

# 2022 CORN MARKET PROSPECTS

*KEY DATES, TRENDS, U.S.-CHINA, MARKET RISKS & REWARDS*

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**2022 Corn School**

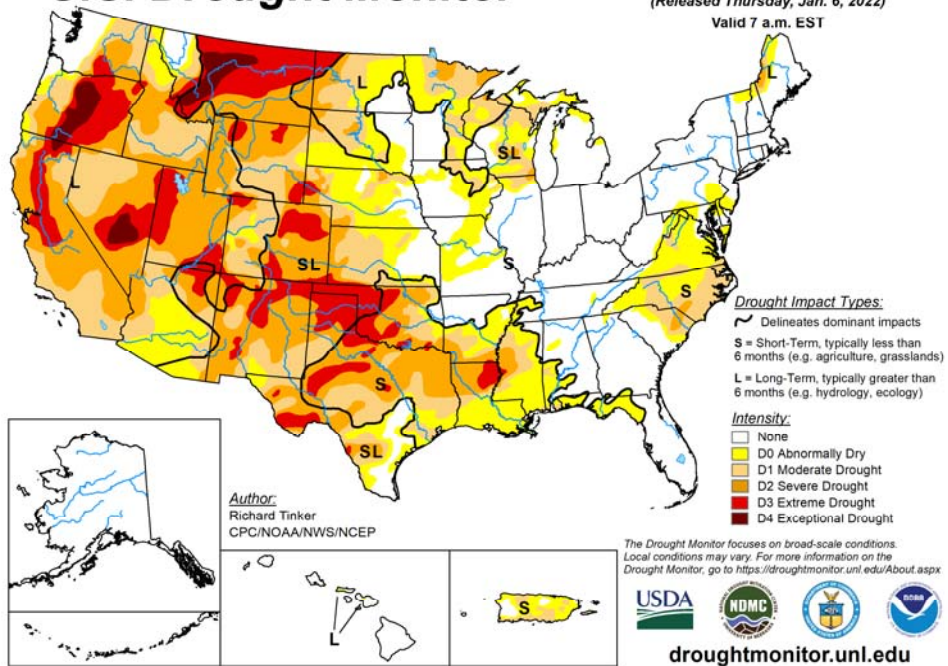
**Oakley, Kansas – January 7, 2022**

## Key Dates Coming Up re: Grain Markets

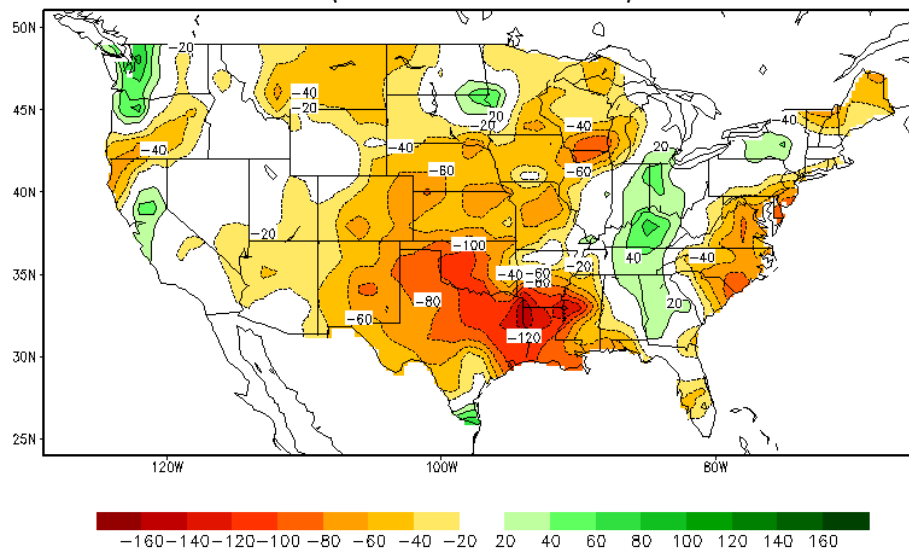
- January 12<sup>th</sup> – USDA Annual Crop Summary, WASDE, Stocks, Wheat Seedings
- February 9<sup>th</sup> – USDA WASDE
- February 24-25 – USDA Agricultural Outlook Forum with MY 2021/22 forecasts
- March 9<sup>th</sup> – USDA WASDE
- March 31<sup>st</sup> – USDA Grain Stocks & Prospective Plantings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

# U.S. Drought Monitor

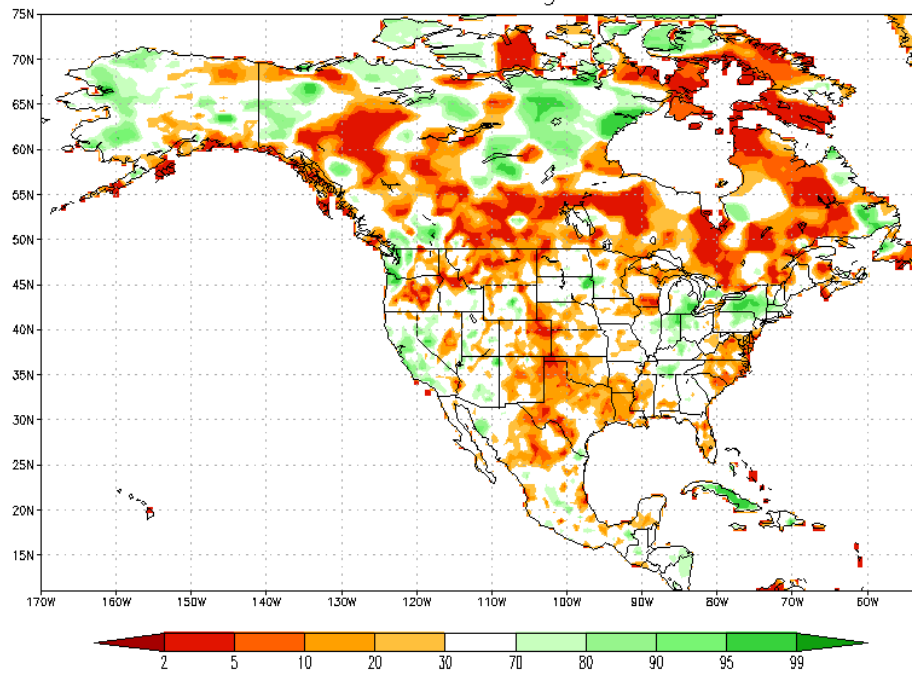
January 4, 2022  
(Released Thursday, Jan. 6, 2022)  
Valid 7 a.m. EST



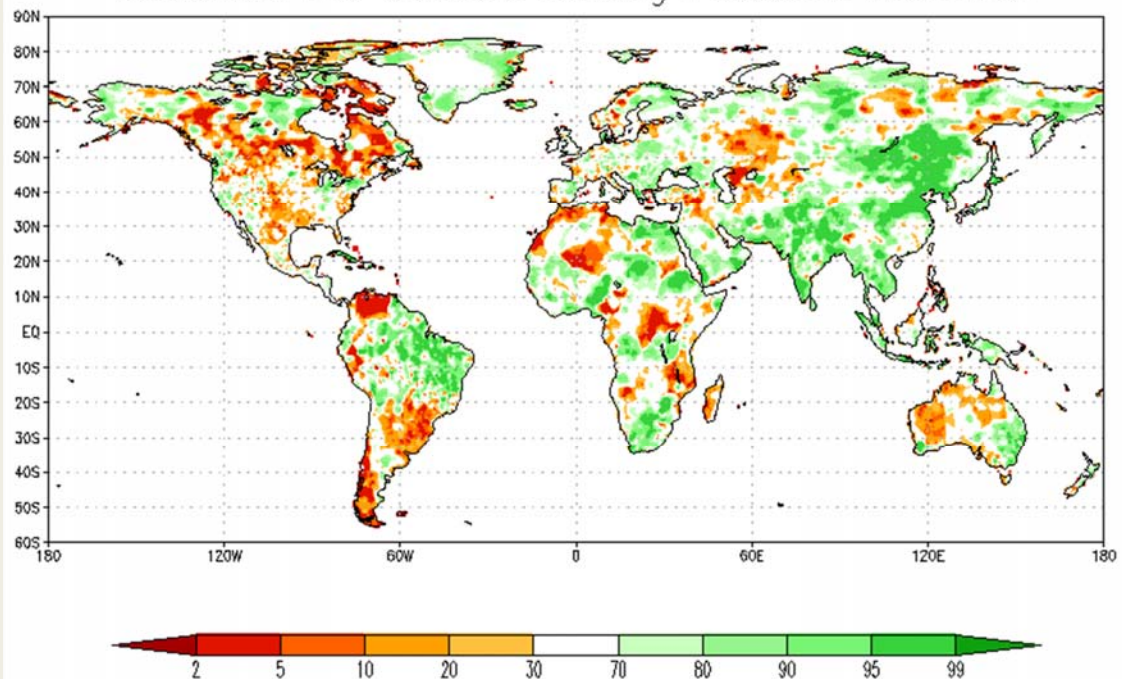
## Predicted Soil Moisture Anomaly (mm) (05Jan2022–13Jan2022)



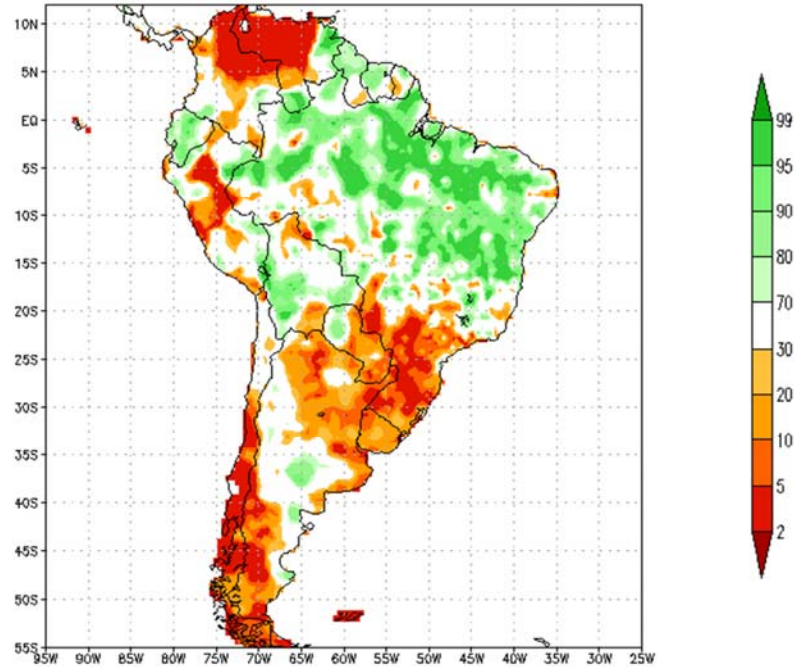
Calculated Soil Moisture Ranking Percentile 20220104



