

Wheat Market Outlook for 2021-22

2021 Outlook Conference

Fargo, North Dakota

August 16-17, 2021

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Most Recent Wheat Market Headlines.....

2

Russian Wheat Exports Fall 20% So Far This Season: Agency – AgResource, 8/16/2021

Wheat up, hovers close to 8-1/2-year high on supply concern – Reuters, 8/16/2021

Russian wheat prices jump after steep cuts to USDA forecast – Reuters, 8/16/2021

Commercials caught short by rally in grain and oilseed prices – AgResource, 8/16/2021

Rain-hit French wheat crop shows uneven test weights - France AgriMer – Reuters, 8/16/2021

Record Ukraine cumulative average wheat yield after 87% harvested.– AgResource, 8/15/2021

EU wheat soars to nearly 9-year high (\$305 MT - \$8.30 BU) as September expiry adds to harvest tension – AgResource, 8/13/2021

More Recent Wheat Market Headlines.....

3

MGE reaches \$9.50, a new high for this 2021 rally. Next upside target is \$10.35? – AgResource, 8/13/2021

India wheat record at 109.5 MMT vs 107.9 MMT last year – AgResource, 8/12/2021

Some big increases in Canadian crop prices in recent days... – AgResource, 8/12/2021

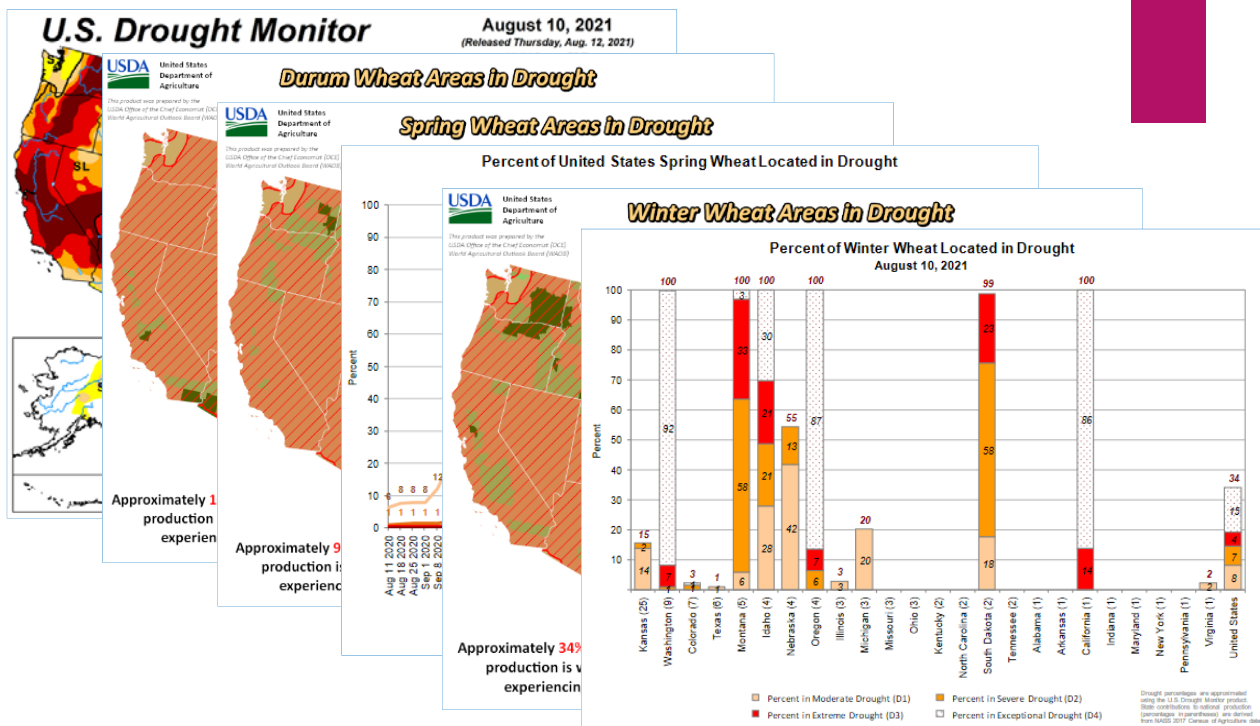
EU wheat, barley harvest losses create 'explosive' world supply outlook – AgResource, 8/12/2021

Global spring wheat production in jeopardy due to simultaneous droughts in Canada, US , Kazakhstan, & Russia. – Reuters, 8/11/2021

South Korea pay's \$347 MT (\$9.44 /bu) for US Soft White & \$401 MT (\$10.91 /bu) for US HRS; paid \$300 MT (\$8.16 /bu) for Aussia Hard Wheat – Reuters, 8/10/2021

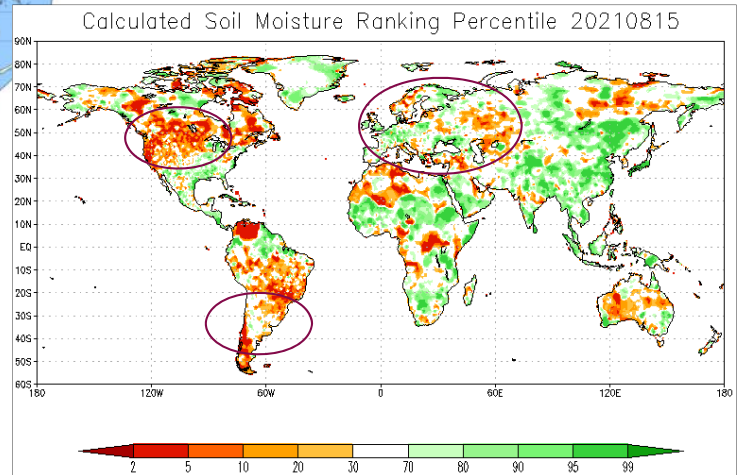
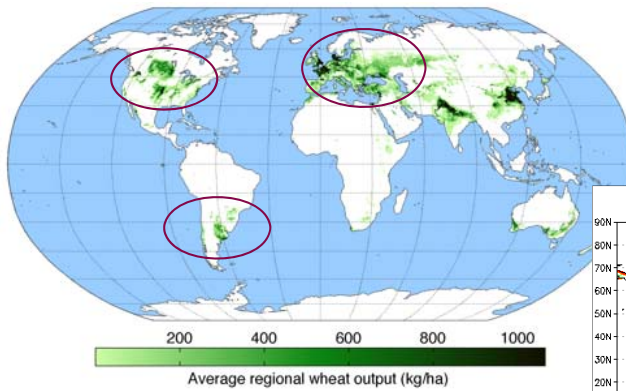
Why Wheat Quality Matters - Black Sea and French – AgResource, 8/5/2021

Millers, bakers fret as drought withers North America's spring wheat – Reuters, 8/5/2021



4

World Wheat Production & Dry Regions



Key Wheat Crop Issues in 2021

☐ Crop Problems in Key Wheat Exporters

- **Russia** ⇒ short production – 72.5 mmt²⁰²¹ (vs 85.35 mmt²⁰²⁰)
- **European Union** ⇒ wet harvest & quality problems in Germany & France (*low milling quality*)
- **Canada** ⇒ Hot, dry conditions – 24 mmt²⁰²¹ (vs 35.2 mmt²⁰²⁰)
- **U.S.** ⇒ Hot, dry conditions – 46.2 mmt²⁰²¹ (vs 49.7 mmt²⁰²⁰)

☐ Larger Crops in Ukraine, Australia, Argentina & China

More Wheat Market Issues

- U.S. Dollar ➡ *Lower*, supporting U.S. wheat exports
- Wheat feeding
 - **Domestic U.S.** ➡ 160 mb²⁰²¹ (4.35 mmt) vs 99 mb²⁰²⁰ (2.7 mmt)
 - **China** & elsewhere ???? ➡ Reports of increased wheat feed use
- **High Ocean Freight Rates**
 - **Baltic Dry Index (BDI)** = 3,606 August 16, 2021 (vs 393 March 2020)
 - Logistics *disadvantage* to U.S. wheat exports in ocean shipping costs into **Middle Eastern** & other foreign markets

More Wheat Market Issues

- **Prospects for Winter Wheat seeding** in Fall 2021
 - Varying soil moisture conditions across U.S. winter wheat areas
 - *IF* LaNina weather trend continues – increases risk of dry fall weather in the U.S. winter wheat areas
- **Risk of broader systematic commodity market events**
 - Potential exists for *geopolitical conflicts* between the U.S. & other trading countries – which would introduce **serious risk, uncertainty & likely volatility** into U.S. & world grain markets

Wheat Market Prices U.S.

