agricultural Outlook Forum with MY 2021/22 forecasts**
- March 9th – **USDA WASDE**
- **March 31st** – **USDA Grain Stocks & Prospective Plantings**
- April 8th – **USDA WASDE**
- May 12th – **USDA WASDE with 1st “New Crop” MY 2021/22 monthly forecast**
- June 10th – **USDA WASDE**
- **June 30th** – **USDA Grain Stocks & Acreage**

U.S. Corn Supply and Demand

Item	2020/2021 estimate	2021/2022 forecast	Change from December 9	Change from 2020/2021
Planted area (million acres)	90.7	93.4	0.1	2.7
Harvested area (million acres)	82.3	85.4	0.3	3.1
Yield (bushels per acre)	171.4	177.0	**	5.6
----- Million bushels -----				
Beginning stocks	1,919	1,235	-2	-685
Production	14,111	15,115	53	1,004
Imports	24	25	--	1
Total supply	16,055	16,375	51	320
Feed and residual	5,602	5,650	--	48
Food, seed, and industrial	6,466	6,760	80	294
Ethanol	5,028	5,325	75	297
Domestic use	12,068	12,410	80	342
Exports	2,753	2,425	-75	-328
Total use	14,821	14,835	5	14
Ending stocks	1,235	1,540	46	305
----- Percent -----				
Stocks to use ratio	8.3	10.4	0.3	2.0
----- Dollars per bushel -----				
Average market price	4.53	5.45	--	0.92

-- No change. ** Rounds to zero.

January 12, 2022

Corn Futures Closes, Changes & Market Carry

on Monday, January 31, 2022

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Corn Futures			
Month	Close	Change	Carry /mo
<u>Mar^L 22</u>	\$6.26	↓ \$0.10	---
May 22	\$6.24 ½	↓ \$0.08 ¼	No Carry
July 22	\$6.19 ¼	↓ \$0.07	No Carry
Sept 22	\$5.85 ½	↑ \$0.01 ¼	No Carry
<u>Dec^H 22</u>	\$5.73 ½	↑ \$0.04	No Carry
Mar 23	\$5.81	↑ \$0.04	\$0.02 ⁵⁰
May 23	\$5.83 ¾	↑ \$0.03 ¼	\$0.01 ³⁷⁵
July 23	\$5.83 ¼	↑ \$0.03 ½	No Carry

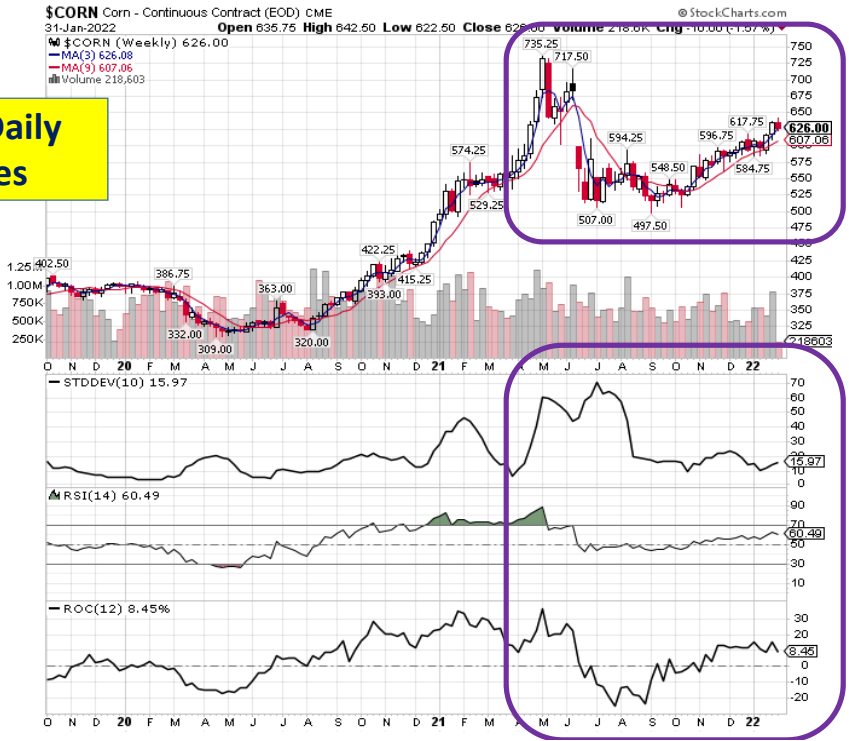
CME Corn
MARCH²⁰²²
Daily OHLC
12/13/2019 to
1/31/2022



