

2024 CROP MARKETS AND WEATHER OUTLOOK

March 29 | 1-2 p.m. CST



Ben Brown
University of Missouri



Zachary Leasor
Missouri Climatology Office

fapri.missouri.edu/aglenderseminars-webinars/

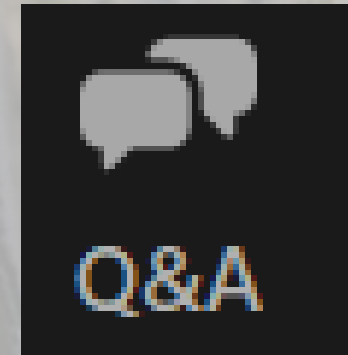


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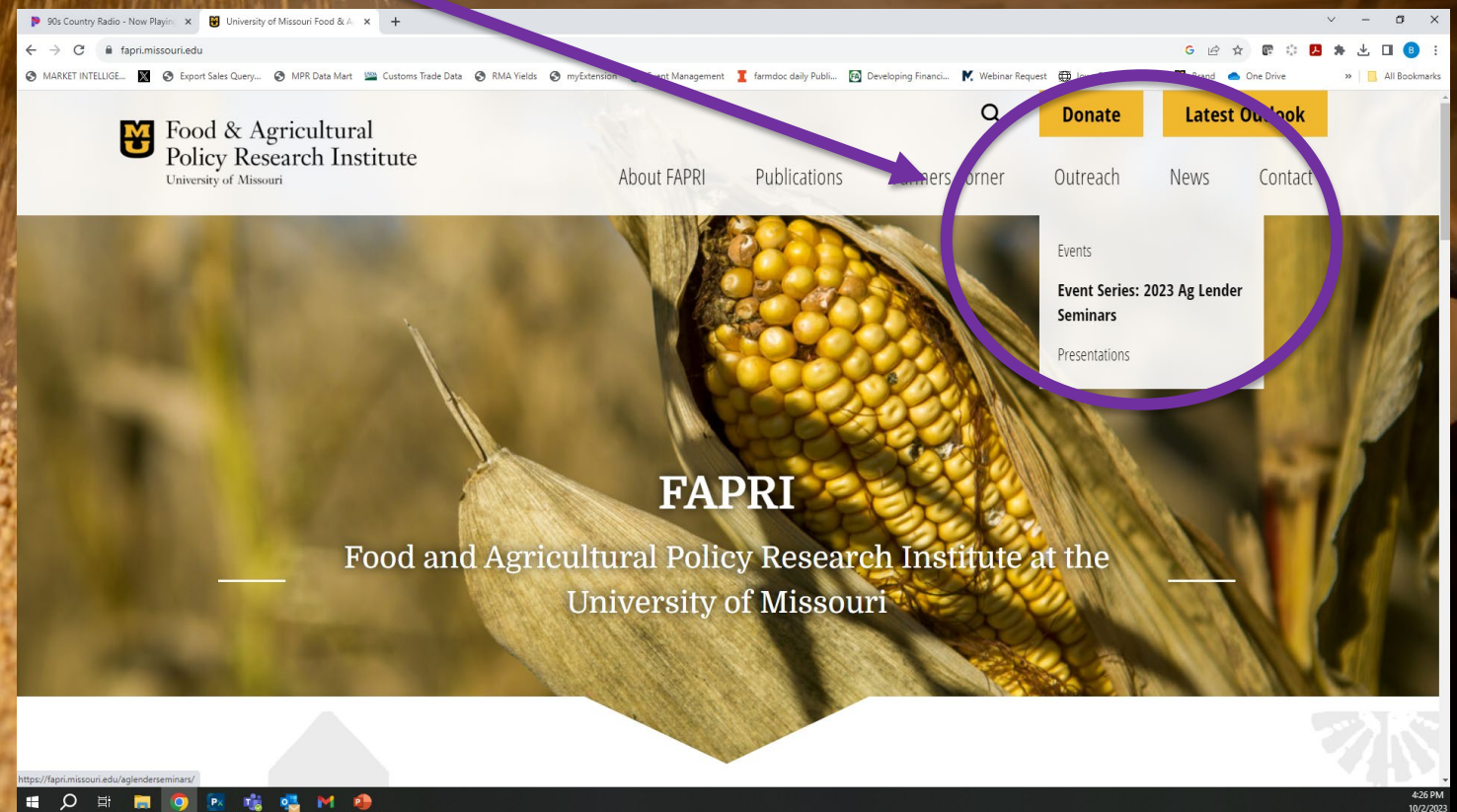
Questions??

- ❖ Feel free to submit questions at any time using the Q/A chat feature at the bottom of your screen.
- ❖ You can also email questions to Ben at bpbrown@missouri.edu
- ❖ We will try to answer as many questions as we can at the end. A full list of questions with responses will be available at fapri.missouri.edu under “events”.



Slides for today's presentations can be found at:

FAPRI.missouri.edu -> Outreach -> Event Series: 2023 Ag Lender

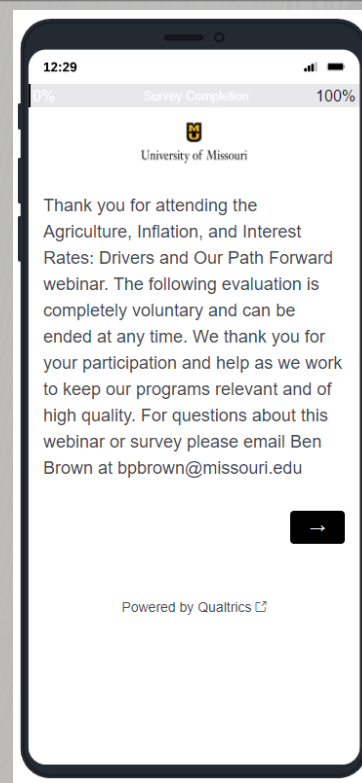


The screenshot shows the FAPRI website interface. The header includes the FAPRI logo and navigation links: About FAPRI, Publications, Farmers Corner, Outreach, News, and Contact. A purple arrow points from the text above to the 'Outreach' link. A dropdown menu is open under 'Outreach', listing 'Events', 'Event Series: 2023 Ag Lender Seminars', and 'Presentations'. The main content area features a large image of corn with the text 'FAPRI Food and Agricultural Policy Research Institute at the University of Missouri'. The browser's address bar shows 'https://fapri.missouri.edu/aglenderseminars/'.