9



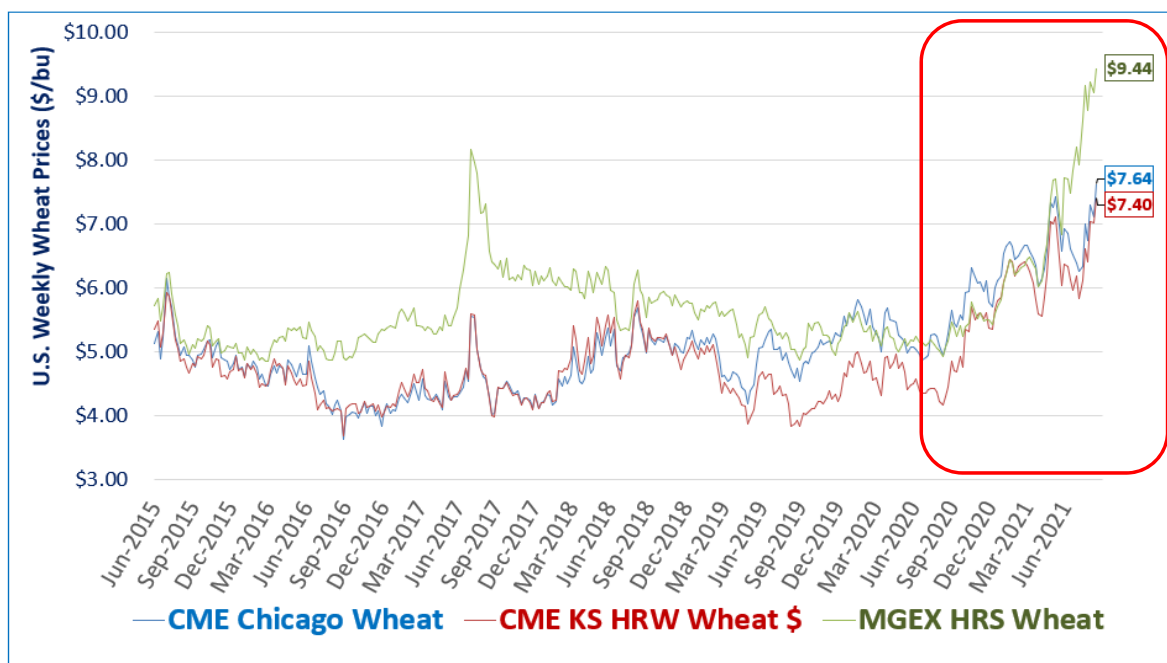
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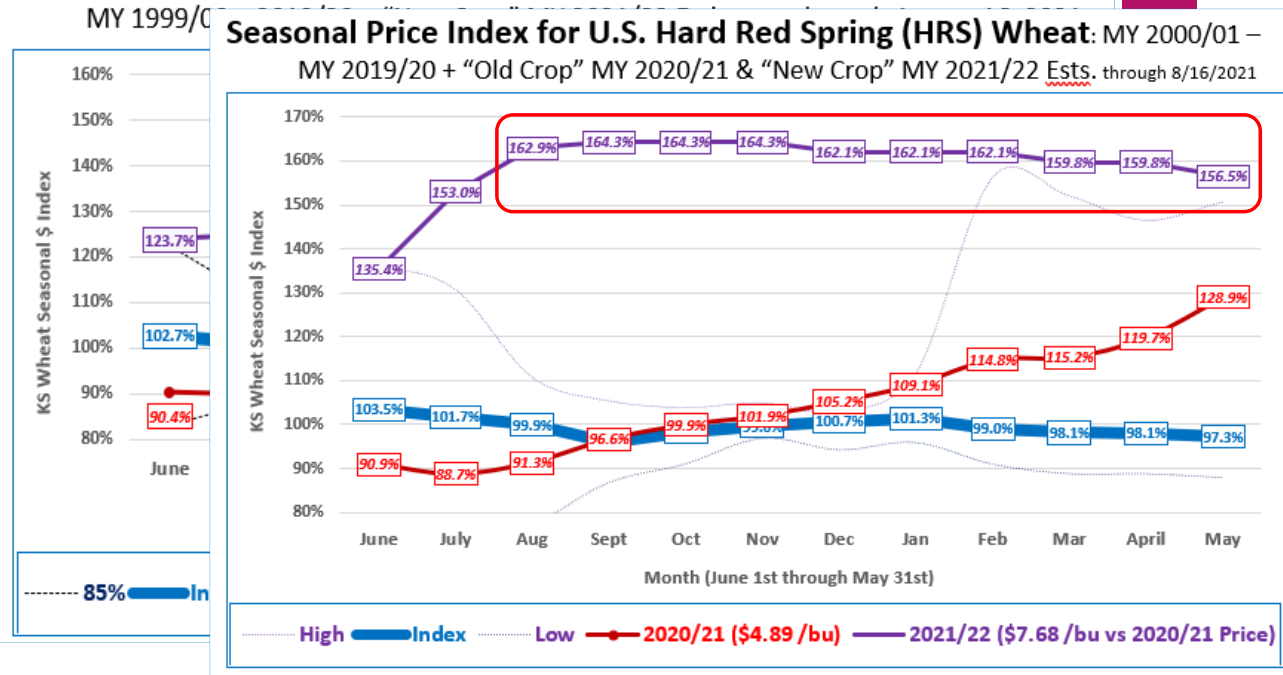
Continuous Weekly Wheat Futures Prices - CME Chicago & KC HRW Wheat Futures \$'s + MGEX HRW Wheat
Futures: June 2015 through August 16, 2021

10



Seasonal Price Index for Kansas Hard Red Winter (HRW) Wheat:

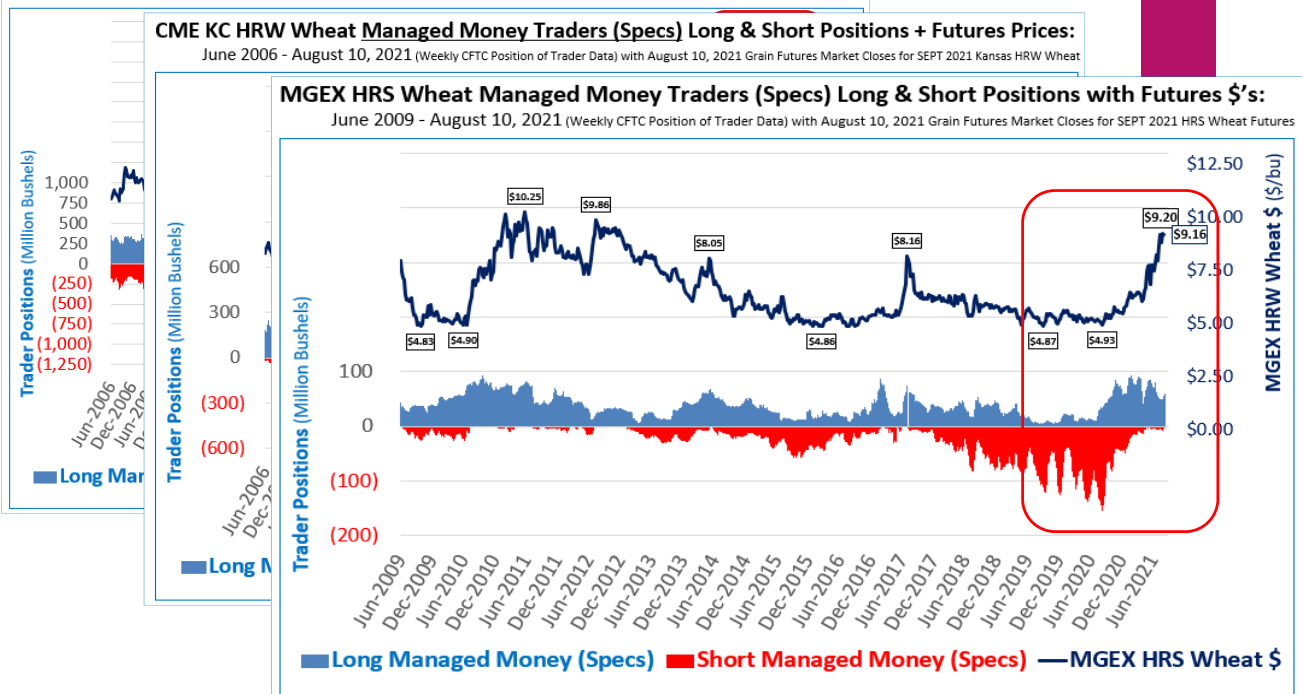
11



CME Chicago SRW Wheat Managed Money Traders (Specs) Long & Short Positions w. Futures:

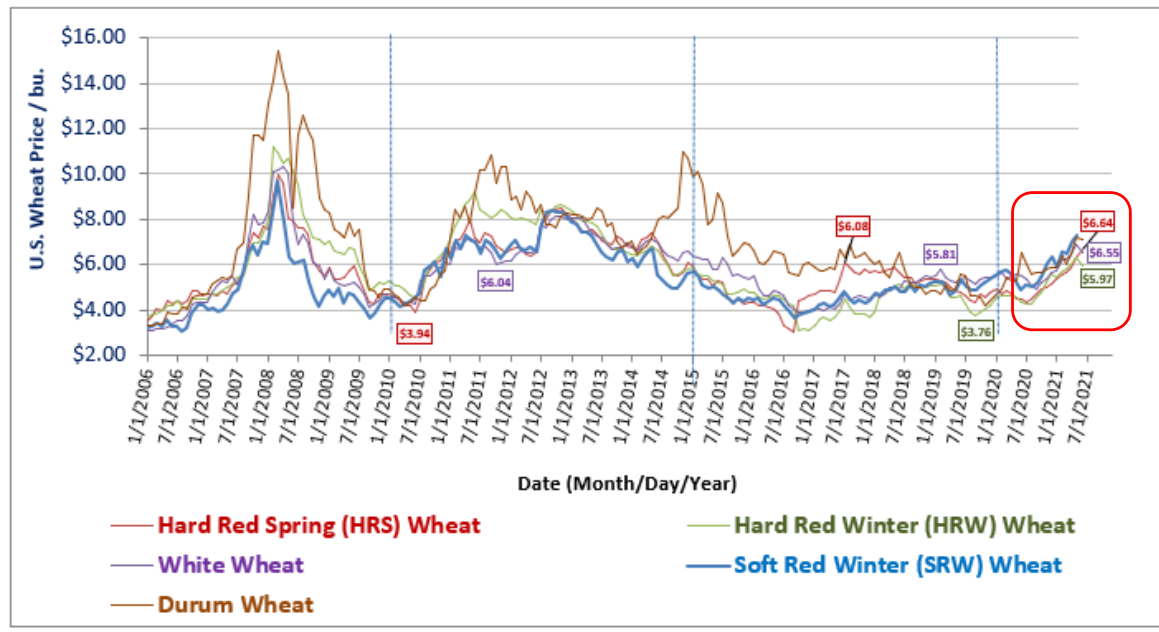
June 2006 - August 10, 2021 (Weekly CFTC Position of Trader Data) with 8/10/2021 Grain Futures Market Closes for SEPT 2021 Chicago Wheat Futures