CME Corn
DEC²⁰²²
Daily OHLC
12/1/2018 to
1/31/2022



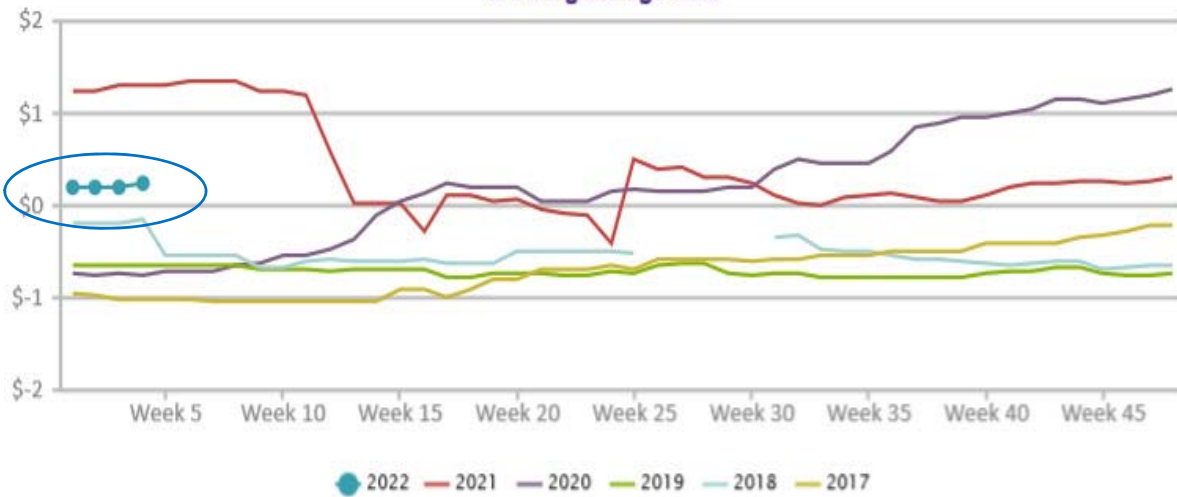
**Continuous Daily
Corn Futures**



Kansas Cash & Futures Prices						
Date						
1/31/2022						
Grain Futures Contracts		Closing \$				
MAR 2022 Corn ^(Lead contract)		\$6.2550				
DEC 2022 Corn ^(2022 Harvest Contract)		\$5.7275				
1/31/2022 Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators						
Representing the highest bids available at each location						
Cash Market Spot & FC Bids	Colby	Salina	Topeka	Garden City	Hutchinson	Columbus ^{Area}
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
Corn Spot Cash\$	\$6.46	\$6.41	\$6.36	\$6.66	\$6.61	\$6.21
Corn Spot Cash Basis	\$0.21	\$0.16	\$0.11	\$0.41	\$0.36	(\$0.04)
Corn Harvest FC\$: Fall ²⁰²²	\$5.52	\$5.48	\$5.43	\$5.88	\$5.60	\$5.48
Corn Harvest FC\$ Basis	(\$0.21)	(\$0.25)	(\$0.30)	\$0.15	(\$0.13)	(\$0.25)

COLBY, KS: Grain Sorghum Basis - CORNERSTONE AG

www.AgManager.info



Soybean & HRW Wheat Futures Closes, Changes & Market Carry on Monday, January 31, 2022

Soybean Futures				Kansas HRW Wheat Futures			
Month	Close	Change	Carry /mo	Month	Close	Change	Carry /mo
<u>Mar^L 22</u>	\$14.48 ¼	↑ \$0.08 ¼	---	<u>Mar^L 22</u>	\$7.93 ½	↓ \$0.22 ¼	---
May 22	\$14.54	↑ \$0.07	\$0.02 ⁸⁷⁵	May 22	\$7.97	↓ \$0.21 ¾	\$0.01 ⁷⁵
July 22	\$14.53 ½	↑ \$0.03	No Carry	<u>July^H 22</u>	\$7.97	↓ \$0.20 ¼	No Carry
Aug 22	\$14.27 ¼	↑ \$0.03 ¼	No Carry	Sept 22	\$8.00 ¼	↓ \$0.20	\$0.01 ⁶²⁵
Sep 22	\$13.69 ¾	↑ \$0.03 ¾	No Carry	Dec 22	\$8.07 ¼	↓ \$0.19	\$0.02 ³³³
<u>Nov^H 22</u>	\$13.38	↑ \$0.04	No Carry	Mar 23	\$8.10	↓ \$0.16 ¾	\$0.00 ⁹¹⁷
Jan 23	\$13.37 ¾	↑ \$0.02 ¾	No Carry	May 23	\$8.00 ¾	↓ \$0.14 ¼	No Carry
Mar 23	\$13.21 ½	↓ \$0.00 ¼	No Carry	July 23	\$7.68 ¼	↓ \$0.13	No Carry