Evaluations

Please help us continue to offer high quality programs by completing our evaluation upon completion of the webinar.

- ❖ The internet-based evaluation will start when you exit the zoom.
- ❖ Takes roughly 3 minutes
- ❖ Responses will be completely private



The evaluation is designed to capture how effective our program was at meeting key objectives.

1. Provide an update on market fundamentals for corn, soybeans and wheat.
2. Overview price markets for 2024.
3. Provide an outlook on planting and summer growing season weather conditions.



2024 AG LENDERS WEBINARS

United States and Agricultural Trade Outlook

January 24 | 10-11 a.m. CST

2024 Federal Commodity Program Update

February 7 | 1-2 p.m. CST

2024 Crop Insurance Decisions

February 28 | 11 a.m.-12 p.m. CST

2024 Crop Enterprise Budget Update

March 19 | 11 a.m.-12 p.m. CST

2024 Crop Markets and Weather Outlook

March 29 | 1-2 p.m. CST

Register for free:

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April 3 | 8-3:30 | Columbia

Hear the latest agricultural outlook and panel discussions on agricultural policy,
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Outlook for 2024 Crop Markets and Weather



Zachary Leasor
University of Missouri



Extension
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Outlook for 2024 Crop Markets and Weather



Ben Brown
University of Missouri



Extension
University of Missouri



2024 Crop Outlooks

Crop Outlook: Report Day March 28, 2024

March 1 Stocks (in billions of bushels)				
	USDA Mar. 1 2024	Average Trade Estimate	Estimate Range	USDA March 1, 2023
Corn	8.347	8.427	8.129-8.568	7.396
Soybeans	1.845	1.828	1.740-1.986	1.687
Wheat	1.087	1.044	0.997-1.080	0.941

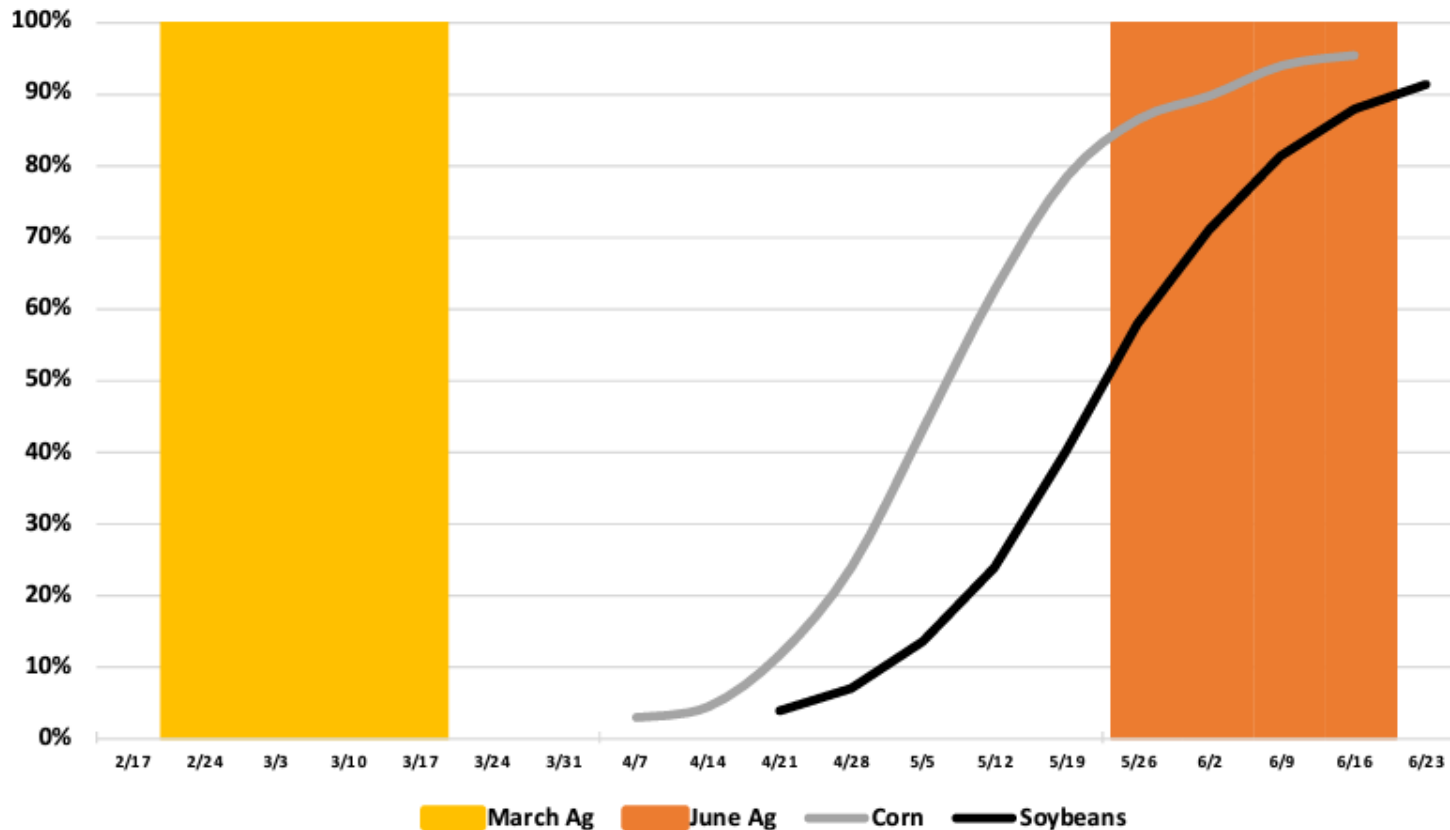
- ❖ Corn Stocks: Up 951 million bushels from last year, down 80 million from trade estimate.
- ❖ Soybean Stocks: Up 158 million bushels from last year, up 17 million bushels from trade estimate.
- ❖ All Wheat Stocks: UP 146 million bushels from last year, up 43 million bushels from trade estimate.