12



Monthly U.S. HRS, HRW, SRW, Durum & White Wheat Prices for January 2006 – August

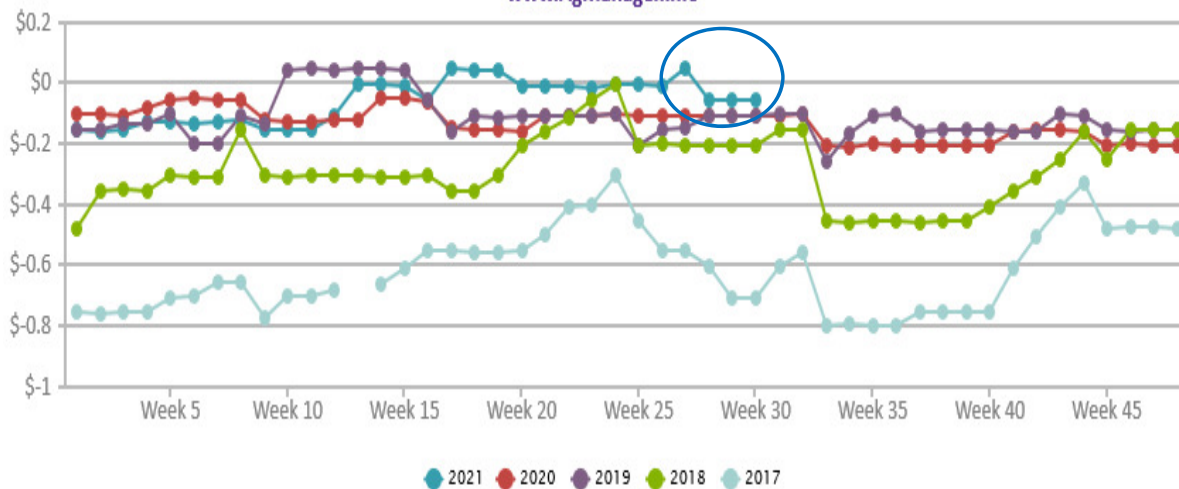
9, 2021 (USDA)



13

TOPEKA, KS: Hard Red Winter Wheat Basis - CARGILL

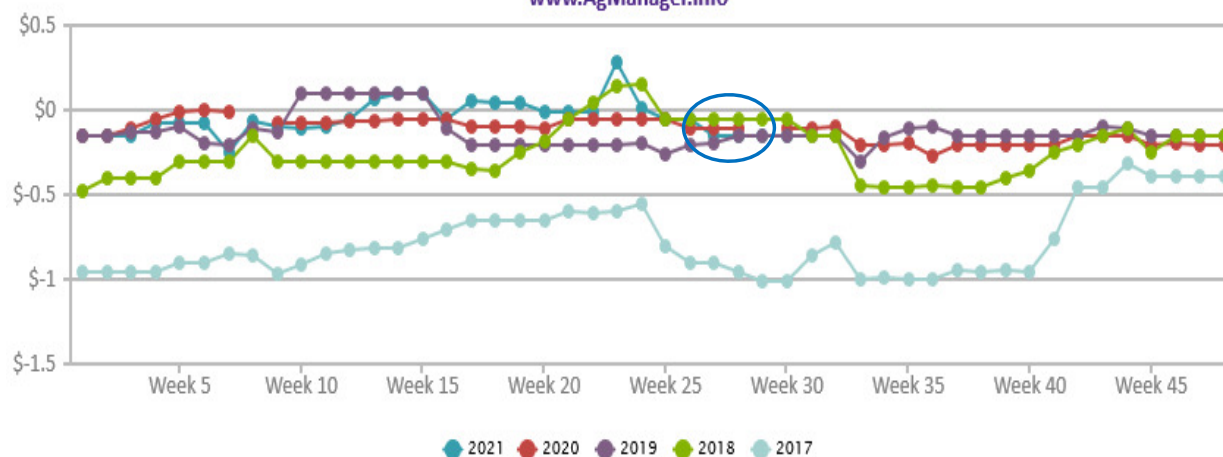
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14

SALINA, KS: Hard Red Winter Wheat Basis - CARGILL

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Wheat Production U.S.



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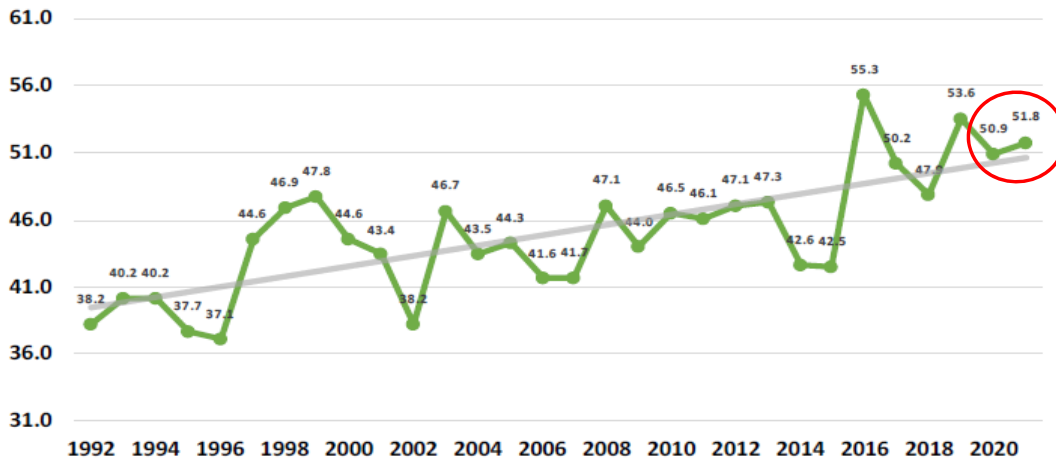




17

Winter Wheat Yield United States

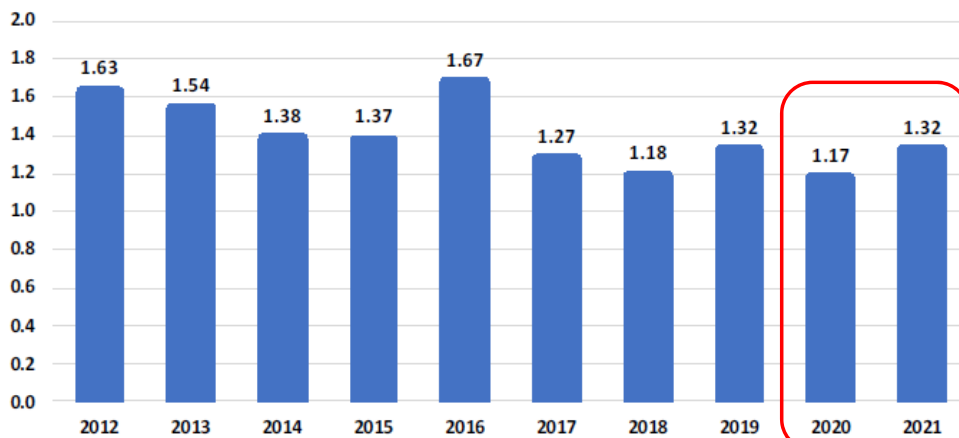
Bushels per Acre



18

Winter Wheat Production United States

Billion Bushels



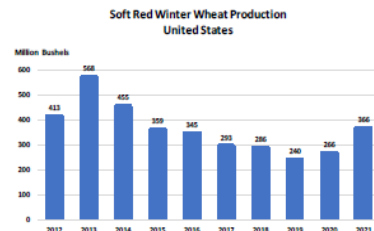
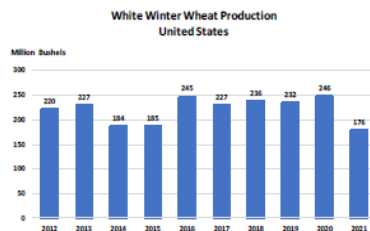
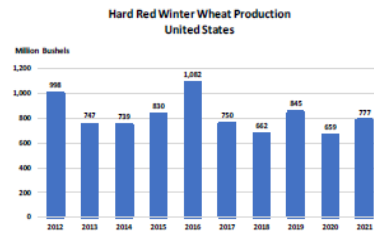


August 2021 Winter Wheat Production United States by Class



19

	Production (1,000 Units)	Unit
Hard Red Winter Wheat	776,855	Bu
% Change from Previous Estimate	↓ 3.4	
% Change from Previous Season	↑ 17.9	
Soft Red Winter Wheat	365,508	Bu
% Change from Previous Estimate	↑ 1.0	
% Change from Previous Season	↑ 37.3	
White Winter Wheat	176,372	Bu
% Change from Previous Estimate	↓ 10.7	
% Change from Previous Season	↓ 28.3	