CME
 Soybean
 NOV²⁰²²
 Daily OHLC
 11/16/2018 to
 1/31/2022



Kansas Cash & Futures Prices						
Date						
1/31/2022						
Grain Futures Contracts	Closing \$					
MAR 2022 Soybeans ^(Lead Contract)	\$14.8875					
NOV 2022 Soybeans ^(2022 Harvest Contract)	\$13.6475					
1/31/2022	Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
<i>Representing the highest bids available at each location</i>						
Cash Market Spot & FC Bids	Colby	Salina	Topeka	Garden City	Hutchinson	Columbus ^{Area}
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
Soybean Spot Cash\$	\$14.14	\$14.54	\$14.63	\$14.14	\$14.69	\$14.48
<i>Soybean Spot Cash Basis</i>	<i>(\$0.75)</i>	<i>(\$0.35)</i>	<i>(\$0.26)</i>	<i>(\$0.75)</i>	<i>(\$0.20)</i>	<i>(\$0.41)</i>
Soybean Harvest FC\$: Fall ²⁰²²	\$12.75	\$13.05	\$13.05	\$12.70	\$12.86	\$12.95
<i>Soybean Harvest FC\$ Basis</i>	<i>(\$0.90)</i>	<i>(\$0.60)</i>	<i>(\$0.60)</i>	<i>(\$0.95)</i>	<i>(\$0.79)</i>	<i>(\$0.70)</i>

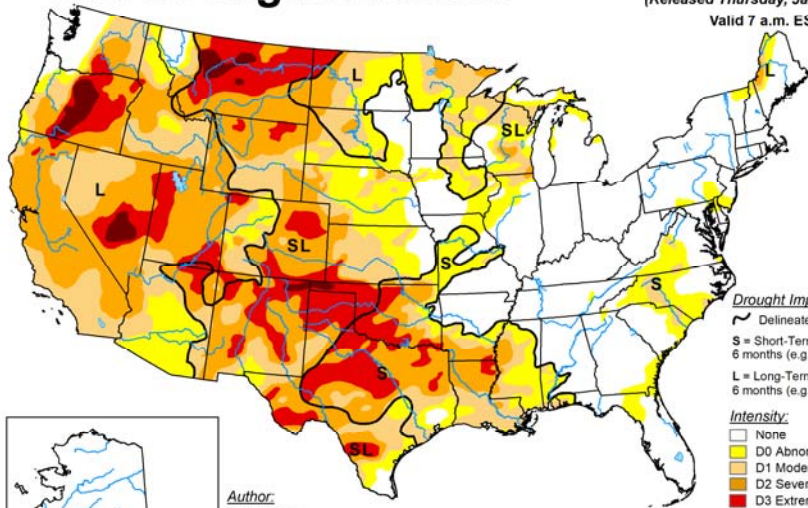
CME HRW
Wheat
JULY²⁰²²
Daily OHLC
7/15/2019 to
1/31/2022



Kansas Cash & Futures Prices						
Date						
1/31/2022						
Grain Futures Contracts	Closing \$					
MAR 2022 KC HRW Wheat <small>(Lead Contract)</small>	\$7.7750					
JULY 2022 KC HRW Wheat <small>(Harvest Contract)</small>	\$7.8050					
1/31/2022	Cash Grain & Harvest Contract Prices @ Kansas Grain Elevators					
	<i>Representing the highest bids available at each location</i>					
Cash Market Spot & FC Bids	Colby	Salina	Topeka	Garden City	Hutchinson	Columbus <small>Area</small>
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
KC HRW Wheat Spot Cash\$	\$7.53	\$7.68	\$7.68	\$7.68	\$7.67	\$7.33
<i>HRW Wheat Spot Cash Basis</i>	<i>(\$0.25)</i>	<i>(\$0.10)</i>	<i>(\$0.10)</i>	<i>(\$0.10)</i>	<i>(\$0.11)</i>	<i>(\$0.45)</i>
KC HRW Wheat FC\$ - Harvest ²⁰²²	\$7.44	\$7.42	\$7.60	\$7.52	\$7.57	\$7.42
<i>HRW Wheat Harvest FC\$ Basis</i>	<i>(\$0.36)</i>	<i>(\$0.39)</i>	<i>(\$0.21)</i>	<i>(\$0.29)</i>	<i>(\$0.23)</i>	<i>(\$0.39)</i>