Crop Outlook: Report Day March 28, 2024



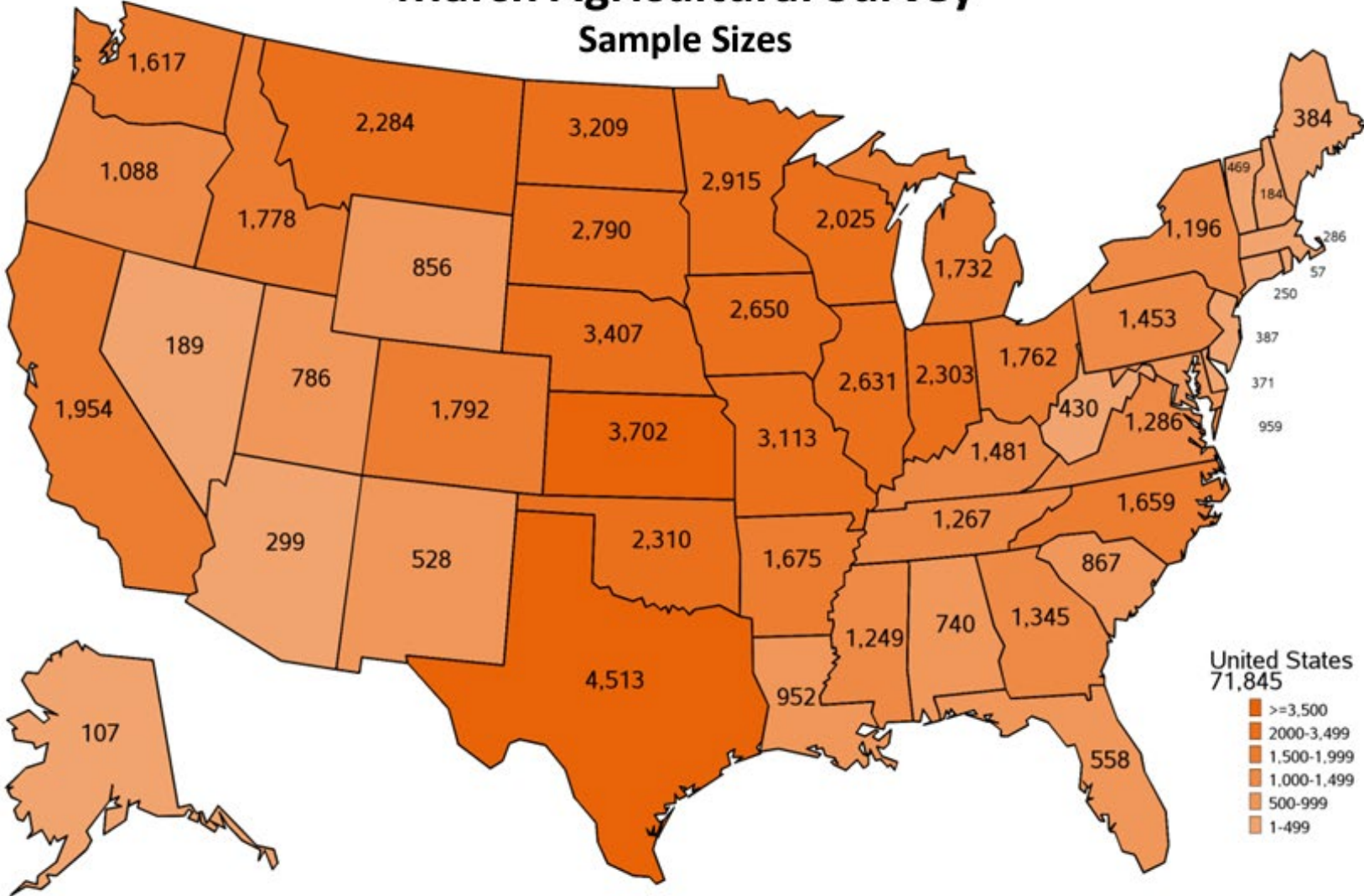
Survey Timing vs. Planting Progress Corn & Soybeans



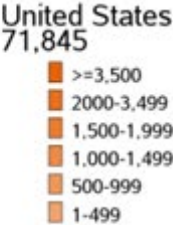
- ❖ Historically, the March planting intentions report has been a good indicator of final planted acres.
- ❖ It is the first part of the bid/ask negotiations of the market and farmers.
- ❖ While prices and relative profitability get all the headlines- weather has the biggest say in final acreage numbers.