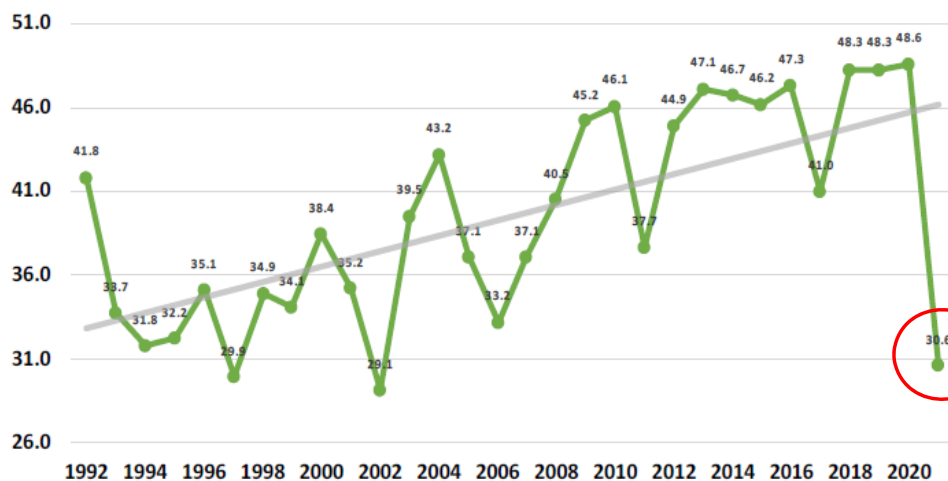


Other Spring Wheat Yield United States



20

Bushels per Acre

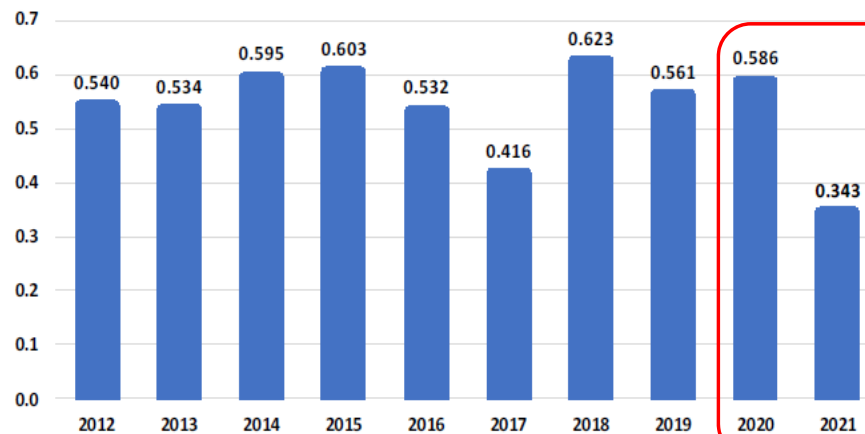




21

Other Spring Wheat Production United States

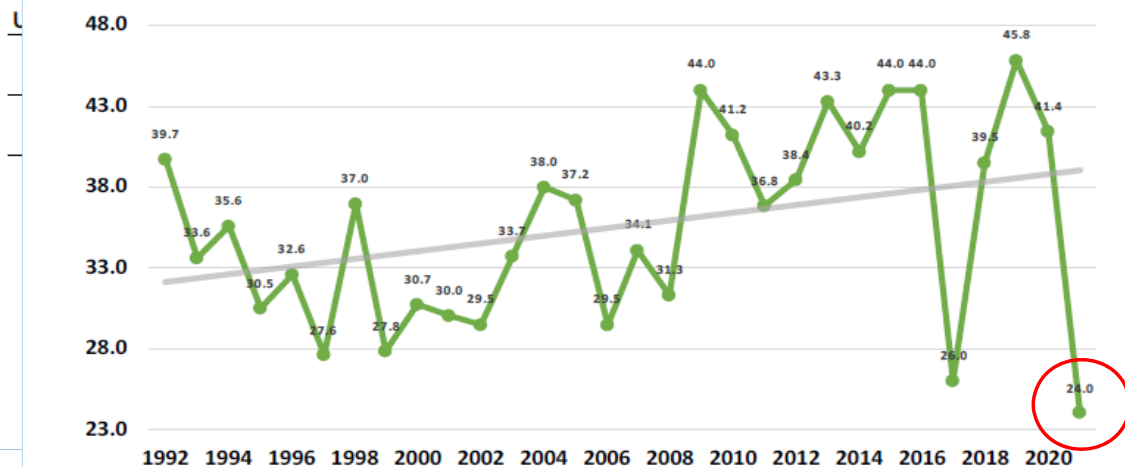
Billion Bushels



22

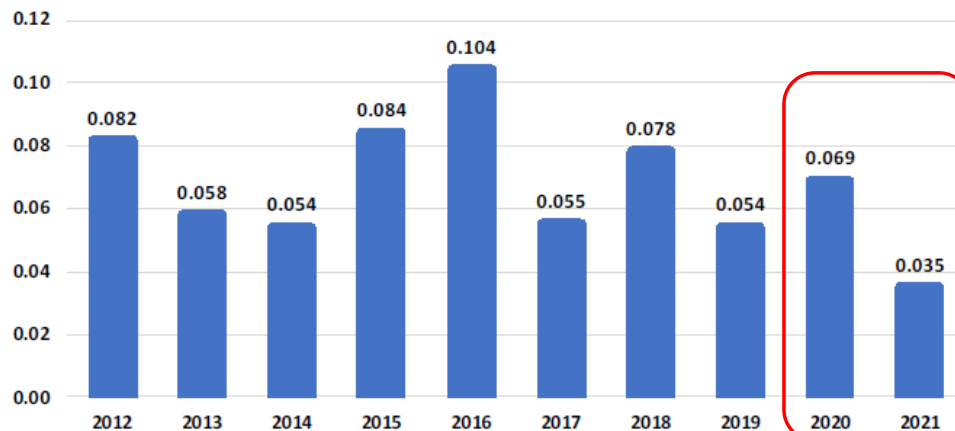
Durum Wheat Yield United States

Bushels per Acre



Durum Wheat Production United States

Billion Bushels



2021 U.S. Wheat Quality & Grades 8/13/2021

- HRW Wheat ²⁰²¹ ⇒ **11.4% protein**, 60.6 lb test wt., 1.8% defects
 - Versus 5 year average = 11.0% protein, 60.9 lb. test wt., 1.2% defects
- SRW Wheat ²⁰²¹ ⇒ **9.4% protein**, 59.5 lb test wt., 1.2% defects
 - Versus 5 year average = 9.6% protein, 58.2 lb. test wt., 1.5% defects
- Soft White Wheat ²⁰²¹ ⇒ **11.3% protein**, 59.9 lb test wt., 0.9% defects
 - Versus 5 year average = 9.8% protein, 61.4 lb test wt., 0.6% defects
- HRS Wheat ²⁰²¹ ⇒ **15.4% protein**, 62.0 lb test wt., 0.8% defects
 - Versus 5 year average = 14.5% protein, 61.2 lb test wt., 0.9% defects

Wheat Supply-Demand U.S.

25



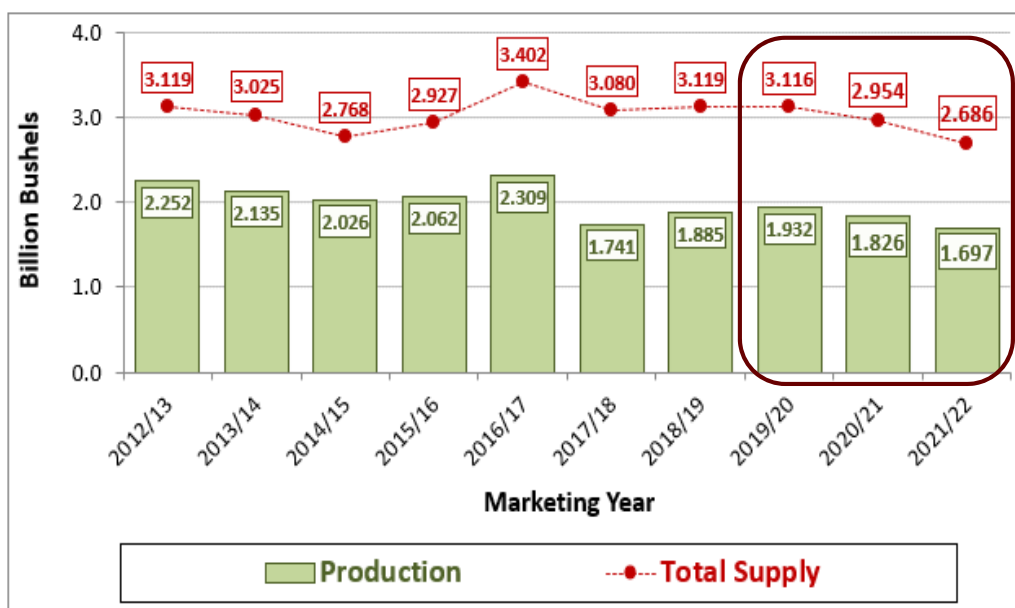
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U.S. Wheat Total Supplies for MY 2012/13 – Projected MY 2020/21