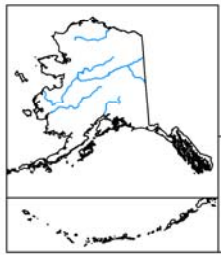
U.S. Drought Monitor

January 25, 2022
 (Released Thursday, Jan. 27, 2022)
 Valid 7 a.m. EST



Drought Impact Types:
 ~ Delineates dominant impacts
 S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
 L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:
 None
 D0 Abnormally Dry
 D1 Moderate Drought
 D2 Severe Drought
 D3 Extreme Drought
 D4 Exceptional Drought

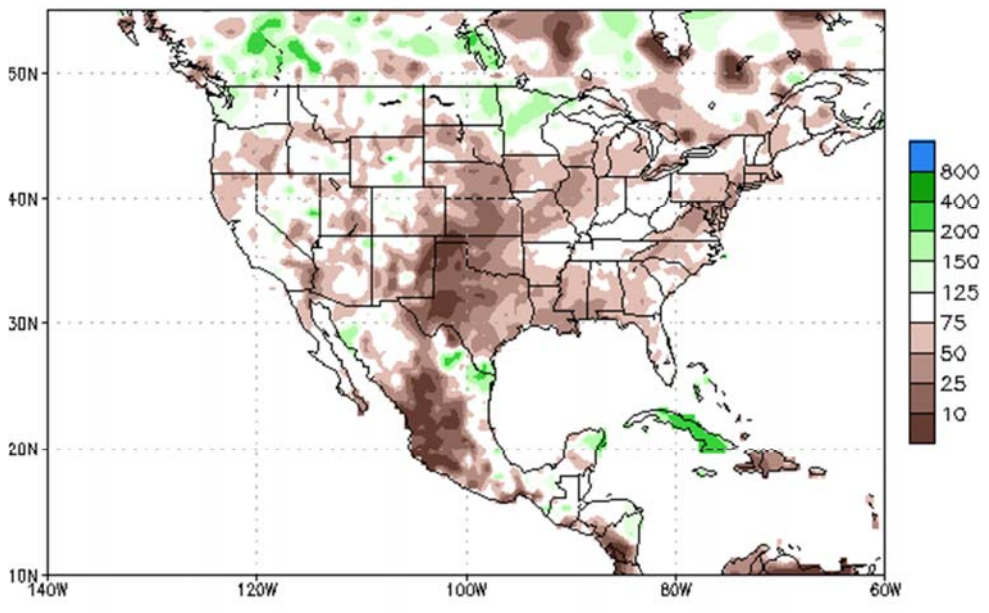


Author:
 Brad Rippey
 U.S. Department of Agriculture

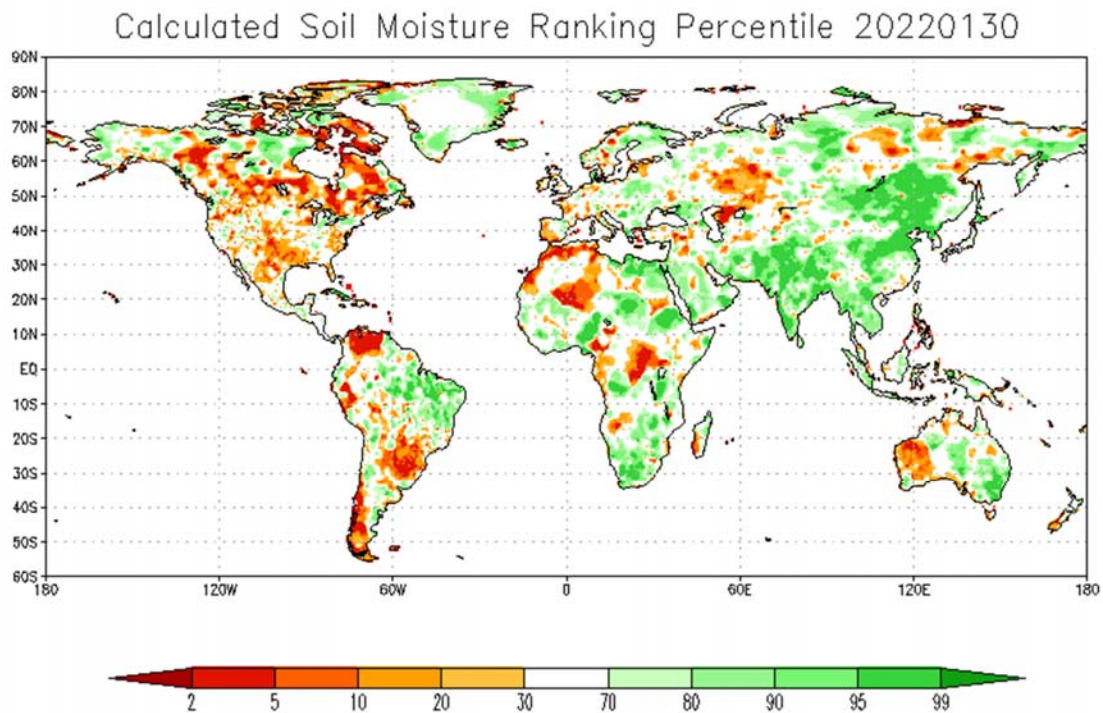
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