Crop Outlook: Report Day March 28, 2024

March Agricultural Survey Sample Sizes



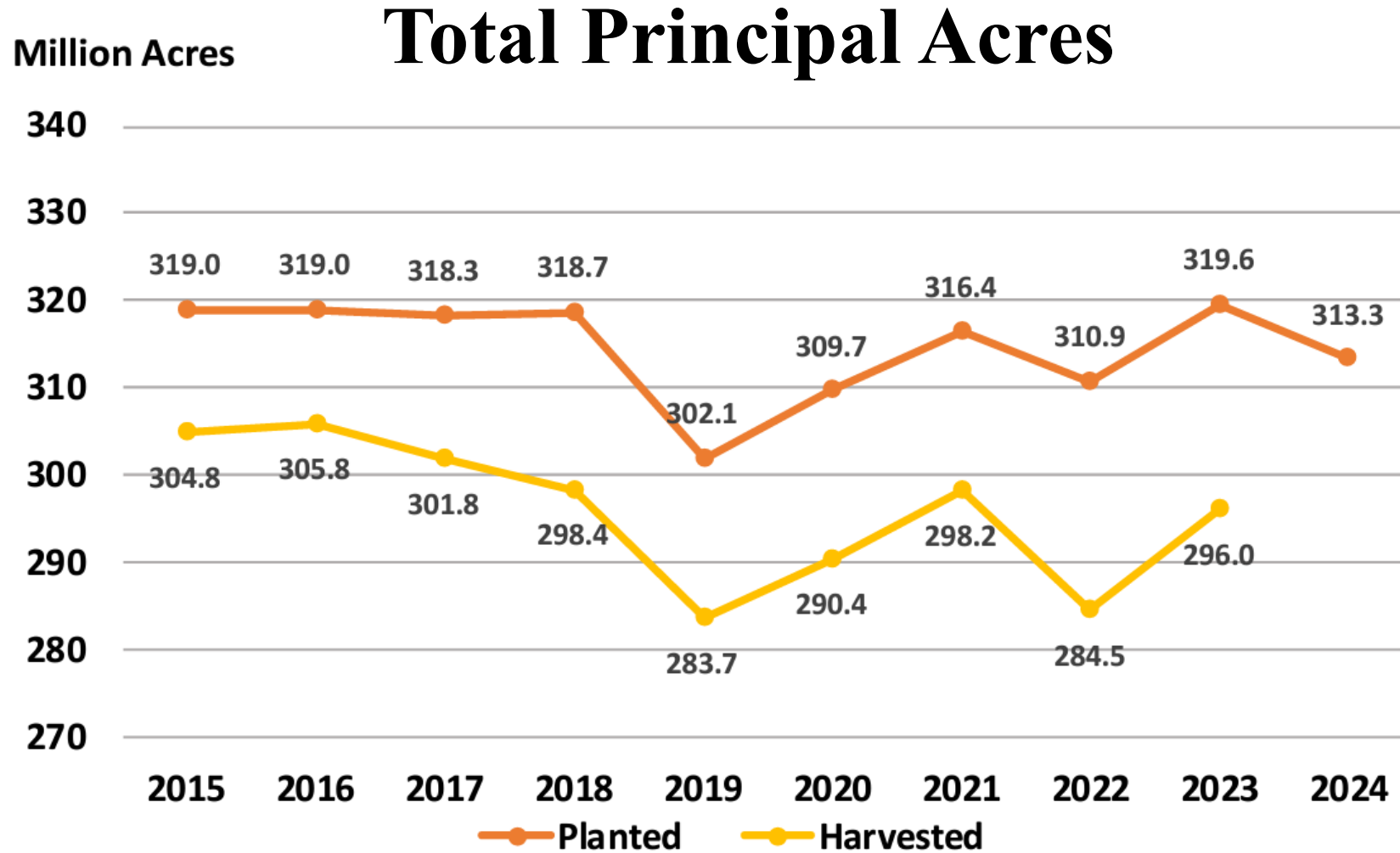
Total
Surveys-
71,845
producers



Crop Outlook: Report Day March 28, 2024

USDA 2024 Prospective Plantings (million acres)				
	USDA Mar. 2024	Average Trade Estimate	Estimate Range	USDA Ag Forum
Corn	90.036	91.776	90.000-93.472	91.00
Soybeans	86.510	86.530	85.350-88.00	87.500
All Wheat	47.498	47.330	46.200-49.982	47.000
Winter Wheat	34.135	34.870	34.000-38.370	34.425
Other Spring	11.335	10.891	10.100-11.320	
Durum	2.028	1.652	1.133-1.800	

Crop Outlook: Report Day March 28, 2024



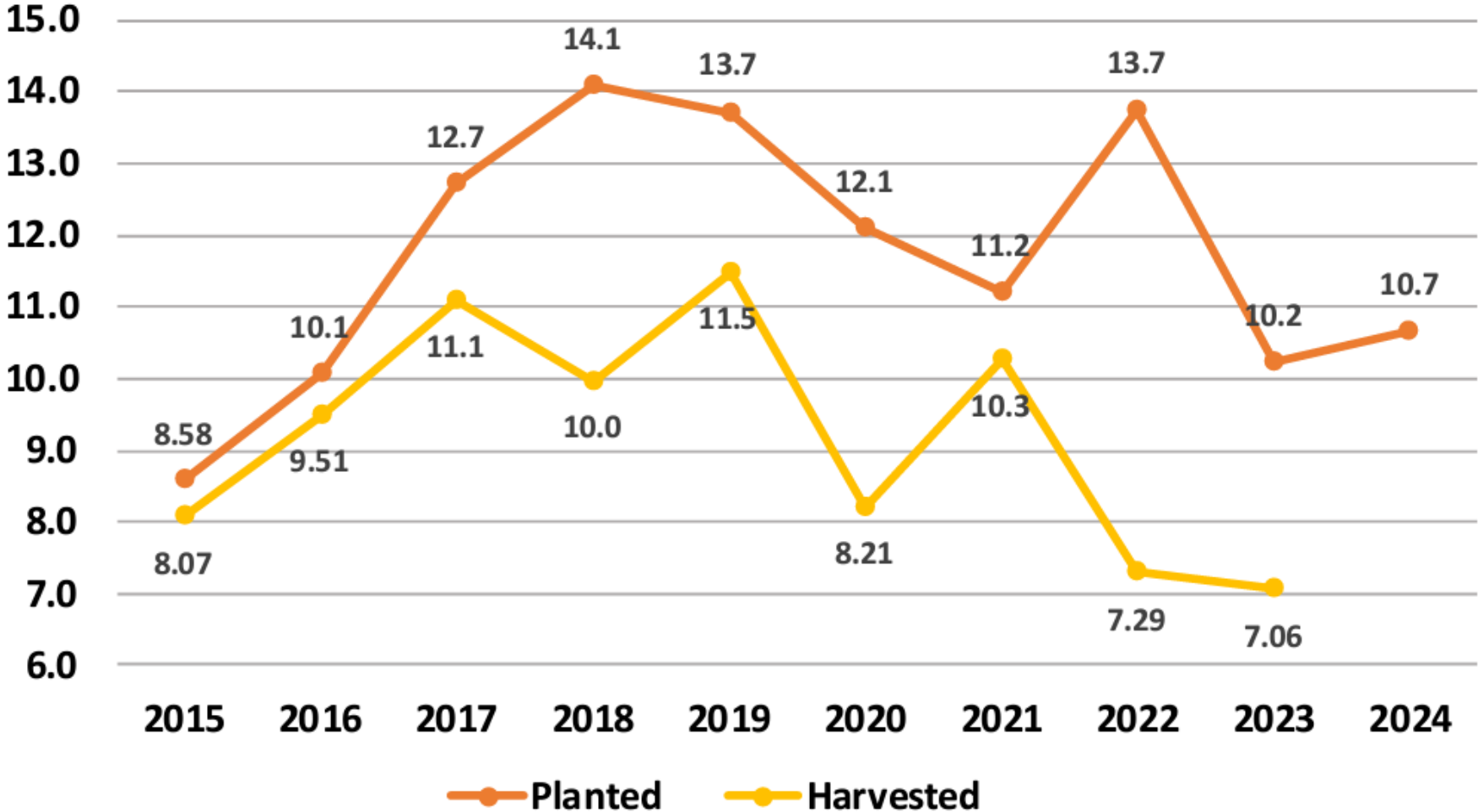
Producers must have listened to the last MU Extension Ag Outlook Webinar on Crop Budgets & Profitability and got the message to decrease acreage.