Calculated Soil Moisture Ranking Percentile 20220104



Calculated Soil Moisture Ranking Percentile 20220104



# **I. Grain Futures Closes, Changes & Market Carry on Thursday, January 6, 2022**

Corn Futures			
Month	Close	Change	Carry /mo
<b>Mar<sup>L</sup> 22</b>	<b>\$6.03 <sup>3</sup>/<sub>4</sub></b>	⬆ <b>\$0.01 <sup>1</sup>/<sub>2</sub></b>	---
May 22	\$6.04 <sup>1</sup> / <sub>2</sub>	⬆ <b>\$0.01 <sup>3</sup>/<sub>4</sub></b>	\$0.00 <sup>58</sup>
July 22	\$6.02 <sup>1</sup> / <sub>4</sub>	⬆ <b>\$0.16 <sup>3</sup>/<sub>4</sub></b>	No Carry
Sept 22	\$5.67 <sup>1</sup> / <sub>4</sub>	⬇ <b>\$0.00 <sup>1</sup>/<sub>4</sub></b>	No Carry
<b>Dec<sup>H</sup> 22</b>	<b>\$5.54 <sup>1</sup>/<sub>4</sub></b>	⬇ <b>\$0.00 <sup>1</sup>/<sub>2</sub></b>	No Carry
Mar 23	\$5.61 <sup>3</sup> / <sub>4</sub>	⬆ <b>\$0.00 <sup>1</sup>/<sub>4</sub></b>	\$0.02 <sup>50</sup>
May 23	\$5.64 <sup>1</sup> / <sub>4</sub>	<b>No Change</b>	\$0.01 <sup>125</sup>
July 23	\$5.63 <sup>3</sup> / <sub>4</sub>	⬆ <b>\$0.00 <sup>1</sup>/<sub>2</sub></b>	No Carry

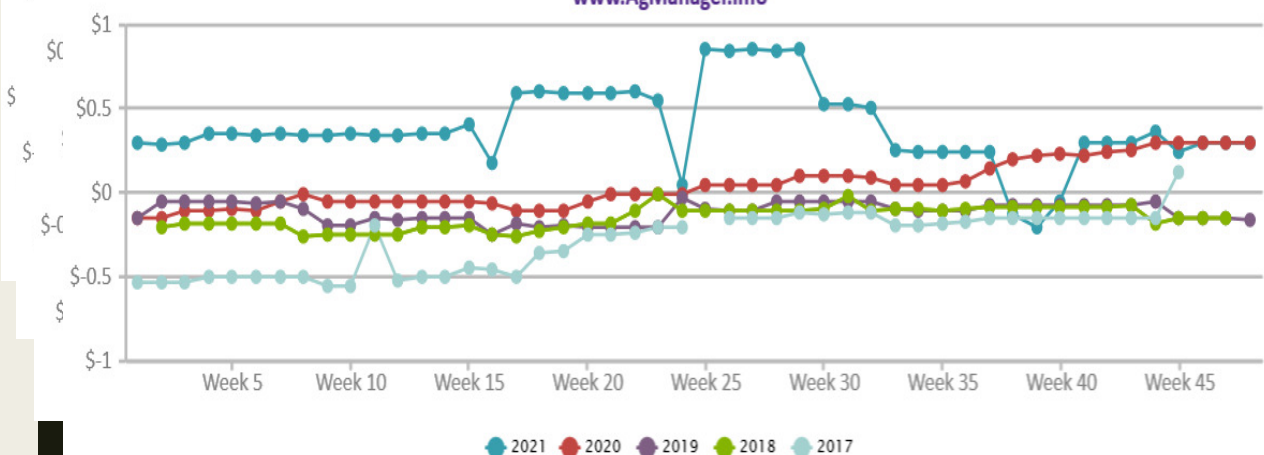


## Kansas Cash & Futures Prices

Date						
1/6/2022						
Grain Futures Contracts	Closing \$					
MAR 2022 Corn <sup>(Lead contract)</sup>	\$6.0375					
DEC 2022 Corn <sup>(2022 Harvest Contract)</sup>	\$5.5425					
1/6/2022	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 <sup>Area</sup>
	NW KS	NC KS	EC-NE KS	SW KS	SC KS	SE KS
Corn Spot Cash\$	\$6.24	\$6.19	\$6.16	\$6.39	\$6.38	\$5.89
Corn Spot Cash Basis	\$0.20	\$0.15	\$0.12	\$0.35	\$0.34	(\$0.15)
Corn Harvest FC\$: Fall <sup>2022</sup>	\$5.29	\$5.29	\$5.24	\$5.64	\$5.41	\$5.29
Corn Harvest FC\$ Basis	(\$0.25)	(\$0.25)	(\$0.30)	\$0.10	(\$0.13)	(\$0.25)

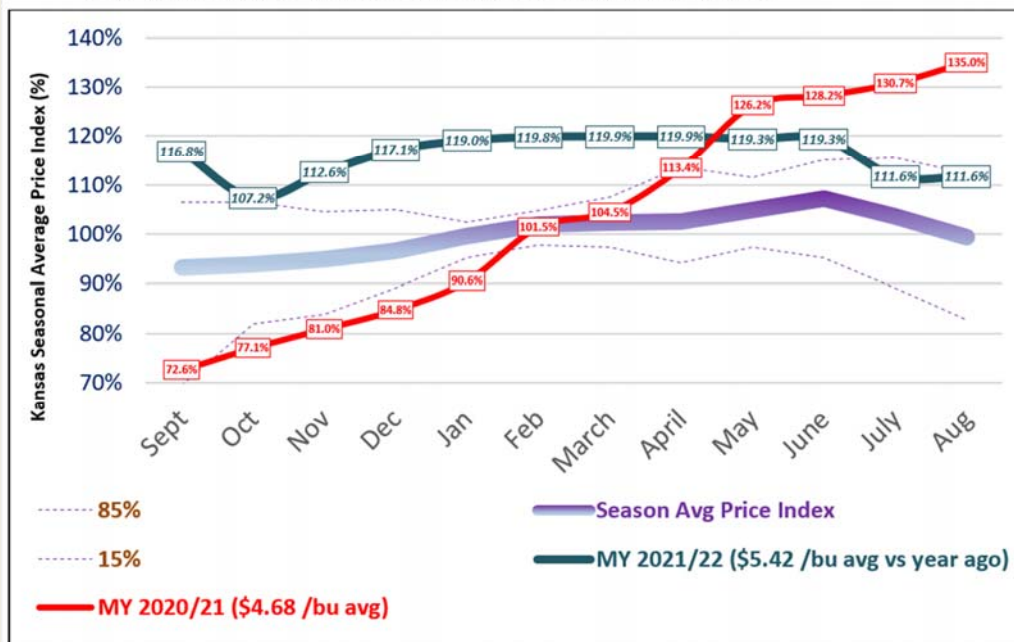
OAKLEY, KS: Corn Basis - FRONTIER AG INC  
 COLBY, KS: Corn Basis - CORNERSTONE AG  
 SCOTT CITY, KS: Corn Basis - SCOTT COOP ASSOCIATION  
 GARDEN CITY, KS: Corn Basis - GARDEN CITY COOP

[www.AgManager.info](http://www.AgManager.info)