90-day Accumulated Prep % of Normal 01NOV2021-29JAN2022



Data Source: CPC Unified (gauge-based & 0.5x0.5 deg resolution) Precipitation Analysis Climatology (1991-2020)



2022 Corn Market “Drivers”

1) U.S. Economy

- A relatively strong U.S. GDP, but fears of inflation causing inflation

2019 Corn Market "Drivers"

1) U.S. Economy

- A relatively strong U.S. GDP, but fears of inflation causing recession

2) 2022 South America Crop Production Prospects

- "Dry" in Argentina & Southern Brazil - ↓ Soybeans, ??? Corn (1st vs 2nd Crop)

Monthly Crop Calendar for Corn

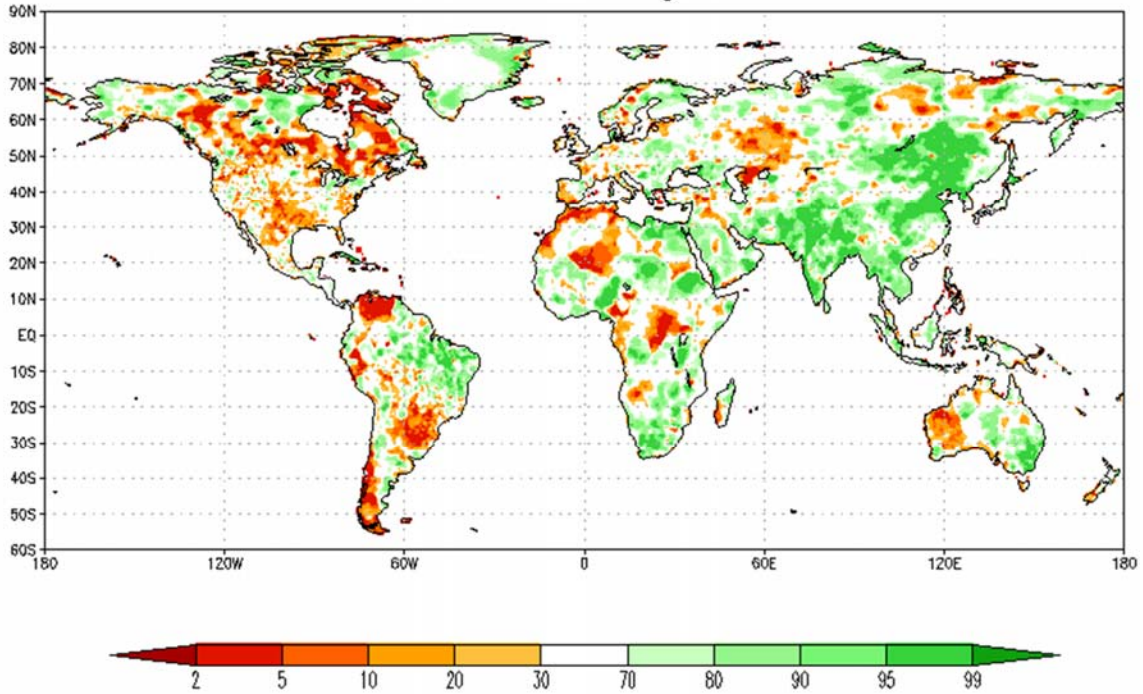
	Plant		Silk			Harvest																	
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep											
EU	H	H	H	H				P	P	P	P			H	H	H	H						
US	H	H	H						P	P	P		S	S	S		H						
Mexico Summer	H	H	H	H	H	H	H	H	H														
Ukraine	H	H	H						P	P	P		S	S			H						
Russia	H	H	H	H					P	P			S	S	S								
China	H	H							P	P	P	P					H	H					
Indonesia Dry Region	H	H							P	P	P	P	P	P	H	H	H	H					
Philippines Main					P	P	P	P	P	H	H	H	H	P	P	P	P	P	P				
Canada	H	H	H	H									P	P	P	P	S	S	S	H			
India	H	H	H	H	H	H	H	H							P	P	P	P	P	P	P		
Brazil 1st crop	P	P	P	P	P	P	H	H	H	H	H	H	H							P	P	P	
Argentina	P	P	P	P		S	S	S			H	H	H	H	H							P	P
Philippines 2nd Crop	P	P	P	P	H	H	H	H	H												P	P	
South Africa	P	P	P	P	P	P	P	S	S														
Mexico Winter						P	P	P	P	P	P												
Brazil 2nd crop							P	P	P	P													
Indonesia Rainy Region	H	H	H	H	H	H																	
Nigeria														P	P	P	P	P	P	P	P	P	