as of the August 12, 2021 USDA Crop Production & WASDE Reports



26

U.S. Wheat Supply and Demand

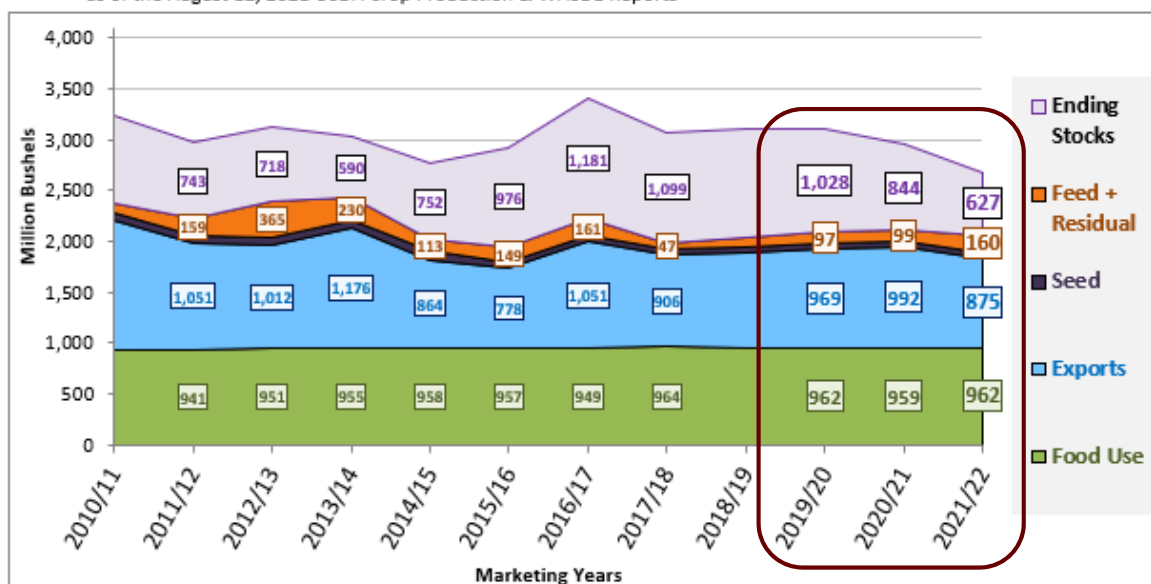
Item	2020/2021 estimate	2021/2022 forecast	Change from July 12	Change from 2020/2021
Planted area (million acres)	44.3	46.7	--	2.4
Harvested area (million acres)	36.7	38.1	--	1.4
Yield (bushels per acre)	49.7	44.5	-1.3	-5.2
----- Million bushels -----				
Beginning stocks	1,028	844	--	-184
Production	1,826	1,697	-49	-129
Imports	100	145	--	45
Total supply	2,954	2,686	-49	-269
Food use	959	962	-1	3
Seed	61	62	--	1
Feed and residual	99	160	-10	61
Domestic use	1,119	1,184	-11	65
Exports	992	875	--	-117
Total use	2,110	2,059	-11	-51
Ending stocks	844	627	-38	-217
----- Percent -----				
Stocks to use ratio	40.0	30.4	-1.7	-9.5
----- Dollars per bushel -----				
Average market price	5.05	6.70	0.10	1.65

-- No change.

August 12, 2021

U.S. Wheat Use & Ending Stocks: MY 2010/11 – “New Crop” MY 2021/22

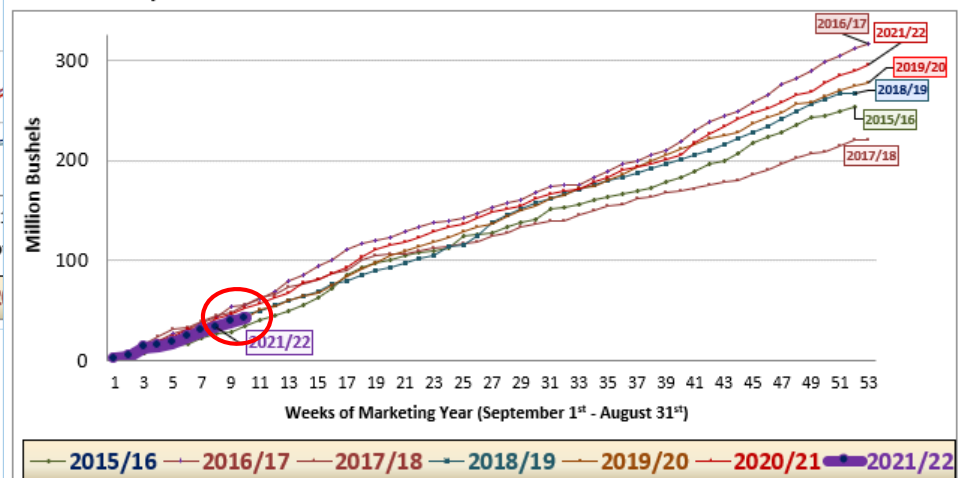
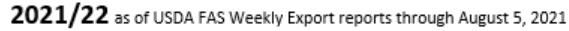
as of the August 12, 2021 USDA Crop Production & WASDE Reports



Export reports through August 5, 2021

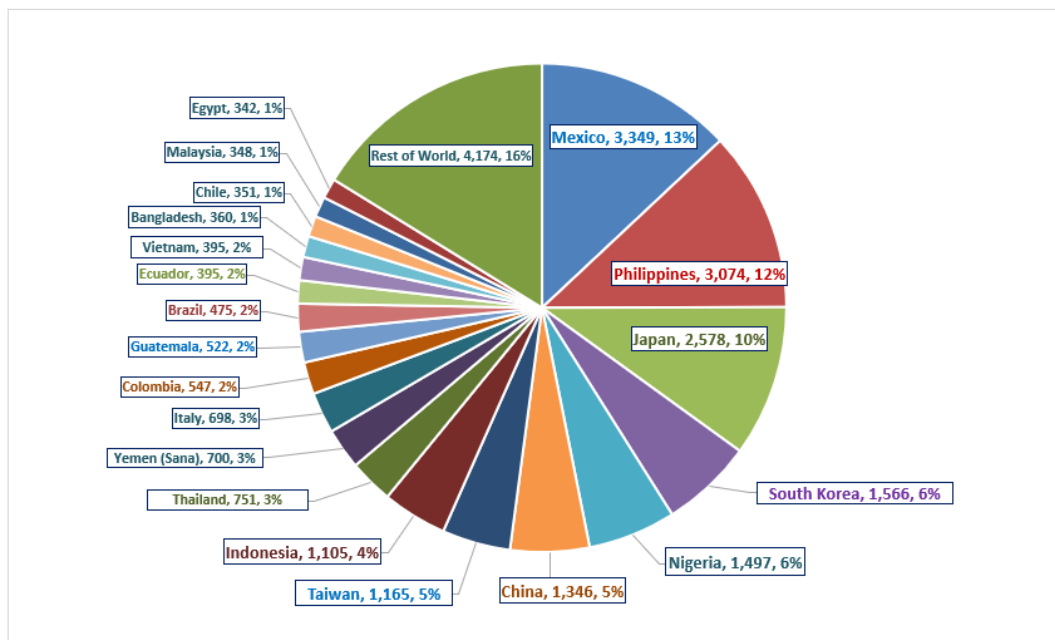


30



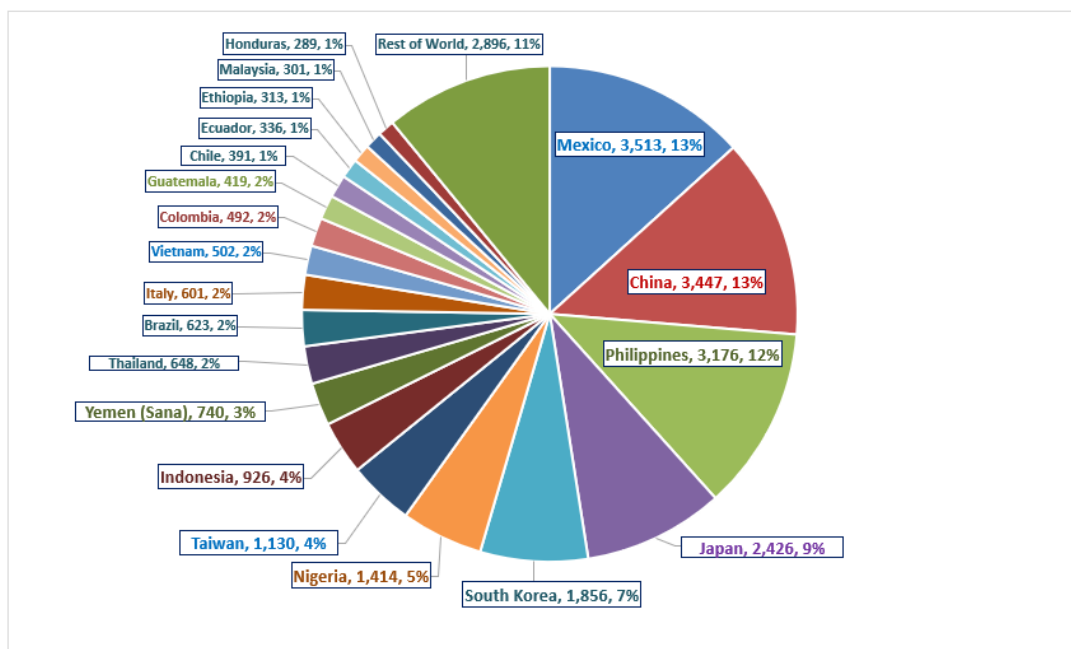
Top 20 U.S. Wheat Export Buyers – Most Recent 3 Year Average: MY 2018/19 through “Old Crop” MY 2020/21 as of the August 5, 2021 USDA WASDE report (via USDA FAS PSD Online) (1,000 mt)