Principal Acreage includes corn, sorghum, oats, barley, rye, winter wheat, Durum wheat, other spring wheat, rice, soybeans, peanuts, sunflower, cotton, dry edible beans, chickpeas, potatoes, millet, canola, tobacco, sugarcane, rye, and hay.

Crop Outlook: Report Day March 28, 2024

Total Cotton Planted and Harvested Acres

Million Acres



Drought in the southern plains of Oklahoma and Texas the last couple years has had a huge impact on harvested acres relative to planting.

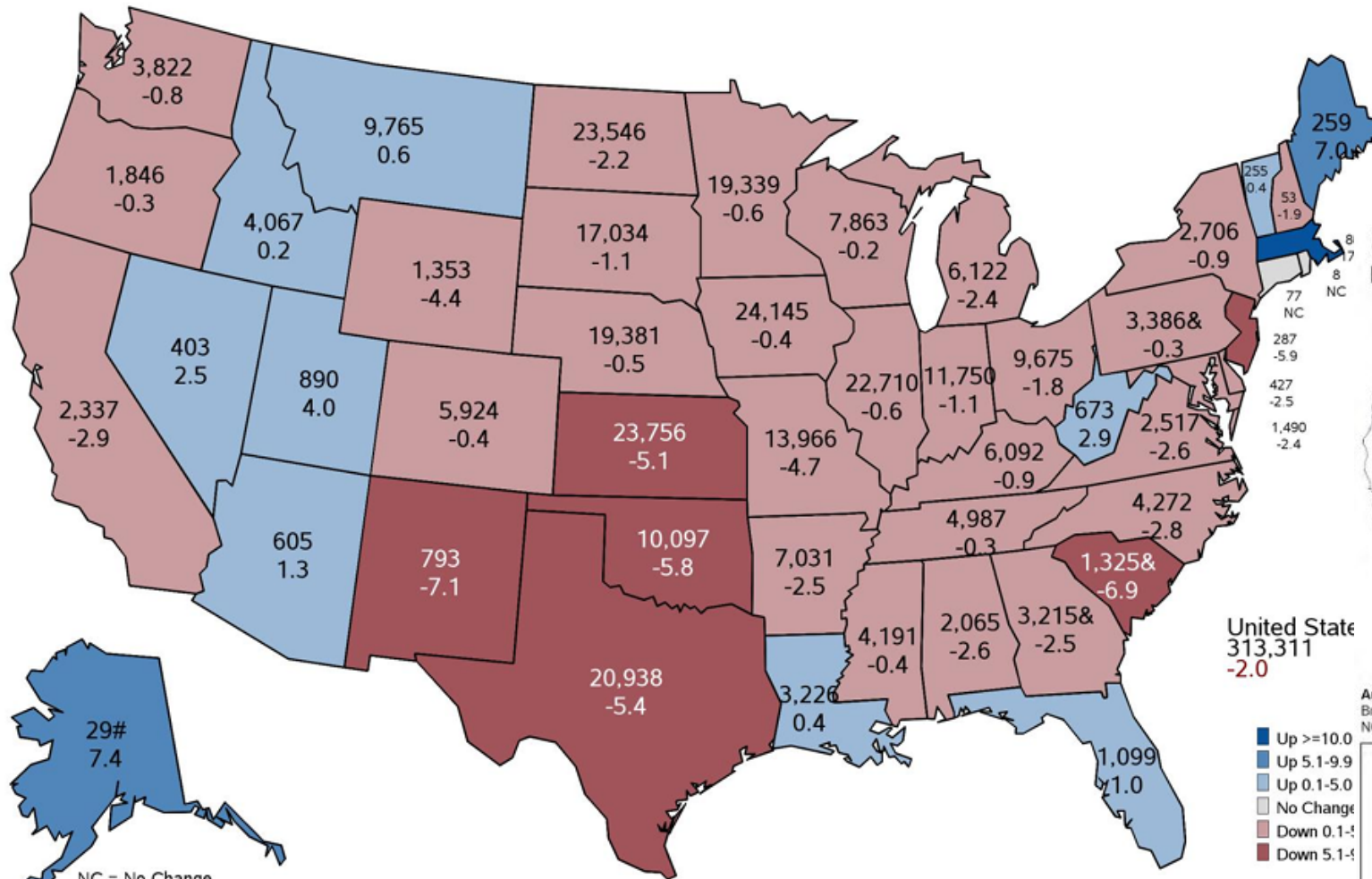
Our expectation is for a more normal difference between planted and harvested.