Sources: USDA, AMIS, and CHS, Inc. locations
 **Production estimates are in million metric tons and come from the FAS/USDA's most recent monthly World Agricultural Production report.
 ***Production estimates are for ALL CORN. Numbers will be listed next to the variety that comes first in the chart.

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Calculated Soil Moisture Ranking Percentile 20220129



Monthly Crop Calendar for Soybeans

	Plant		Bloom		Harvest									
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Ukraine				P P	P P			H H	H H					
EU				P P	P P				H H	H H				
Russia				P P	P P				H H	H H	H H	H H		
US					P P P		B B B			H H H	H H			
China					P P P P				H H H	H H				
Canada					P P P P		B B B			H H H	H			
Indonesia					P P P P	P P P		H H H	H H	H H				
Mexico	H H	H H			P P P P	P P P P	P P P	P P P	P P P	H H	H H	H H		
India						P P P P	P P P				H H H	H H		
Paraguay	H H	H H	H H	H H	H H	H H				P P P	P P P	P P P		
Brazil	H H	H H	H H	H H	H H	H H					P P P	P P P		
Argentina	P	B B			H H	H H	H H					P P P P		
South Africa		H H	H H									P P P		

Sources: USDA, AMIS, & CHS, Inc.

2022 Corn Market “Drivers”

1) U.S. Economy

- A relatively strong U.S. GDP, but fears of future inflation



2) 2022 South America Crop Production Prospects

- “Dry” in Argentina & Southern Brazil - ↓ Soybeans, ??? Corn (1st vs 2nd Crop)

3) 2022 U.S. Corn Acres

- Market “Narrative” ⇒ U.S. Corn Acres **Down 2 to 3 mln acres+**
- **BUT** now So. America, U.S.-China issues may change that

4) “Strong” U.S. Corn Usage in “Current” MY 2021/22 (thru 8/31/2022)

- **High Ethanol Plant Profitability**
 - – “Strong” corn ethanol use @ 5.325 bb (vs 5.028 bb & 4.857 bb last 2 years)
- **U.S. Exports @ 2.425 bb^{USDA}** (vs 2.753 bb & 1.777 bb last 2 years)
- **Feed Use @ 5.650 bb** (vs 5.602 bb & 5.900 bb last 2 years)



5) “Tighter” U.S. Corn Stocks & % Ending Stocks-to-Use

- **1.540 bb @ 10.40% Stocks/Use** in “Current” MY 2021/22
- **Impact of +/- 250 mb ?**
 - **1.290 bb vs 1.793 bb** U.S. corn ending stocks
 - **≤ 9% S/U vs ≥ 12% S/U** ➡ **Significant +/-** Corn price effects

6) U.S. Corn Price Outlook ^{USDA}

- \$4.53 /bu in “Old Crop” MY 2020/21
- \$5.45 /bu in “Current Crop” MY 2021/22 (+\$0.92 /bu vs current)