## Kansas Corn Seasonal Prices: MY 1999/00 – MY 2019/20 plus “Old

Crop” MY 2020/21 & “New Crop” MY 2021/22 as of January 6, 2022



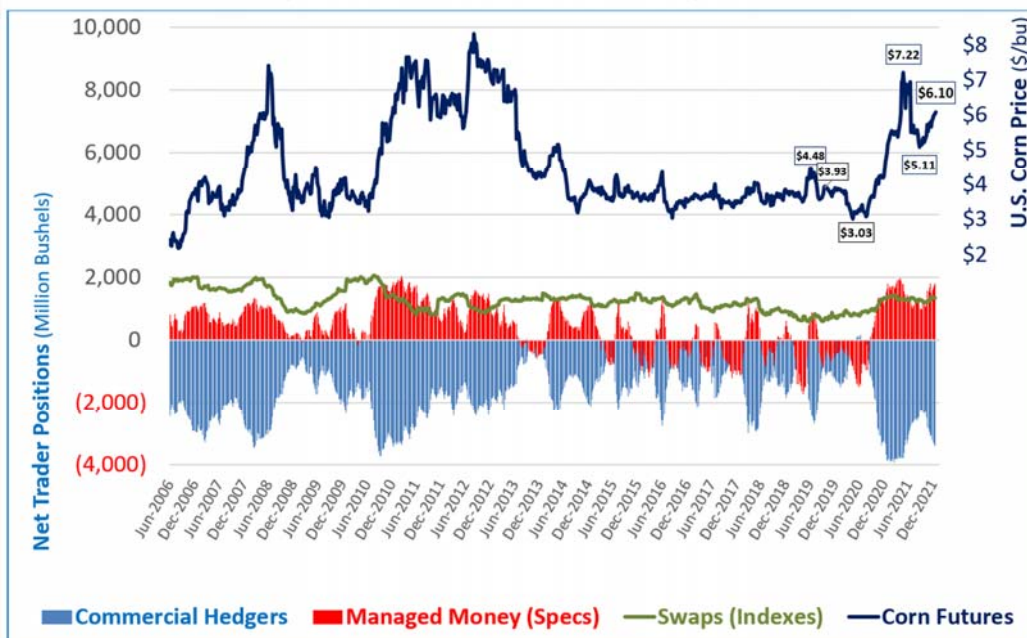
## Daily CME MARCH 2022 Corn Futures





## Net Position of Traders for CME CORN: June 2006 through December 28, 2021 (Weekly CFTC

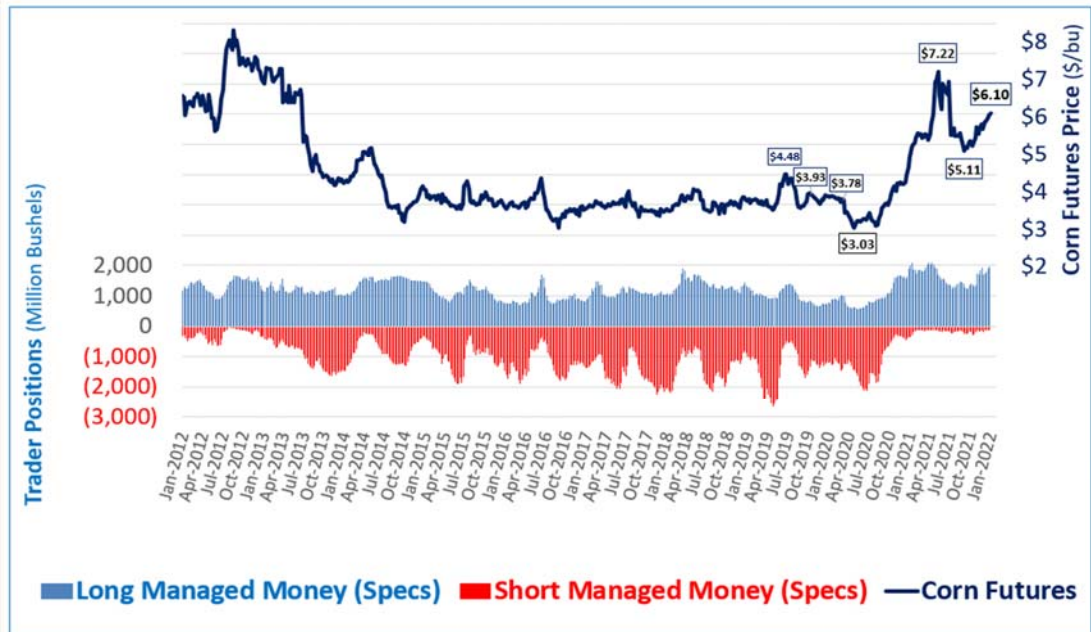
Position of Trader Data) + January 4, 2022 MARCH<sup>2022</sup> Corn Futures Closing Price





## Managed Money Traders (Specs) Long & Short Positions for CME CORN:

June 2006 – Dec. 28, 2021 (Weekly CFTC Position of Trader Data) + Jan. 4, 2022 MARCH<sup>2022</sup> Corn Futures Close



## Corn Markets



**KANSAS STATE UNIVERSITY**

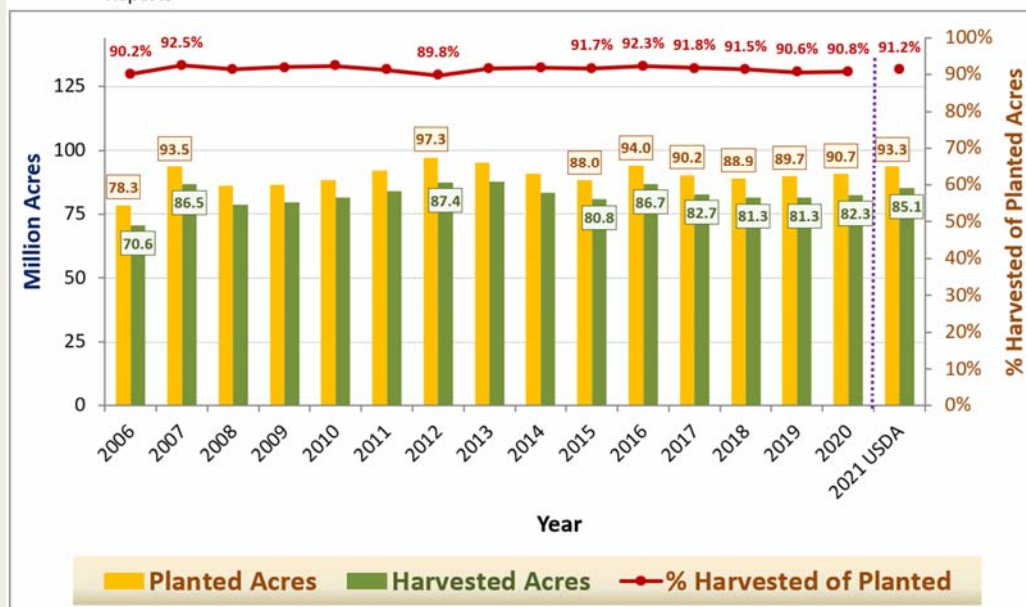
Department of Agricultural Economics



**Table 1. U.S. Corn Supply-Demand Balance Sheet: MY 2010/11 – “New Crop” MY 2021/22** as of the December 9, 2021  
USDA WASDE report

Item	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	USDA 2021/22 12/9/2021 WASDE
% Probability of Occurring (KSU)										50% <sup>KSUest</sup>
Planted Area (million acres)	97.291	95.365	90.597	88.019	94.004	90.167	88.871	89.745	90.652	93.304
Harvested Area (million acres)	87.365	87.461	83.146	80.753	86.748	82.733	81.276	81.337	82.313	85.085
% Harvested/Planted Area	89.8%	91.7%	91.8%	91.7%	92.3%	91.8%	91.5%	90.6%	90.8%	91.2%
Yield / harvested acre (bu/ac)	123.1	158.1	171.0	168.4	174.6	176.6	176.4	167.5	171.4	177.0
Million Bushels										
Beginning Stocks (million bushels)	989	821	1,232	1,731	1,737	2,293	2,140	2,221	1,919	1,236
Production (million bu.)	10,755	13,829	14,216	13,602	15,148	14,609	14,340	13,620	14,111	15,062
Imports (million bu.)	160.0	35.8	31.7	67.6	57.1	36.3	28.0	42.0	24.0	25.0
Total Supply (million bu.)	11,904	14,686	15,479	15,401	16,942	16,939	16,509	15,883	16,055	16,323
Ethanol for fuel Use (million bu.)	4,641	5,124	5,200	5,224	5,432	5,605	5,378	4,857	5,028	5,250
Food & Industrial Use (mln bu.)	1,372	1,377	1,366	1,393	1,424	1,422	1,386	1,395	1,406	1,400
Seed Use (million bu.)	31.0	29.7	29.3	30.6	29.3	29.6	29.1	29.9	30.8	30.6
Exports (million bu.)	730	1,921	1,867	1,899	2,296	2,438	2,066	1,777	2,753	2,500
Feed & Residual Use (million bu.)	4,309	5,004	5,287	5,118	5,470	5,304	5,429	5,900	5,601	5,650
Total Use (million bu.)	11,083	13,456	13,750	13,664	14,649	14,798	14,288	13,963	14,819	14,830
Ending Stocks (million bu.)	821	1,232	1,731	1,737	2,293	2,140	2,221	1,919	1,236	1,493
% Ending Stocks-to-Use	7.41%	9.16%	12.59%	12.71%	15.66%	14.46%	15.54%	13.74%	8.34%	10.07%
Days of Supply (% S/U x 365 days)	27.0 days	33.4 days	46.0 days	46.4 days	57.2 days	52.8 days	56.7 days	50.2 days	30.4 days	36.8 days
U.S. Corn Average Farm Price (\$/bushel)	\$6.89	\$4.46	\$3.70	\$3.61	\$3.36	\$3.36	\$3.61	\$3.56	\$4.53	\$5.45

**U.S. Corn Acreage for 2006-2021** as of the December 9, 2021 Crop Production & WASDE Reports



## U.S. Corn Yield Trend for 2007-2021 as of the December 9, 2021 USDA NASS

Crop Production Report

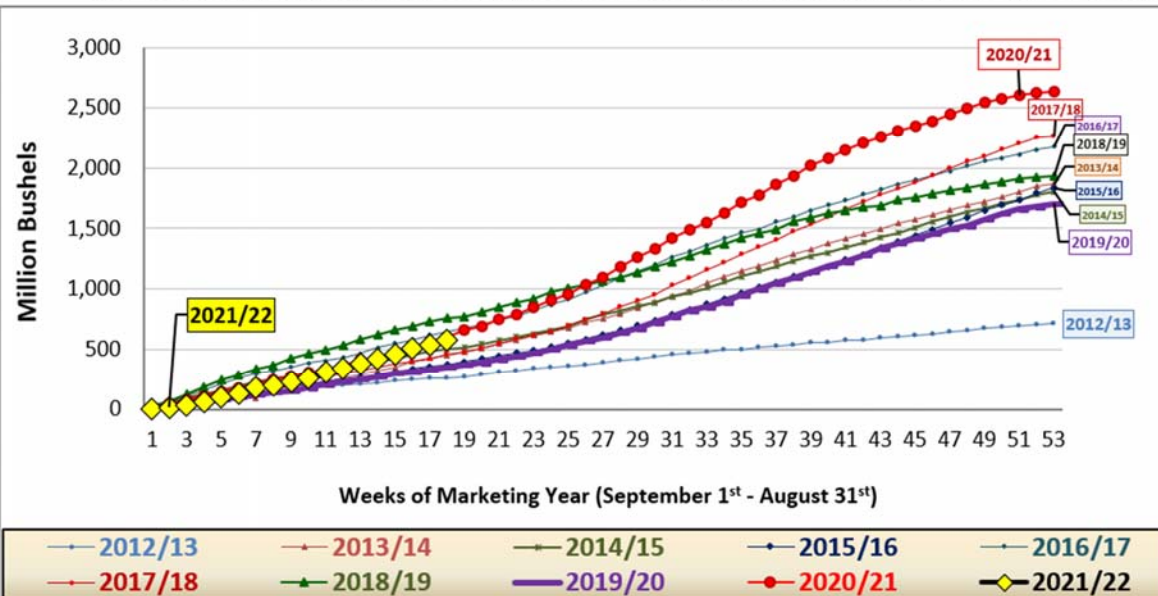


## U.S. Corn Production & Total Supplies: MY 2009/10 - "New Crop" MY 2021/22 as of the December 9, 2021 USDA WASDE & Crop Production Reports