Crop Outlook: Report Day March 28, 2024

2024 Principal Crops Planted

Thousand Acres and Percent Change from Previous Year

Principal crop acreage was down across the country, but especially in the southern plains where drought continues to be an issue.

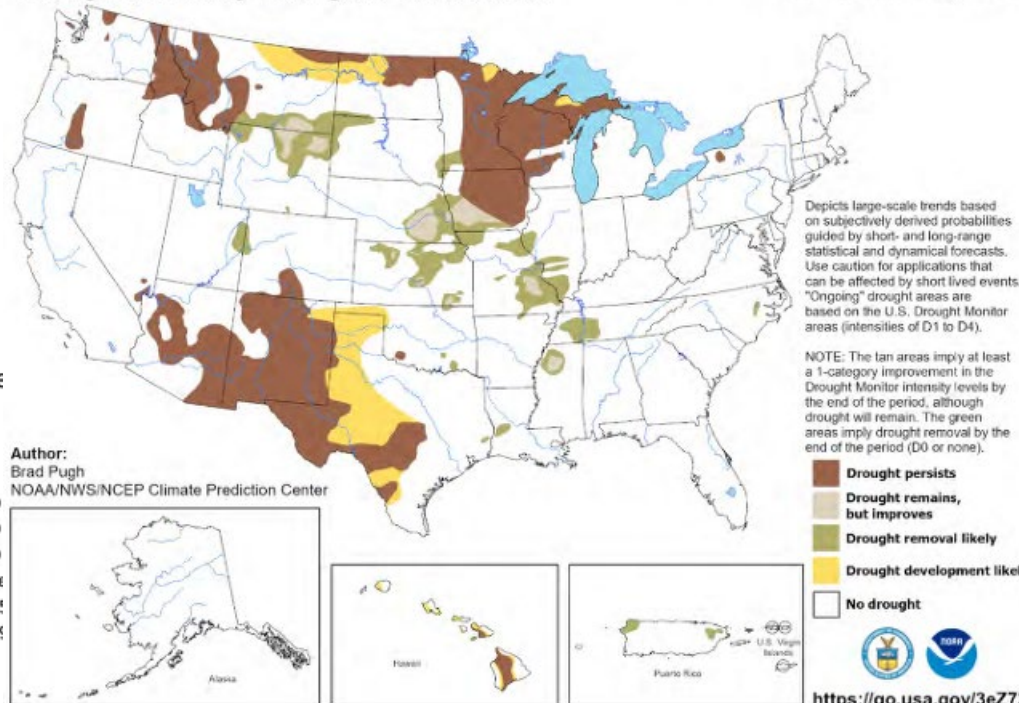


NC = No Change
= Record High
& = Record Low

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

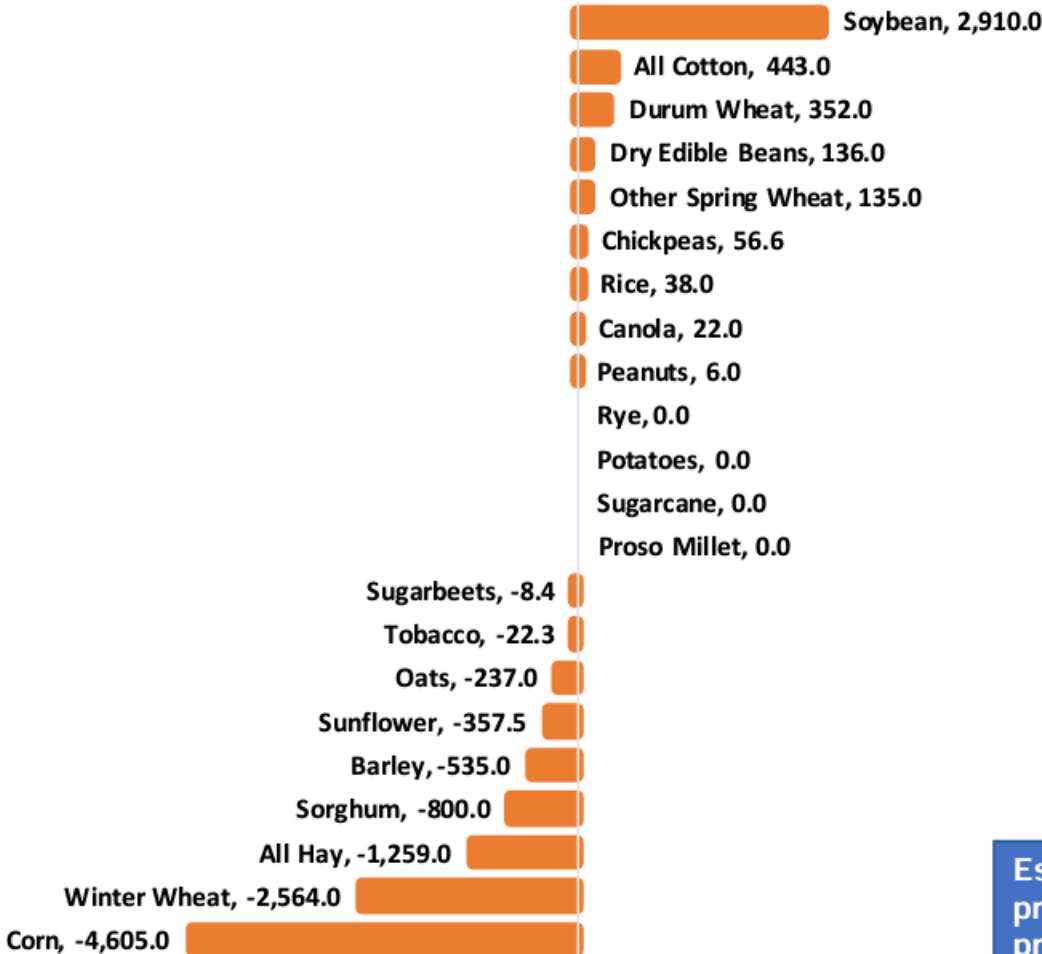
Valid for March 21 - June 30, 2024
Released March 21, 2024