7) “Other” Market Factors

- “Moderate” U.S. Grain Sorghum Exports ⇨ “paced” China demand
- Inflation in crop production costs, especially for fertilizer
 - Key Question: IF less fertilizer applied to crop acres, THEN will it impact final 2022 production?
- Other Broad Market Factors
 - Potential for geopolitical problems in Black Sea & Asia-Pacific region
 - U.S. Elections & domestic economic uncertainty
 - U.S. Government or FED policies that could impact the U.S. economy

2022 Corn Markets – Early-Mid April 2022

Key Corn Market Factors to Watch in April 2022

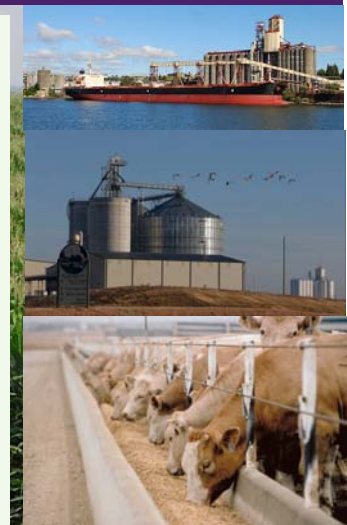
1) If Brazil remains dry & impacts their 2nd corn crop

2) U.S. Soybean Export & Price prospects

- ✓ U.S. vs China Trade Status
- ✓ U.S. Planted Acres of Soybeans vs Corn?

3) Domestic Corn Usage Issues

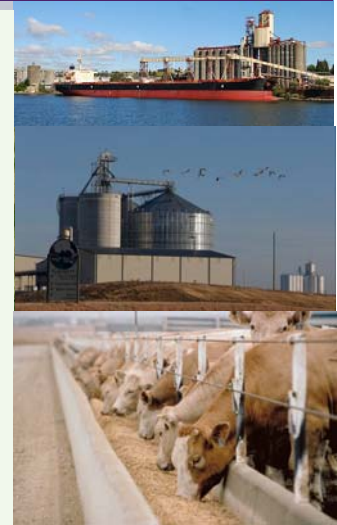
- ✓ Ethanol production & corn use stronger? (summer driving)
- ✓ Livestock profitability & feed use
- ✓ Exports are a “Wild Card” – watch the South America crop



2022 Corn Markets – Early-Mid May 2022

Key Corn Market Factors to Watch in May 2022

- 1) **More accurate view of Brazil 2nd corn crop size**
- 2) **U.S. Corn Planting underway**
 - ✓ Planting problems would support market (“early” for panic)
 - ✓ U.S. Soybean vs Corn Plantings still affecting market
- 3) **Domestic Corn Usage Issues**
 - ✓ Ethanol production & corn use (“*Show me*” the corn use!)
- 4) **“Decision” time for New Crop Corn Market Direction**



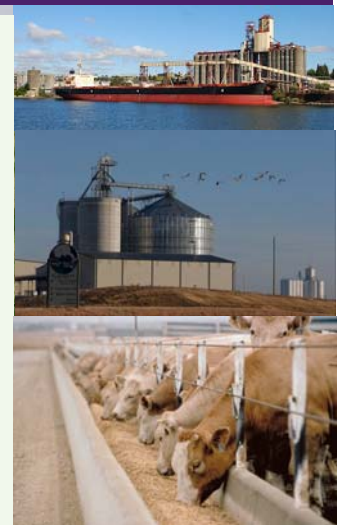
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2022 Corn Markets – Early-Mid July 2022

Key Corn Market Factors to Watch in July 2022

- 1) **2022 U.S. Crop Prospects are the Corn market focus**
- 2) **Brazil 2nd Crop Corn Prospects Known**
 - ✓ Whether “large” or not will affect corn \$s
- 3) **U.S. July Corn development is time for “Volatility”**
 - ✓ “Shifting” *Up/Down* market narratives based on weather
 - ✓ Battle of the “*Bulls vs Bears*” pre-August USDA 2022 report
- 4) **Futures may *fall* on 2022 prospects while Basis may *narrow* to finish up “Old Crop” MY 2021/22 usage**