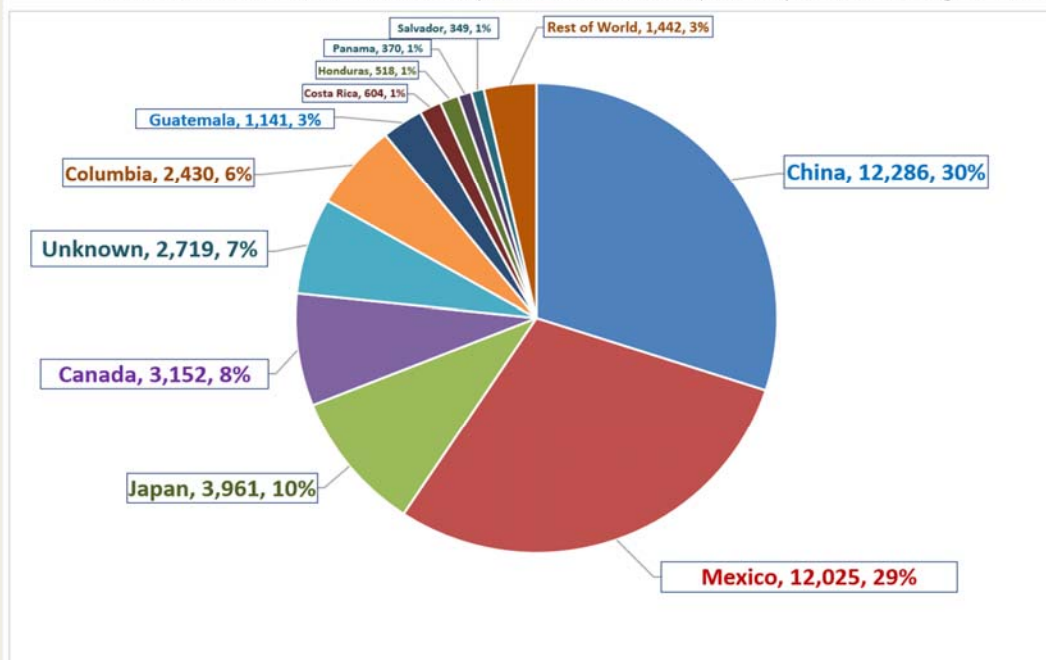
## U.S. Corn Exports: MY 2012/13 through “New Crop” MY 2021/22 based on

USDA Foreign Agricultural Service Weekly Export reports through 12/30/2021 (Start of marketing year on 9/1)



## Top U.S. Corn Export Outstanding Sales + Shipments – “New Crop” MY 2021/22

as of the December 30, 2021 USDA U.S. Export Forward Purchases (1,000 mt); 9/1/2021 through 8/31/2022.



## WASDE - 619 - 31

## U.S. Quarterly Animal Product Production 1/

Year and Quarter	Beef	Pork	Red Meat 2/	Broiler	Turkey	Total Poultry 3/	Red Meat & Poultry	Egg	Milk
<i>Million Pounds</i>									
2020 IV	7,069	7,515	14,633	11,047	1,451	12,630	27,263	2,371	55.6
Annual	27,174	28,303	55,680	44,583	5,743	50,876	106,556	9,283	223.2
2021 I	6,895	7,291	14,235	10,893	1,390	12,410	26,645	2,306	56.8
II	6,957	6,668	13,673	11,231	1,399	12,770	26,443	2,303	58.1
III	6,978	6,529	13,551	11,581	1,403	13,124	26,675	2,332	55.9
IV*	7,065	7,245	14,358	11,025	1,400	12,555	26,913	2,400	55.4
Annual									
Nov Proj.	27,885	27,678	55,751	44,828	5,612	50,981	106,732	9,345	226.4
Dec Proj.	27,895	27,733	55,817	44,730	5,592	50,859	106,676	9,341	226.2
2022 I*	6,895	6,980	13,925	11,150	1,390	12,675	26,600	2,345	56.8
II*	6,730	6,480	13,259	11,400	1,405	12,950	26,209	2,345	58.2
III*	6,720	6,825	13,592	11,690	1,420	13,255	26,847	2,365	56.4
Annual									
Nov Proj.	27,000	27,585	54,779	45,240	5,700	51,490	106,269	9,470	228.1
Dec Proj.	27,000	27,595	54,790	45,500	5,640	51,695	106,485	9,480	227.7

\* Projection. 1/ Commercial production for red meats; federally inspected for poultry meats. 2/ Beef, pork, veal and lamb & mutton. 3/ Broilers, turkeys and mature chicken.

## U.S. Corn Use &amp; Ending Stocks: MY 2012/13 through Projected "New Crop"

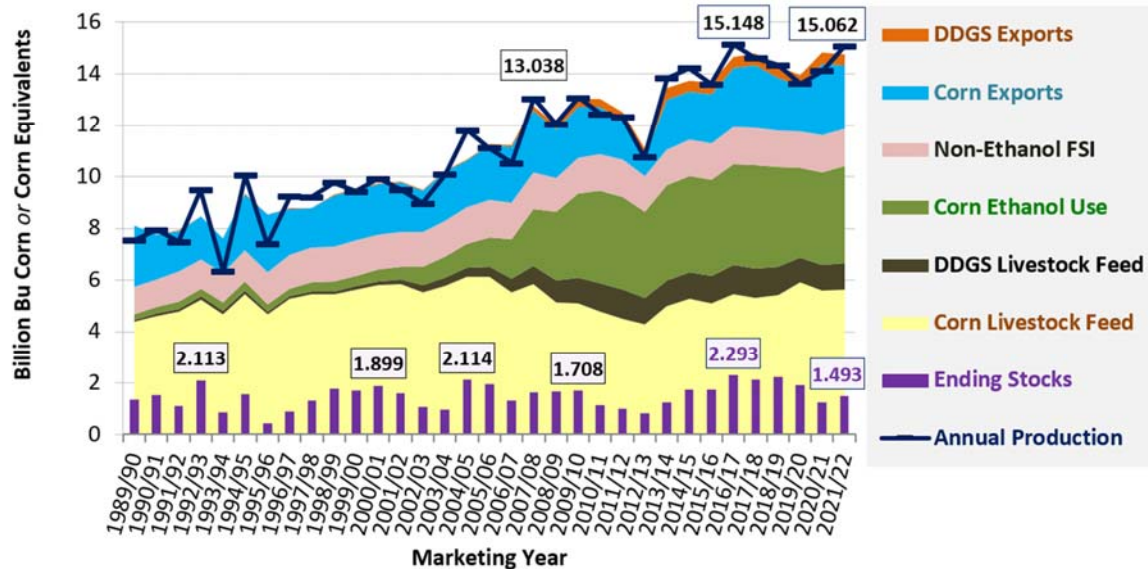
MY 2021/22 as of the December 9, 2021 USDA WASDE report





## U.S. Corn Supply-Demand with DDGS Adjustments

as of the December 9, 2021 USDA World Agricultural Supply and Demand Estimates (WASDE) report



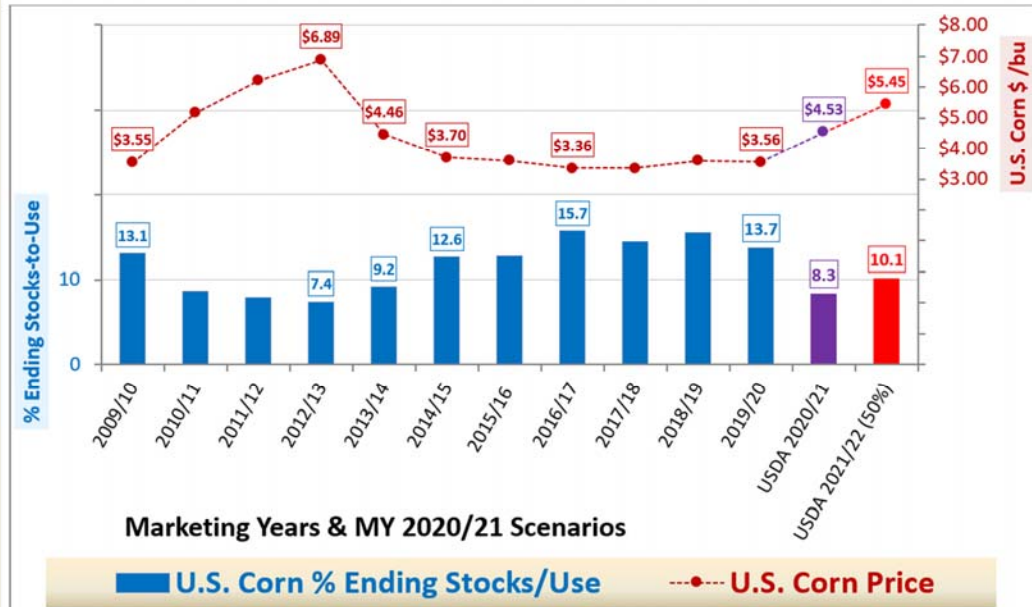
## U.S. Corn Ending Stocks & % Ending Stocks-to-Use:

MY 2005/06 through "New Crop" MY 2021/22 as of the December 9, 2021 WASDE Report



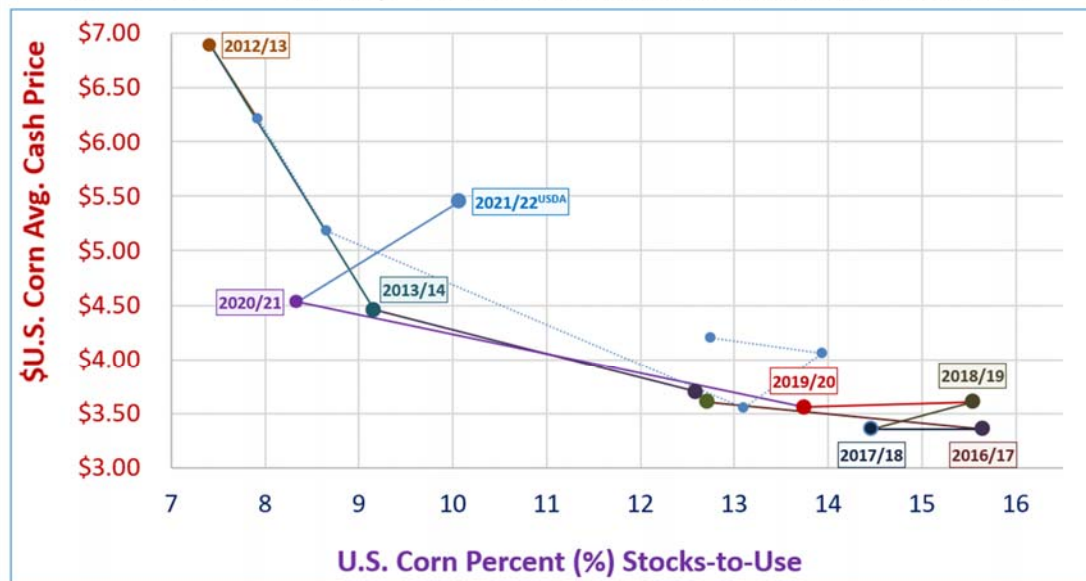
## U.S. Corn % Ending Stocks vs U.S. Corn Prices: MY 2009/10 – “New