31

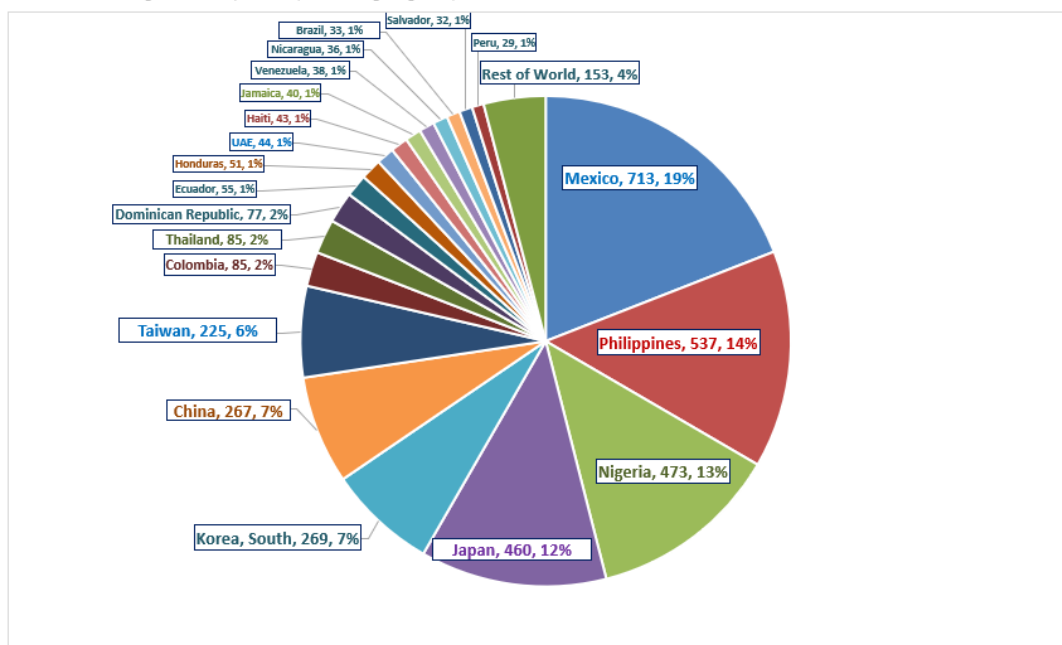


Top 20 U.S. Wheat Export Buyers – “Old Crop” MY 2020/21 as of the August 5, 2021 USDA U.S. Export Shipments (1,000 mt), with Marketing Year from June 1, 2020 through May 31, 2021.

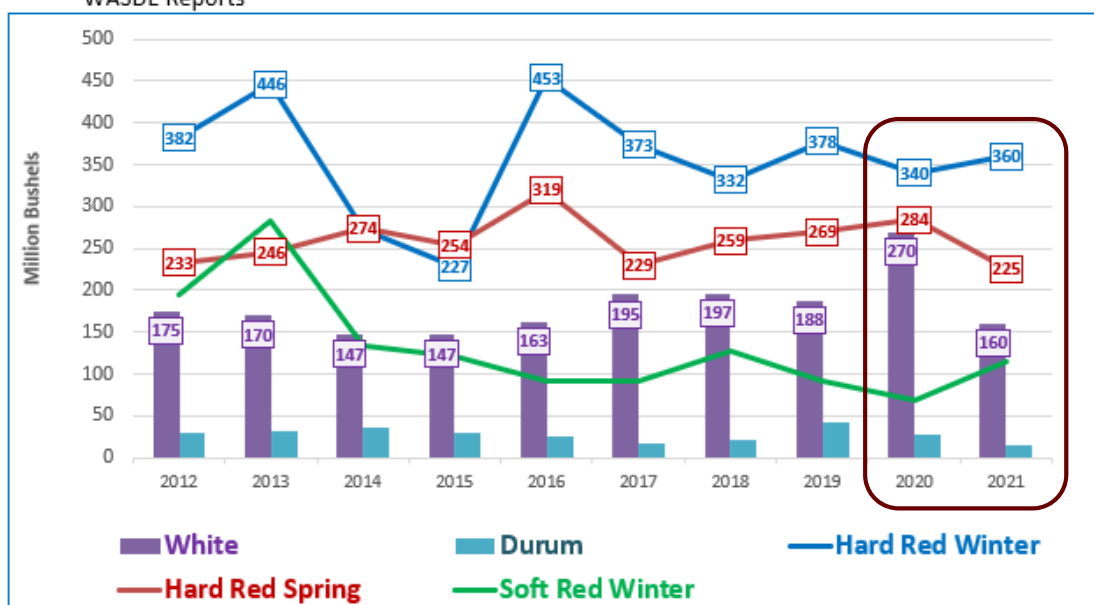
32



Top U.S. Wheat Export Buyers – “New Crop” MY 2021/22 as of the August 5, 2021 USDA U.S. Export Shipments (1,000 mt), with Marketing Year from September 1, 2021 through August 31, 2022.



U.S. Wheat Exports by Class Since 2012 as of the August 12, 2021 USDA Crop Production & WASDE Reports



Wheat Stocks & Prices U.S.

35



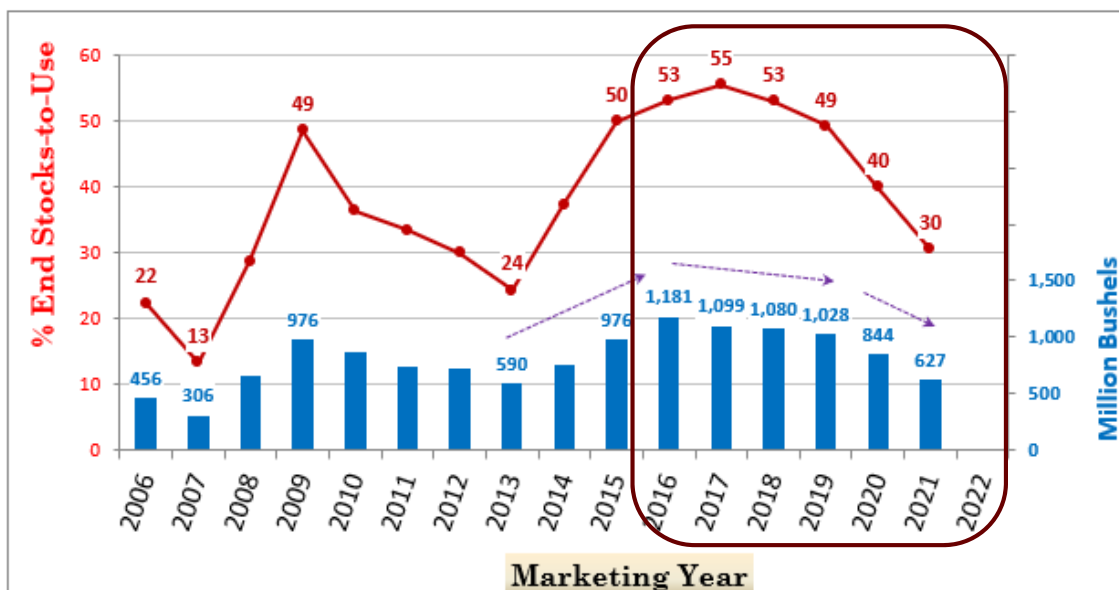
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U.S. Wheat Ending Stocks & Percent (%) Stocks-to-Use: MY 2006/07 thru
"New Crop" MY 2021/22 as of the August 12, 2021 USDA Crop Production & WASDE Reports

36



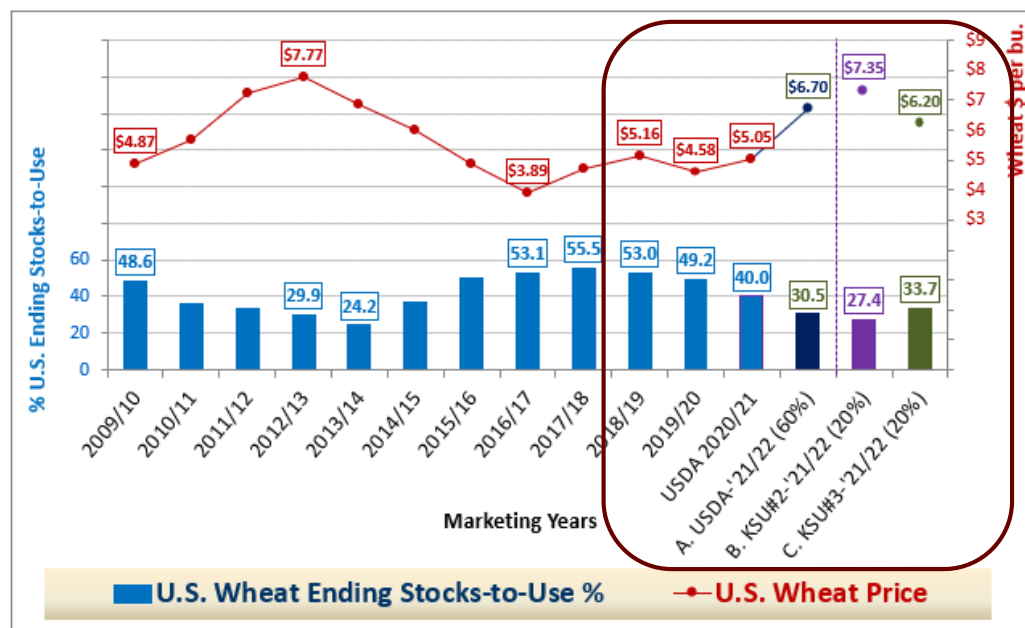
U.S. Wheat Supply-Demand Balance Sheet: "Old Crop" MY 2020/21 – "New Crop" MY 2021/22 as of the August 12, 2021 USDA WASDE report, with KSU scenarios