Crop Outlook: Report Day March 28, 2024



2024 Principal Crops Planted Acreage Change (000) from 2023



Harvested acres for hay, sugarcane, and tobacco.

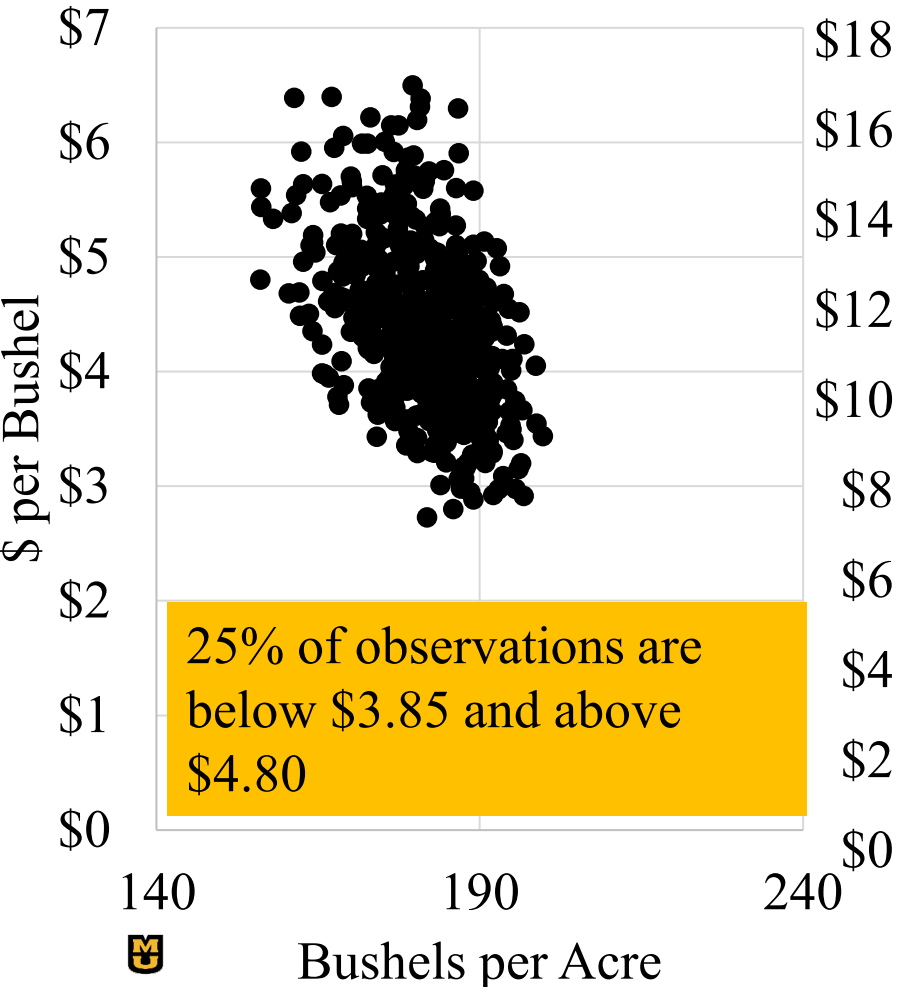
Estimates carried forward from previous year for potatoes, proso millet, rye, and sugarcane.