Crop” MY 2021/22 as of the December 9, 2021 USDA WASDE report



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

MY 2007/08 - “New Crop” MY 2021/22 as of the December 9, 2021 USDA WASDE report



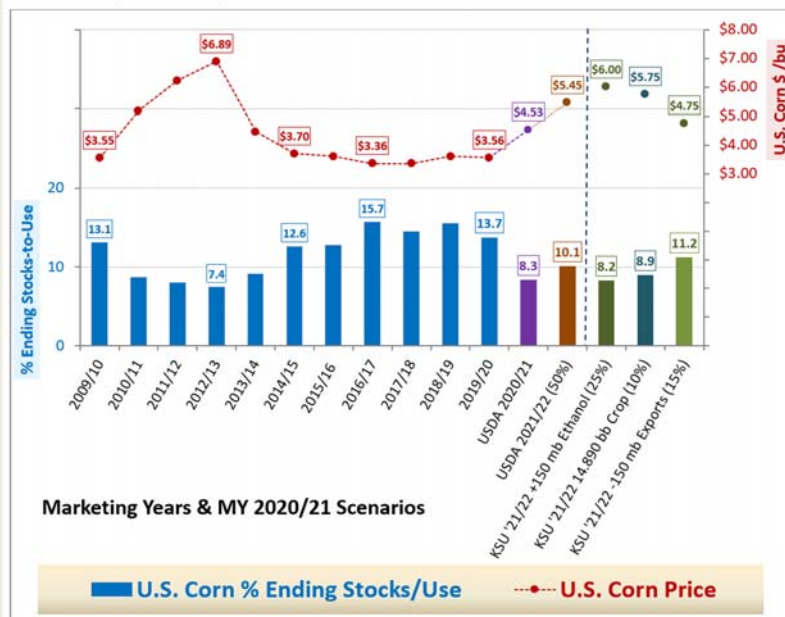
## U.S. Corn Supply-Demand Balance Sheet: Projected "New Crop" MY 2021/22 as of the

December 9, 2021 USDA WASDE report, with Alternative KSU "New Crop" 2021/22 Marketing Year Scenarios

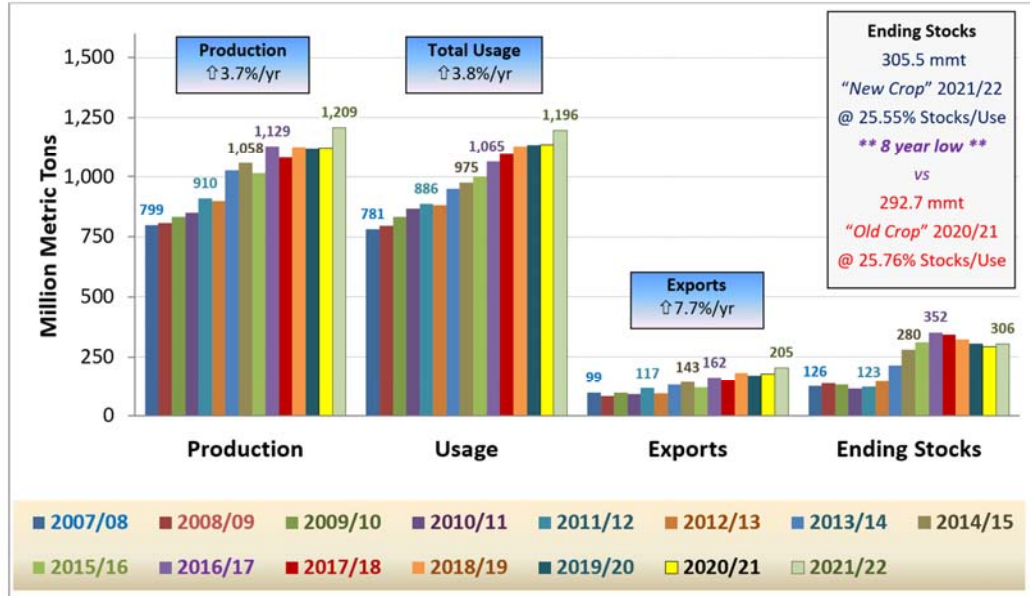
Item	A. USDA 2021/22 12/9/2021 USDA WASDE Report	B. USDA <sup>KSU Adjusted</sup> MY 2021/22 12/9/2021 WASDE @ +150 mb Ethanol Use **14.980 bb Total Use**	C. USDA <sup>KSU Adjusted</sup> MY 2021/22 12/9/2021 WASDE @ **175.0 bu/ac Yield** & **14.890 bb Crop**	D. USDA <sup>KSU Adjusted</sup> MY 2021/22 12/9/2021 WASDE Less 150 mb U.S. Exports
% Probability of Occurring (KSU)	50% <sup>KSUest</sup>	25% <sup>KSUest</sup>	10% <sup>KSUest</sup>	15% <sup>KSUest</sup>
Planted Area (million acres)	93.304	93.304	93.304	93.304
Harvested Area (million acres)	85.085	85.085	85.085	85.085
% Harvested/Planted Area	91.2%	91.2%	91.2%	91.2%
Yield / harvested acre (bu/ac)	177.0	177.0	175.0	177.0
Million Bushels				
Beginning Stocks (million bushels)	1,236	1,236	1,236	1,236
Production (million bu.)	15,062	15,062	14,890	15,062
Imports (million bu.)	25.0	25	25	25.0
<b>Total Supply (million bu.)</b>	<b>16,323</b>	<b>16,323</b>	<b>16,151</b>	<b>16,323</b>
Ethanol for fuel Use (million bu.)	5,250	5,400	5,250	5,250
Food & Industrial Use (mln bu.)	1,400	1,400	1,400	1,400
Seed Use (million bu.)	30.6	31	31	31
Exports (million bu.)	2,500	2,500	2,500	2,300
Feed & Residual Use (million bu.)	5,650	5,650	5,650	5,650
<b>Total Use (million bu.)</b>	<b>14,830</b>	<b>14,980</b>	<b>14,830</b>	<b>14,680</b>
Ending Stocks (million bu.)	1,493	1,343	1,321	1,643
% Ending Stocks-to-Use	10.07%	8.23%	8.91%	11.19%
Days of Supply (% S/U x 365 days)	36.8 days	30.0 days	32.5 days	40.85 days
U.S. Corn Average Farm Price (\$/bushel)	\$5.45 /bu vs \$5.37 KSU Futures	\$6.00 /bu Adjusted from Nov <sup>2021</sup> USDA frst	\$5.75 /bu Adjusted from Nov <sup>2021</sup> USDA frst	\$4.75 /bu Adjusted from Nov <sup>2021</sup> USDA frst

## U.S. Corn % Ending Stocks vs U.S. Corn Prices: MY 2009/10 – "New

Crop" MY 2021/22 as of the December 9, 2021 USDA WASDE report + KSU "new crop" estimates.



## World Corn Supply-Demand: MY 2007/08 – “New Crop” MY 2021/22, as of the December 9, 2021 USDA WASDE Report



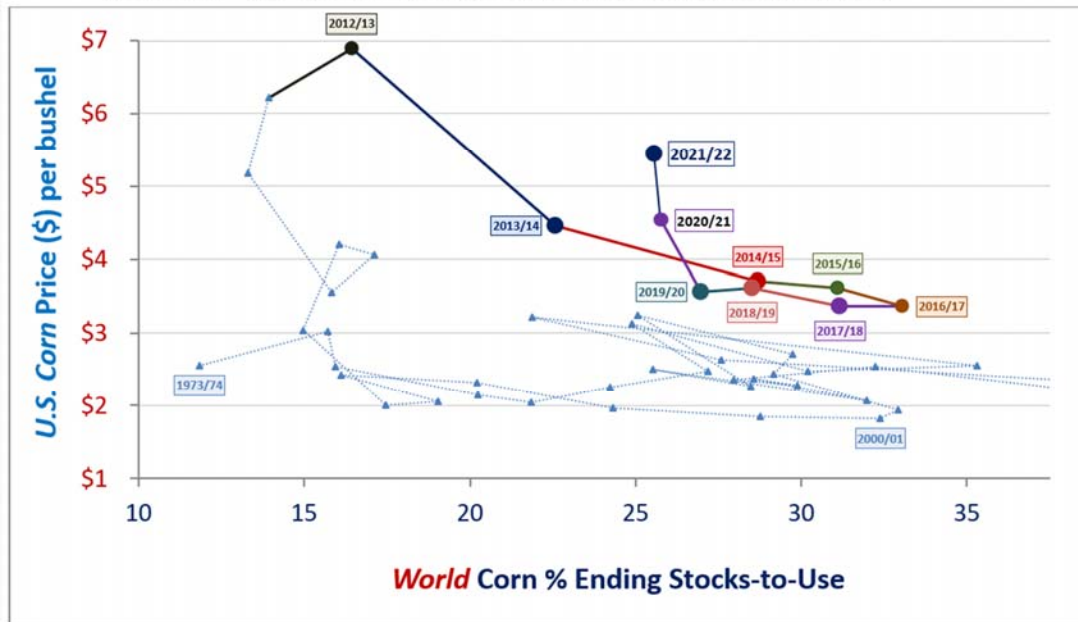
## World Corn Supply-Demand Trends: MY 2006/07 – “New Crop” MY 2021/22 as of the December 9, 2021 USDA WASDE report