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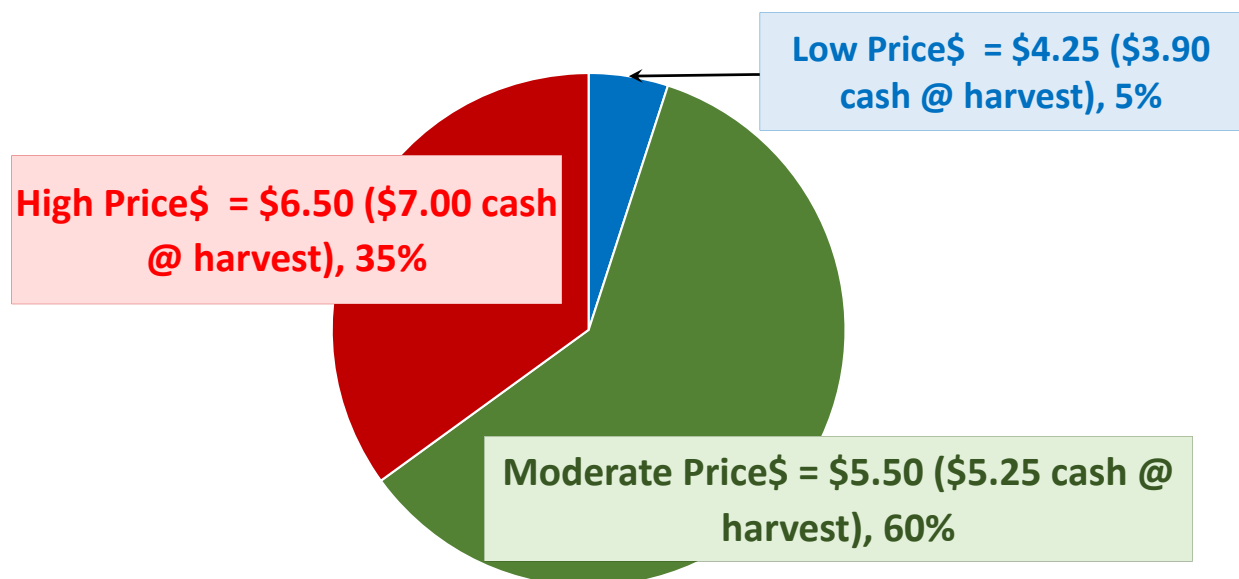
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Likelihood of Corn Market Price Outcomes for “New Crop” MY 2022/23 ^{KSU-O’Brien}

Versus

\$5.45 /bu in “Old Crop” MY 2021/22 ^{USDA}

MY 2022/23 Corn Market Cash\$ Forecasts



2022 Corn Markets – Early November 2022

“Low Price” Market Scenario in 2022 (5% prob.)

- 1) **2022 U.S. Corn production of $\approx 15^+$ billion bu.**
- 2) **“New Crop” 2022/23 Ending Stocks ≈ 2.25 bln. bu**
 - ✓ % Ending Stocks-to-Use ≥ 14 -15%
- 3) **Overwhelming U.S. Corn Supplies – a “Buyer’s Mkt”**
 - ✓ Low corn prices supporting U.S. corn use (a silver lining!)
 - ✓ Stronger U.S. corn exports would result (some now & later!)
- 4) **MYA\$ fall to lows (\$4.25) – BUT farmers then store en mass & force “some” returns to post-harvest storage**



2022 Corn Markets – Early November 2022

“Moderate” Price Scenario in 2022 (60% prob.)

- 1) **2022 U.S. Corn production of ≈ 14.25 -14.5 bln. bu.**
- 2) **“New Crop” 2022/23 End Stocks ≈ 1.500 bln. bu**
 - ✓ % Ending Stocks-to-Use ≈ 9 %-11%
- 3) **“OK-Not Tight” U.S. Corn Supplies – a “Neutral Mkt”**
 - ✓ “Moderate/Lower” corn \$ - “Good-Healthy” corn use
 - ✓ U.S. corn exports varying on 2022 South America crop size
- 4) **MYA\$ rise to \$5.50 in “New Crop” MY 2022/23 – Moderately tight & uncertain S/D in the Corn market**



2022 Corn Markets – Early November 2022

“High” Market Price Scenario in 2022 (35% prob.)

- 1) **2022 U.S. Corn production of < 14.000 bln. bu.**
- 2) **“New Crop” 2022/23 End Stocks < 1.250 bln. bu**
 - ✓ % Ending Stocks-to-Use \approx 7%-8%
- 3) **“Tight” U.S. Corn Supplies – a “Seller’s Market”**
 - ✓ “High” corn prices\$ - “Rationing” corn usage
 - ✓ IF small 2022 South America crop, then drives \$’s higher
- 4) **MYA\$s rise to \$6.50 (\$7 @ harvest) – Reflecting impact of a short, tight, “at risk” corn S/D in U.S.**



Questions?

Daniel O'Brien – Extension Ag Economist

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