37

Item	USDA "Old Crop" MY 2020/21	A. USDA Scenario #1 "New" MY 2021/22 6/30 Grains Stocks ^{mb}	B. KSU Scenario #2 "New" MY 2021/22 Higher Exports ^{mb}	C. KSU Scenario #3 "New" MY 2021/22 Lower Exports ^{mb}
% Probability of Occurrence ^{KSU est.}		60% prob	20% prob.	20% prob.
Planted Area (million acres)	44,349	46,743	46,743	46,743
Harvested Area (million acres)	36,746	38,102	38,102	38,102
% Harvested/Planted Area	82.86%	81.51%	81.51%	81.51%
Yield / harvested acre (bu/ac)	49.7	44.5	44.5	44.5
Million Bushels				
Beginning Stocks	1,028	844	844	844
Production	1,826	1,697	1,697	1,697
Imports	105	145	145	145
Total Supply (million bushels)	2,954	2,686	2,686	2,686
Food Use	960	962	962	962
Seed Use	61	62	62	62
Exports	992	875	925	825
Feed & Residual Use	98	160	160	160
Total Use (million bushels)	2,110	2,059	2,109	2,009
Ending Stocks (million bushels)	844	627	577	677
% Ending Stocks-to-Use	40.00%	30.45%	27.36%	33.70%
Days of Supply (% S/U x 365 days)	146 days	111 days	100 days	123 days
U.S. Wheat Avg. Farm Price (\$/bushel)	\$5.05	\$6.70	\$7.35	\$6.20

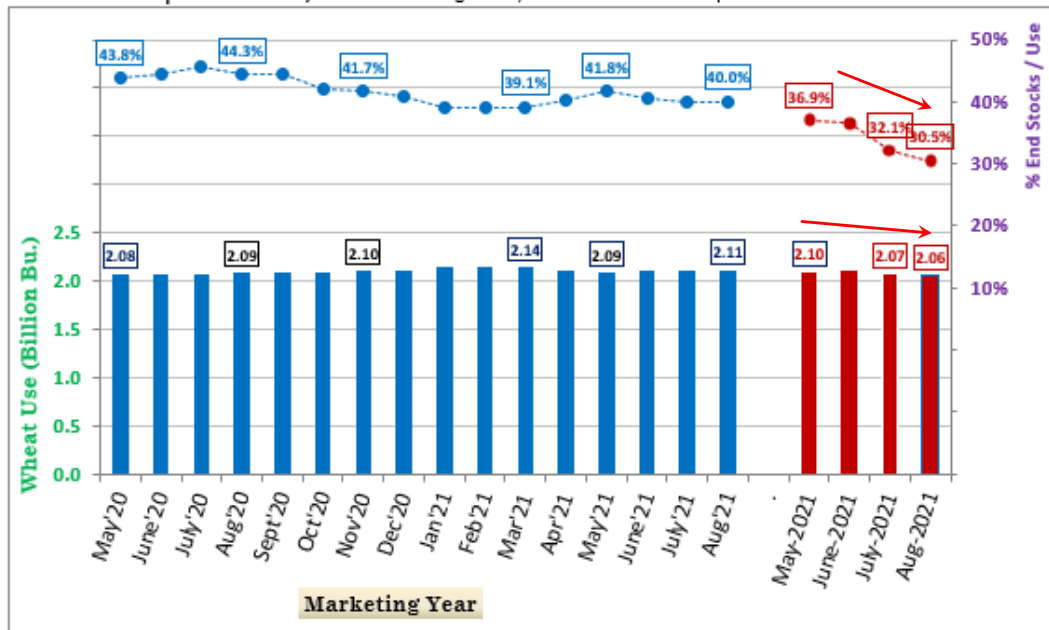
U.S. Wheat Ending Stocks vs U.S. Cash Prices: MY 2009/10 thru "New Crop" MY 2021/22 as of the August 12, 2021 USDA Crop Production & WASDE Reports, with KSU Projections

38



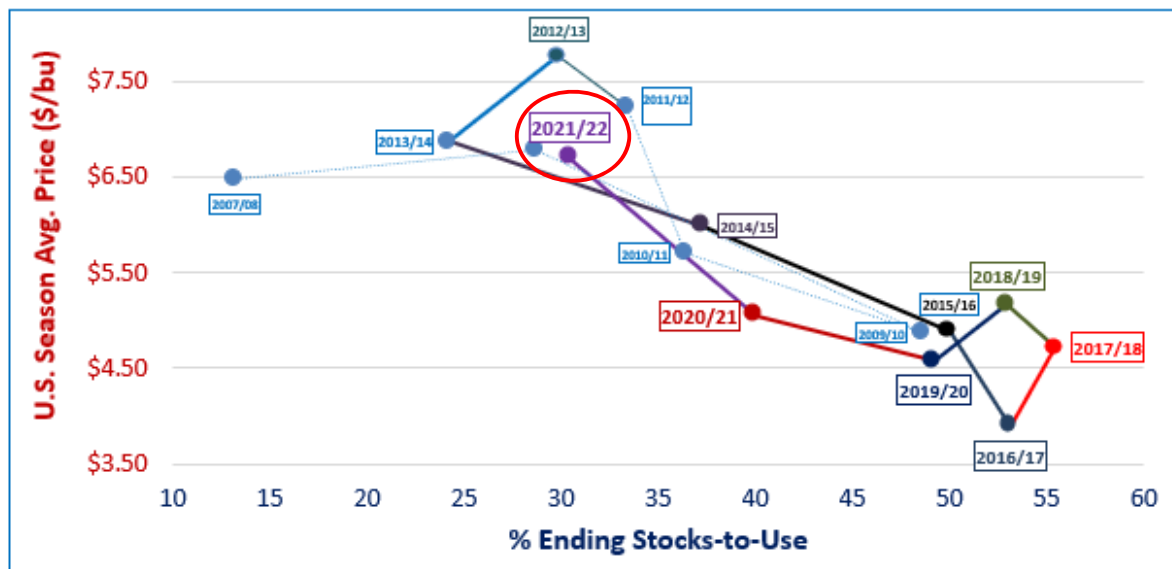
U.S. Wheat Ending Stocks & % Ending Stocks-to-Use: MY 2005/06 through "New Crop" MY 2021/22 as of the August 12, 2021 USDA WASDE report

39



U.S. Wheat Price vs U.S. % Stocks-to-Use: MY 2007/08 thru "New Crop" MY 2021/22 as of the August 12, 2021 USDA Crop Production & WASDE Reports

40



Wheat Stocks & Prices World

41



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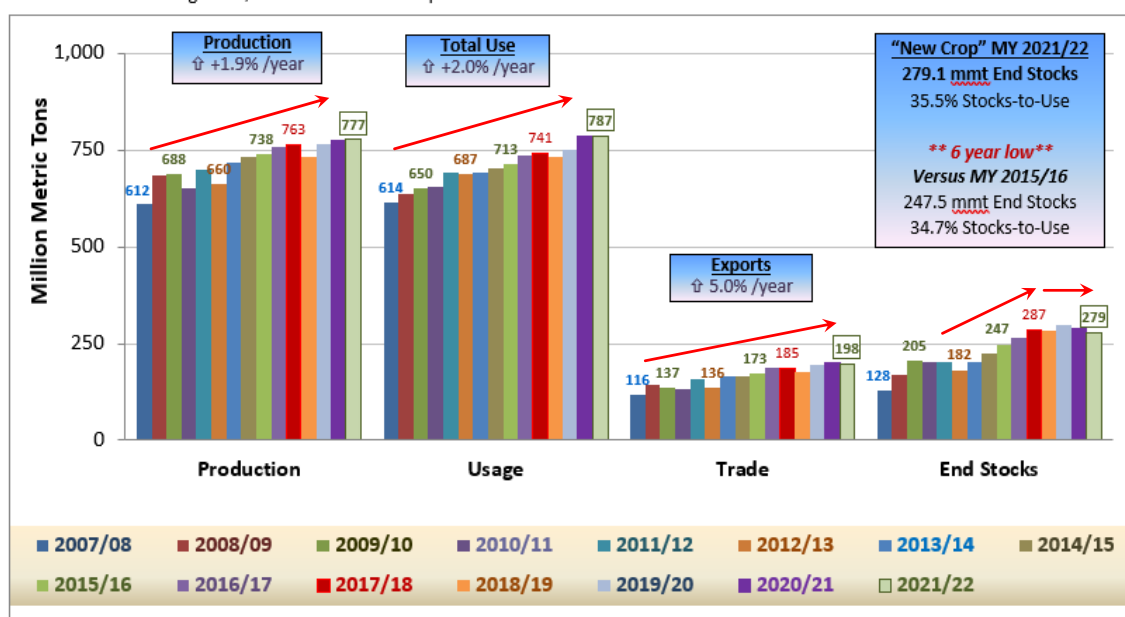
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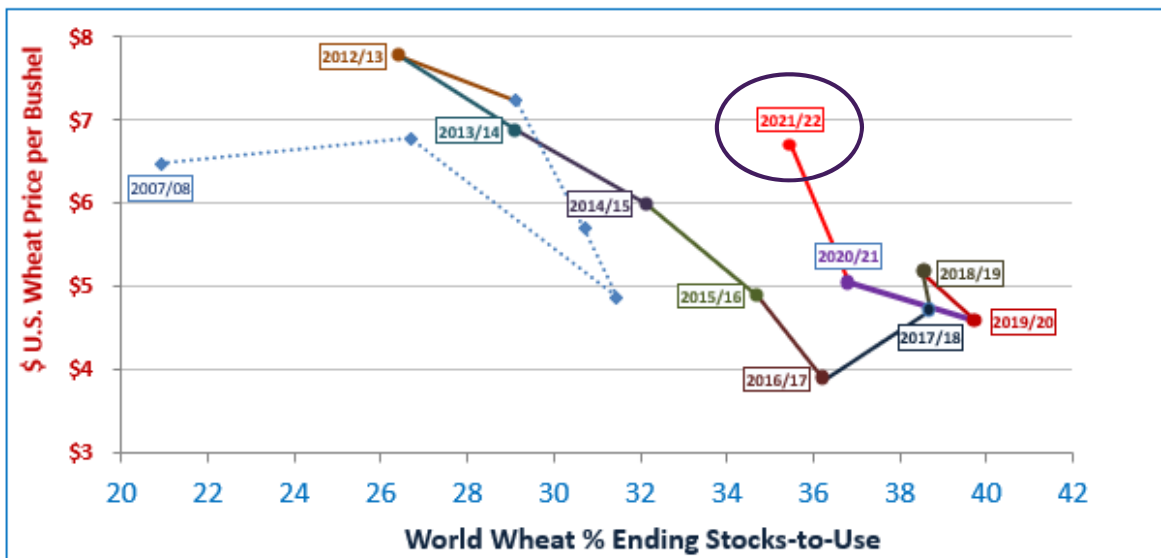
World Wheat Usage & Ending Stocks: MY 2007/08 - "New Crop" MY 2021/22