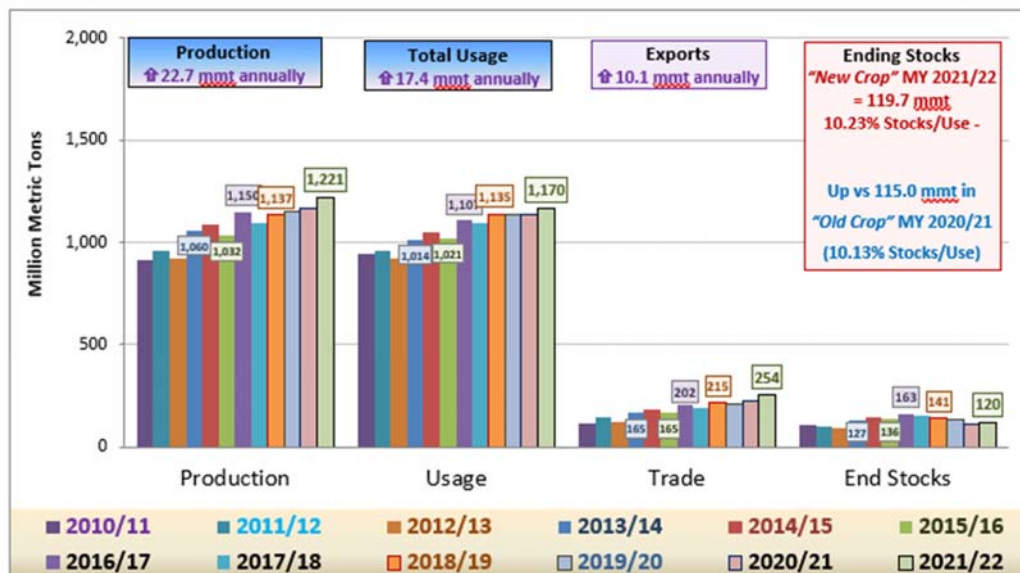
## U.S. Corn \$'s vs World Corn % Stocks-to-Use: MY 1973/74 through

"New Crop" MY 2021/22 as of the December 9, 2021 USDA WASDE report

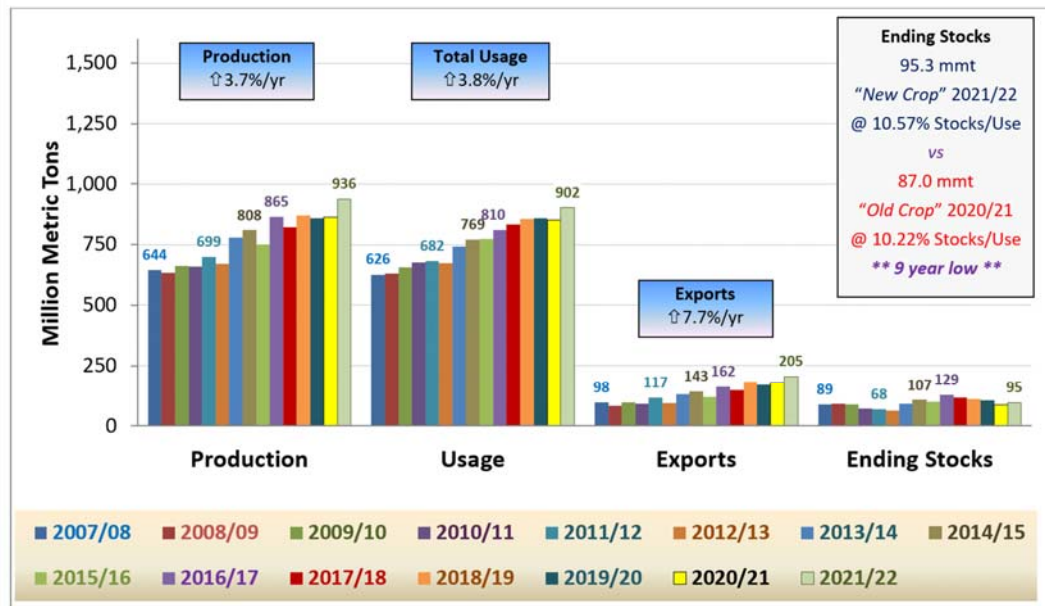


## "World-Less-China" Coarse Grain Supply-Demand:

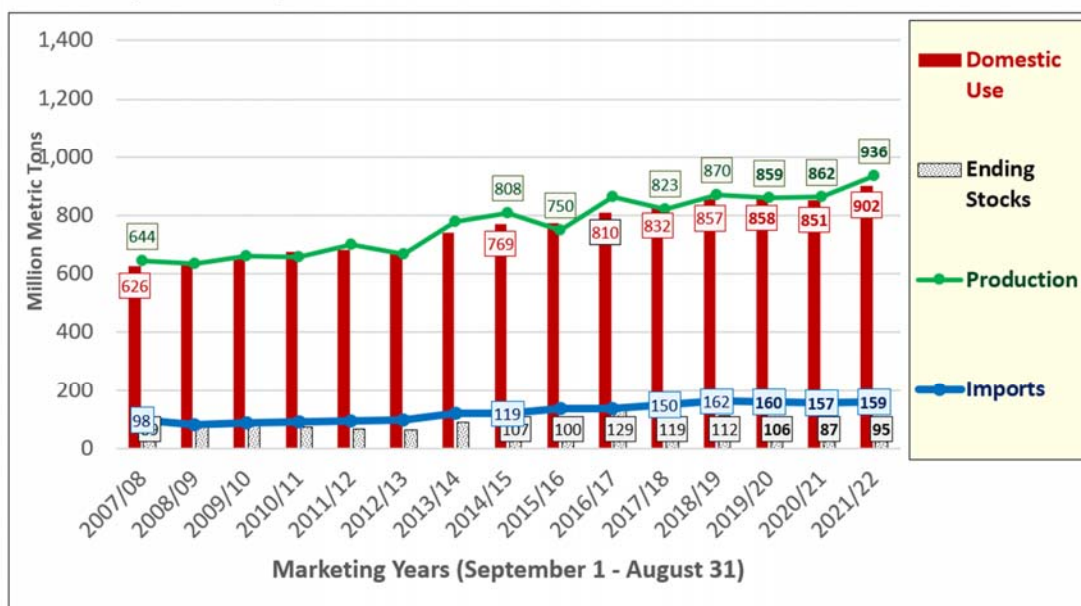
MY 2007/08 thru "New Crop" 2021/22 as of the December 9, 2021 USDA WASDE



**“World-Less-China” Corn Supply-Demand: MY 2007/08 – “New Crop” MY 2021/22**  
 2021/22, as of the December 9, 2021 USDA WASDE Report

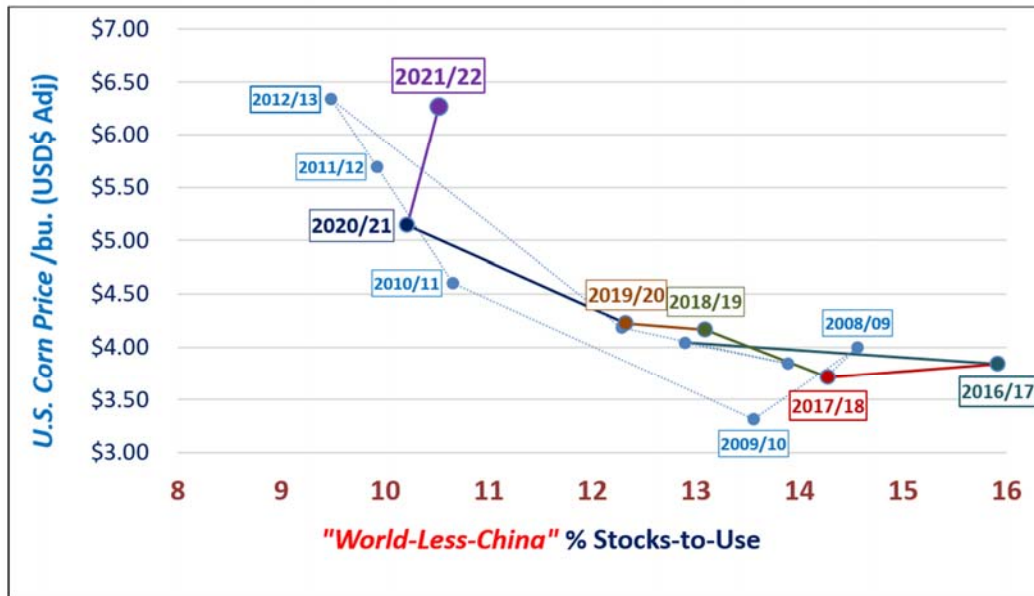


**“World-Less-China” Corn Supply-Demand: MY 2006/07 – “New Crop” MY 2021/22**  
 as of the December 9, 2021 USDA WASDE report



## U.S. Corn \$'s<sup>USD\$ Adj.</sup> vs "World-Less-China" % Corn S/U:

MY 2007/08 – "New Crop" MY 2021/22, as of the December 9, 2021 USDA WASDE



## World vs "World-Less-China" % Corn Stocks-to-Use: MY 2007/08 through "New

Crop" MY 2021/22, as of the December 9, 2021 USDA WASDE report.



## Brazil Corn Supply-Demand: MY 2006/07 – “New Crop” MY 2021/22 as of

the December 9, 2021 USDA WASDE report



## Argentina Corn Supply-Demand: MY 2006/07 – “New Crop” MY 2021/22

as of the December 9, 2021 USDA WASDE report

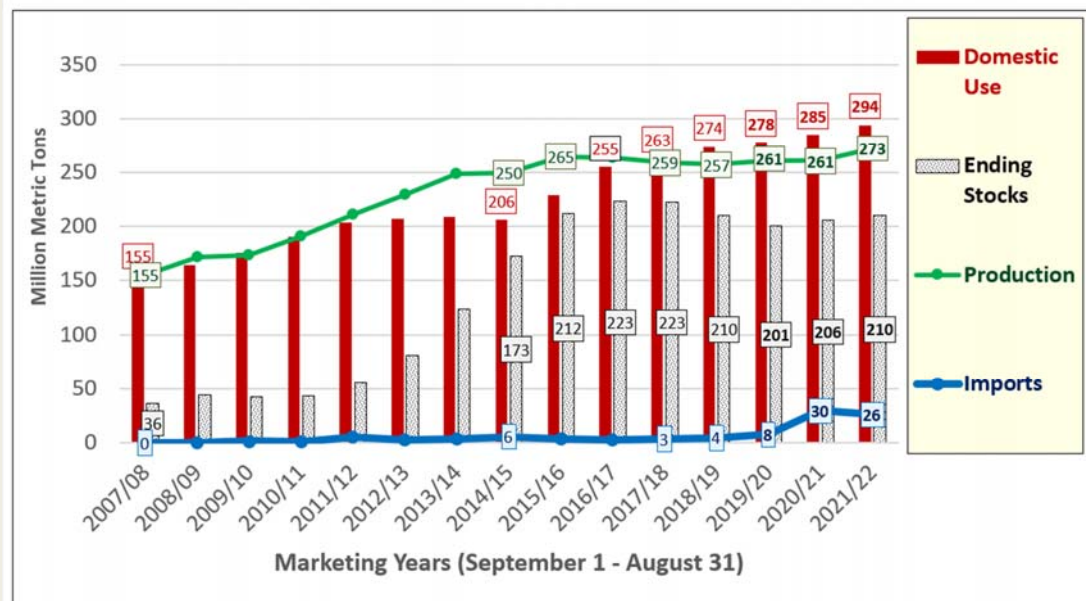




## Ukraine Corn Supply-Demand: MY 2006/07 – “New Crop” MY 2021/22 as of of the December 9, 2021 USDA WASDE report



## China Corn Supply-Demand: MY 2006/07 – “New Crop” MY 2021/22 as of the December 9, 2021 USDA WASDE report



# Ethanol & DDGS Markets



Thu. Jan 06, 2022



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USDA Daily Ethanol Report  
Agricultural Marketing Service  
Livestock, Poultry & Grain Market News

Thu. Jan 06, 2022

## US #2 Yellow Corn - dollars/bushel

	Cash Bids	Chg	Basis	Avg:
Iowa-Eastern:	5.9225 - 6.0425	↓	-10H to 2H	-2.83
Iowa-Western:	5.8225 - 6.2225	↓	-20H to 20H	1.50
Illinois:	5.9425 - 6.2225	↓	-8H to 20H	7.75
Indiana:	5.8425 - 6.1725	↓	-18H to 15H	3.70
Ohio:	5.9925 - 6.0725	↓	-3H to 5H	0.33
Michigan:	5.6725 - 5.9225	↓	-35H to -10H	-22.50
Kansas:	6.2525 - 6.4925	↓	23H to 47H	32.33
Minnesota:	5.8425 - 6.1425	↓	-18H to 12H	-6.00
Nebraska:	5.8225 - 6.3725	↓	-20H to 35H	-2.18
Wisconsin:	5.6525 - 5.9225	↓	-37H to -10H	-23.50
South Dakota:	5.8825 - 6.0725	↓	-14H to 5H	-3.23
Missouri:	5.9825 - 6.3725	↓	-4H to 35H	11.50



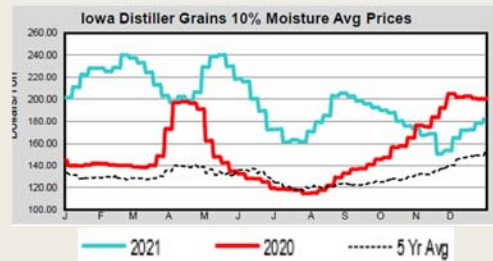
## Sorghum - dollars/bushel

	Cash Bids	Chg	Basis	Avg:
Kansas:	NA	NA	NA	NA

### Distillers Grain - dollars/ton - week ending 12/31/2021

	Dried 10%	Chg	Avg:	Modified 50-55%	Chg	Avg:	Wet 65-70%	Chg	Avg:
Iowa-Eastern:	175.00 - 185.00	↑	182.50	85.00 - 90.00	↓	88.75	NA	NA	NA
Iowa-Western:	170.00 - 190.00	↓	181.50	85.00 - 88.00	↑	86.00	58.00 - 70.00	↑	64.33
Illinois:	192.00 - 215.00	↓	199.14	80.00	NA	80.00	95.00	↓	95.00
Indiana:	170.00 - 205.00	↑	186.11	NA	NA	NA	NA	NA	NA
Ohio:	180.00 - 202.00	↑	190.33	NA	NA	NA	NA	NA	NA
Michigan:	159.00 - 200.00	↑	182.20	NA	NA	NA	NA	NA	NA
Kansas:	225.00 - 260.00	↑	242.50	NA	NA	NA	90.00 - 96.00	↑	92.40
Minnesota:	165.00 - 200.00	↑	178.33	85.00 - 90.00	↓	87.50	50.00	↓	50.00
Nebraska:	190.00 - 230.00	↓	210.00	90.00 - 112.00	↑	98.80	75.00 - 93.00	↑	86.20
Wisconsin:	170.00 - 190.00	↓	181.25	77.00	↓	77.00	58.00	↑	58.00
South Dakota:	190.00 - 214.00	↑	205.60	92.00 - 109.00	↑	103.33	65.00	↓	65.00
Missouri:	208.00 - 225.00	↓	217.00	110.00	↓	110.00	72.00 - 74.00	↑	73.33

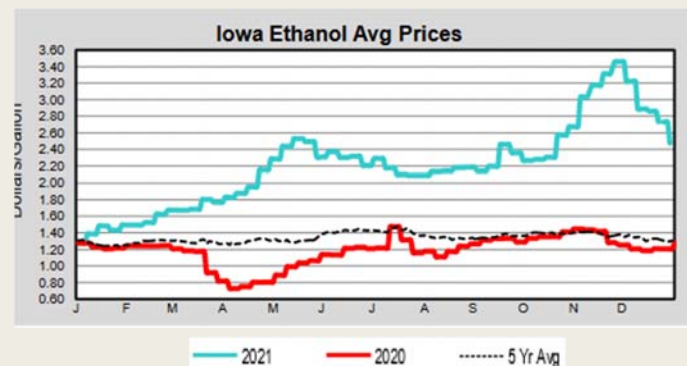
Thu. Jan 06, 2022



Thu. Jan 06, 2022

### Ethanol - dollars/gallon - week ending 12/31/2021

Iowa:	2.37	-	2.54	↓	2.47
Eastern Cornbelt	2.62	-	2.70	↓	2.66
Kansas:	2.37	-	2.55	↓	2.45
Minnesota:	2.45	-	2.51	↓	2.48
Nebraska:	2.33	-	2.54	↓	2.43
Wisconsin:			NA	NA	NA
South Dakota:	2.50	-	2.50	↓	2.50



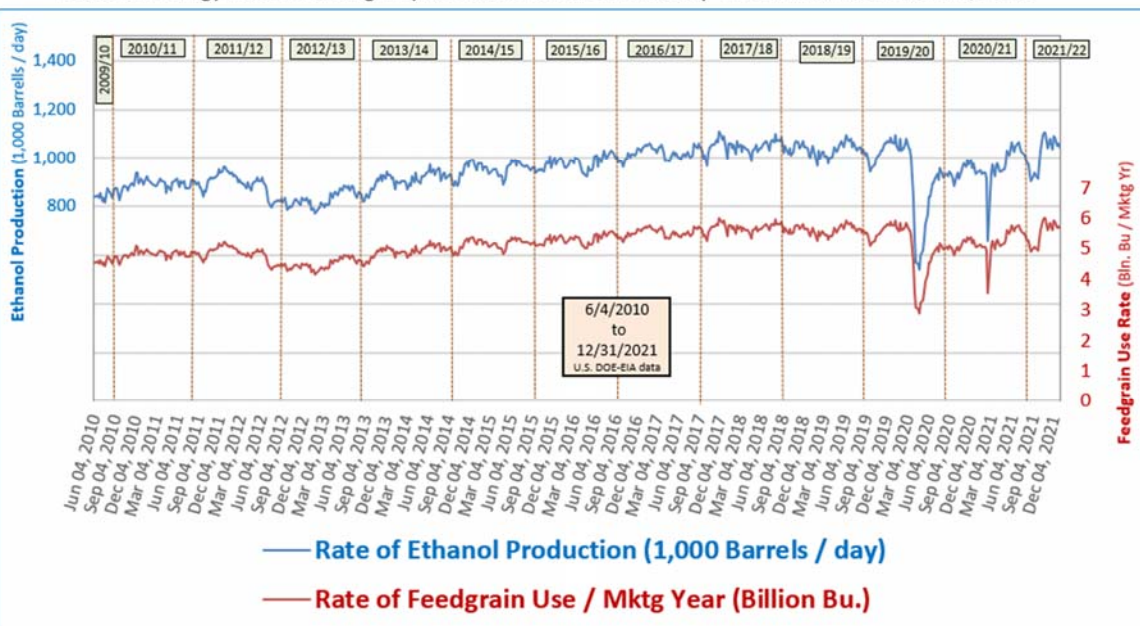
# Retail Diesel & Gasoline Prices

Weekly Continuous Chart: April 5, 1993 through January 3, 2022



## Weekly U.S. Fuel Ethanol Production & Estimated Corn Use

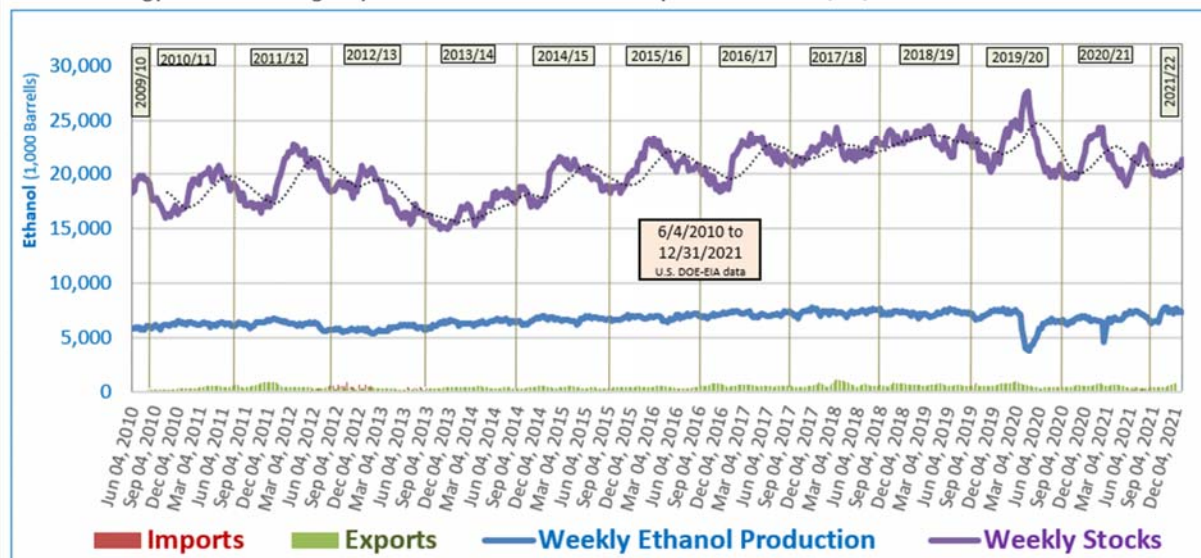
based on Energy Information Agency data on U.S. Ethanol Industry Trends as of December 31, 2021