as of the August 12, 2021 USDA WASDE Report

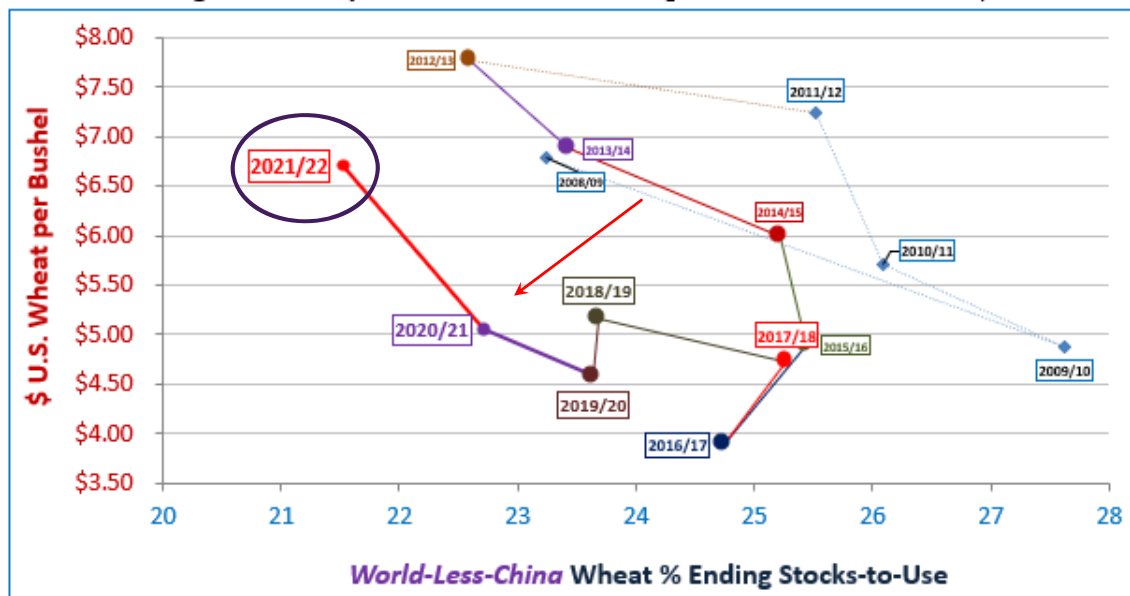
42



U.S. Wheat Price vs World % Stocks-to-Use: MY 2007/08 through “New Crop” MY 2020/21 as of the August 12, 2021 USDA WASDE Report

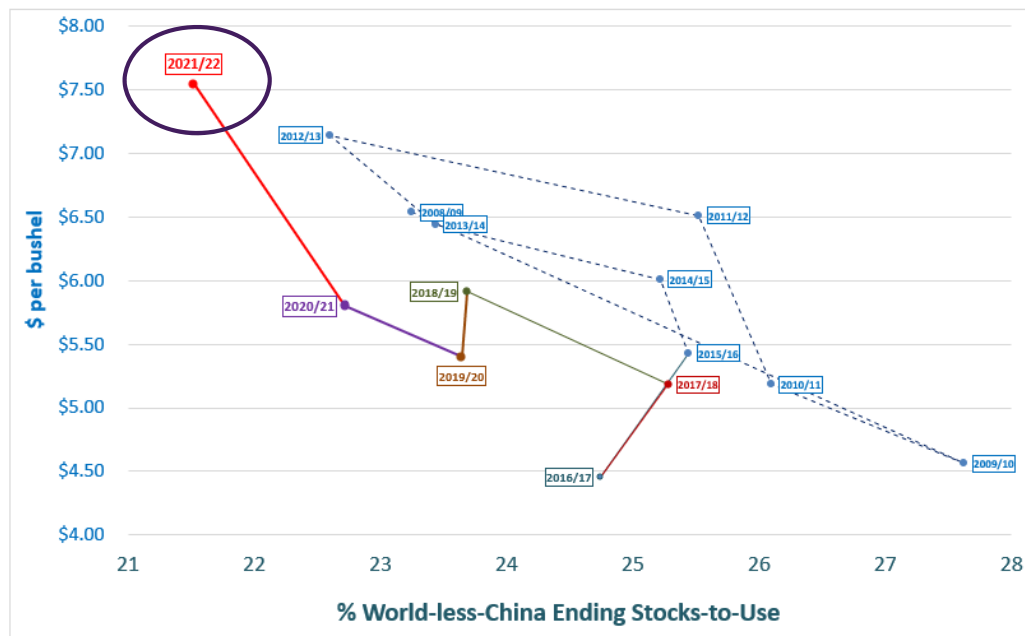


U.S. Wheat Price vs “World-Less-China” % Stocks-to-Use: MY 2008/09 through “New Crop” MY 2020/21 as of the August 12, 2021 USDA WASDE report



U.S. Wheat Price (Adj. by Trade Weighted U.S. Dollar) vs “World-Less-China” % Stocks-to-Use:

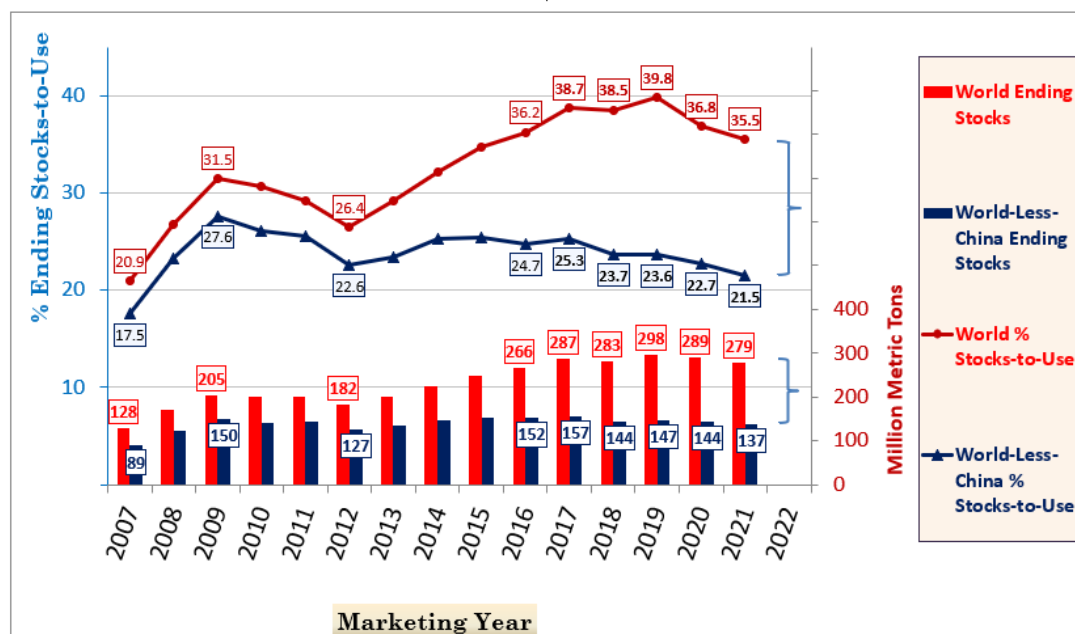
MY 2008/09 through “New Crop” MY 2020/21 as of the August 12, 2021 USDA WASDE report



45

World vs “World-Less-China” Ending Stocks & % Stocks-to-Use: MY 2007/08 through “New Crop”

MY 2021/22 as of the August 12, 2021 USDA WASDE report



46

Concluding Thoughts

47



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Wheat Market Trends in 2021-2022

- ▶ What economic responses have been set in motion by recent wheat market events? *Do high grain prices “cure” high prices?*
 - High prices for U.S. & World wheat are likely to encourage **wheat acreage increases**
 - *HOWEVER – high prices for corn, grain sorghum, soybeans & other crops will compete against wheat acres in 2021-2022*
 - Soil moisture in the U.S. central & southern plains during Fall 2021 will be key for fall seeding (along with wheat market prospects at that time).
 - How will wheat producers respond in Major exporting countries?



Andrew Wavemaker Chambers
"Grain Elevators & Feed Mills" on Facebook
Deerfield, Kansas
August 2019



KSNT TV
Tribune, Kansas
August 2019



Questions?

Daniel O'Brien – Extension Ag Economist

Blog: www.ksugrains.wordpress.com

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