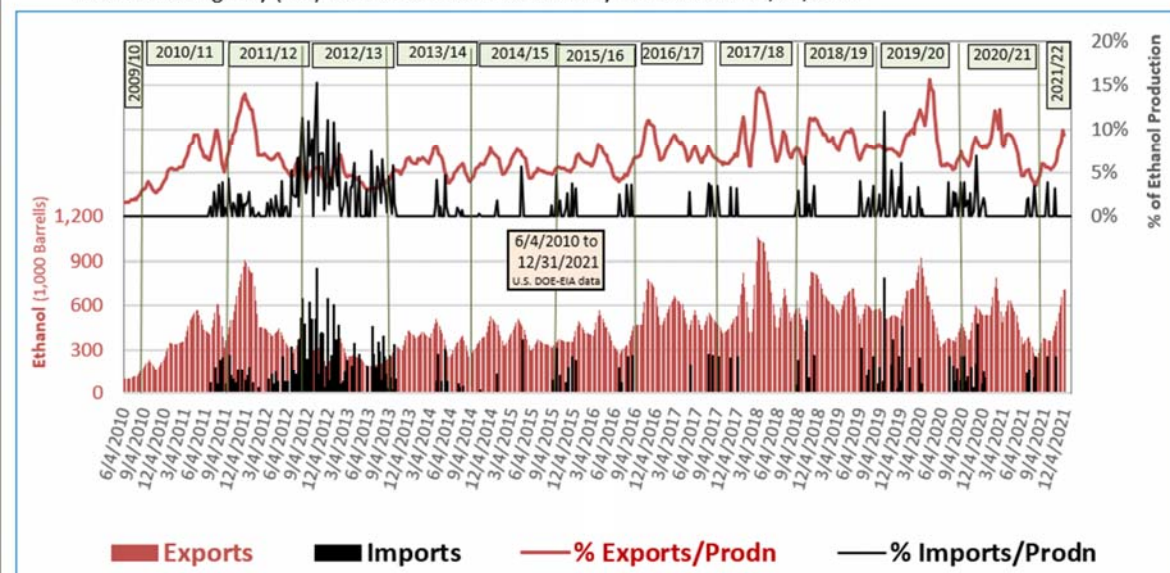
## Weekly U.S. Ethanol Production & Stocks based on U.S. Department of Energy

– Energy Information Agency data on U.S. Ethanol Industry Trends as of 12/31/2021



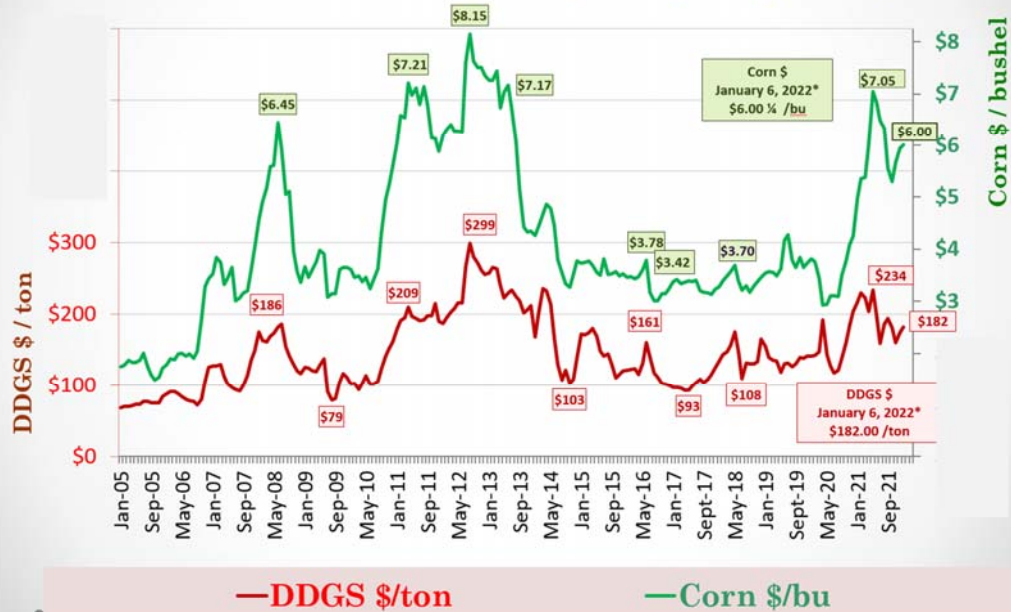
## Weekly U.S. Ethanol Foreign Trade based on U.S. Department of Energy – Energy

Information Agency (EIA) data on U.S. Ethanol Industry Trends as of 12/31/2021



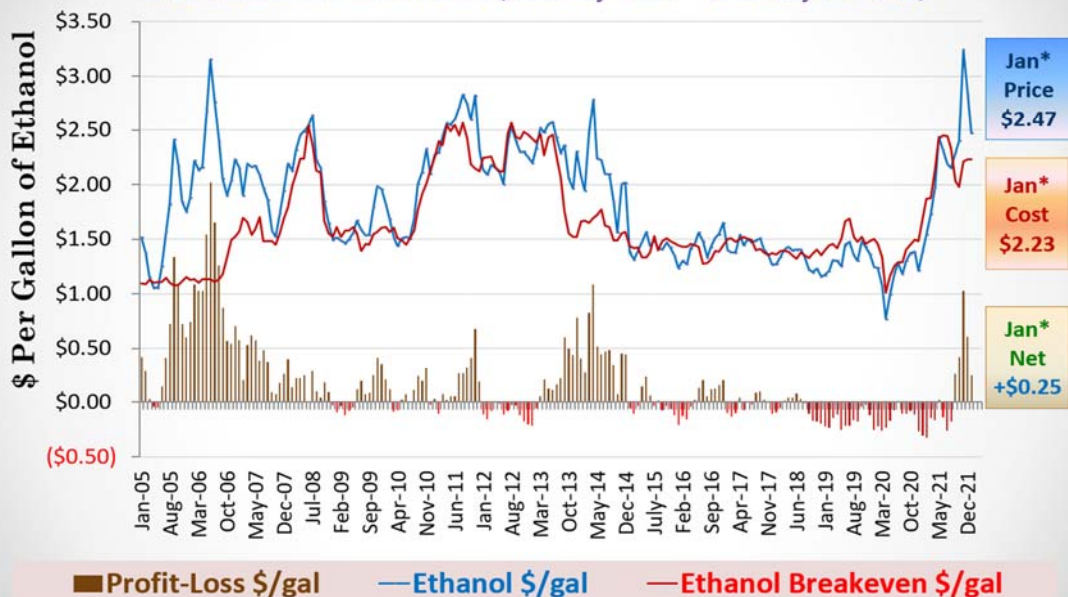
# Ethanol DDGS & Corn Input Prices

ISU Ethanol Plant Model (January 2005 – January 6, 2022)



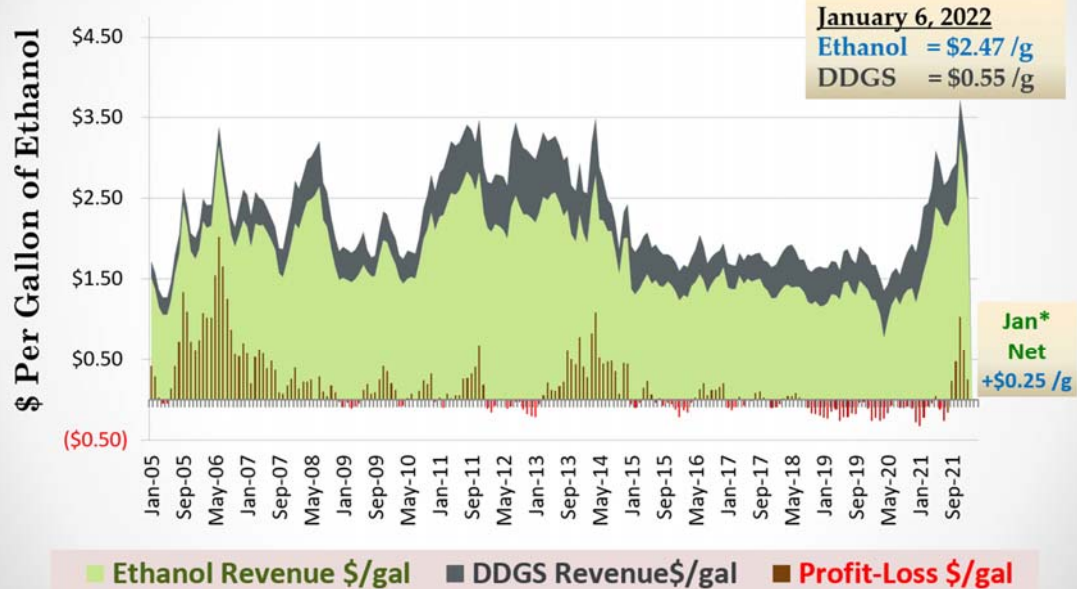
# Ethanol Price, Cost & Profit/Loss

ISU Ethanol Plant Model (January 2005 – January 6, 2022)



# Ethanol Revenues & Net Returns

ISU Ethanol Plant Model (January 2005 – January 6, 2022)



## Questions?

**Daniel O'Brien – Extension Ag Economist**

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