Crop Outlook: Price Prospects

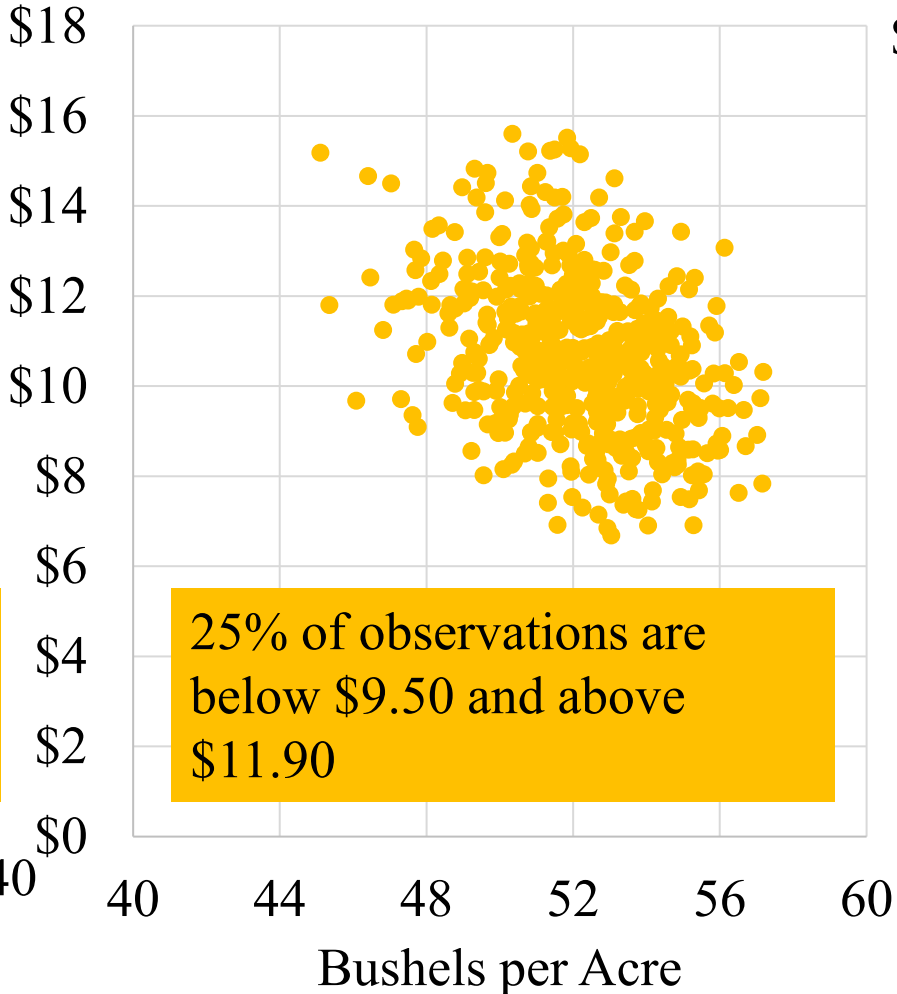
	2018-2022 average	2018	2019	2020	2021	2022	2023	2024	Percent Change
Corn (\$/Bu.)	4.85	3.61	3.56	4.53	6	6.54	4.78	4.38	-8%
All Rice (\$ cwt)	15.18	12.6	13.6	14.4	16.1	19.2	18.09	15.19	-16%
Sorghum (\$/bu.)	4.70	3.26	3.34	5.04	5.94	5.94	4.83	4.00	-17%
Soybeans (\$/bu.)	11.07	8.48	8.57	10.8	13.3	14.2	12.68	10.69	-16%
Upland Cotton (\$/lb)	0.74	0.7	0.6	0.66	0.91	0.85	0.76	0.68	-11%
Wheat (\$/bu.)	6.25	5.16	4.58	5.05	7.63	8.83	7.19	6.11	-15%
Barley (\$/bu.)	5.35	4.62	4.69	4.75	5.31	7.4	7.44	6.25	-16%
Oats (\$/bu.)	3.47	2.66	2.82	2.77	4.55	4.57	3.69	3.44	-7%

Crop Outlook: Price Prospects

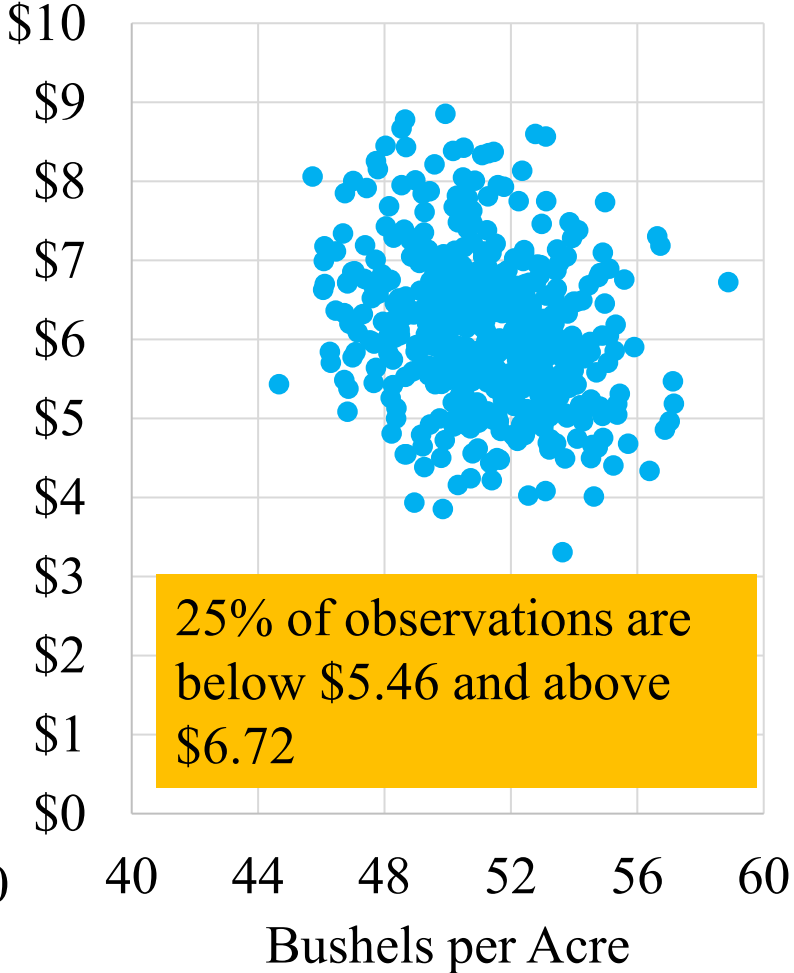
2024 Corn Price Outcomes



2024 Soybean Price Outcomes



2024 Wheat Price Prospects



Crop Outlook: Price Prospects

Corn yield and farm price, 2024/25

Yield range	Average yield	Average price	Price range
	(Bushels per acre)		(Dollars per bushel)
154 - 162	158.9	5.42	4.61 - 6.52
162 - 170	166.6	4.86	3.68 - 6.60
170 - 178	174.7	4.73	3.38 - 6.32
178 - 186	182.1	4.38	2.65 - 6.52
186 - 194	189.0	4.04	2.83 - 6.40
194 - 202	195.9	3.69	2.84 - 4.63

Soybean yield and farm price, 2024/25

Yield range	Average yield	Average price	Price range
	(Bushels per acre)		(Dollars per bushel)
45-47	46.0	12.51	9.62 - 15.30
47 - 49	48.1	11.79	9.07 - 14.64
49 - 51	50.2	11.36	8.01 - 15.61
51 - 53	52.1	10.79	6.81 - 15.61
53 - 55	53.9	10.20	6.67 - 14.71
55 - 58	55.8	9.53	6.87 - 13.21

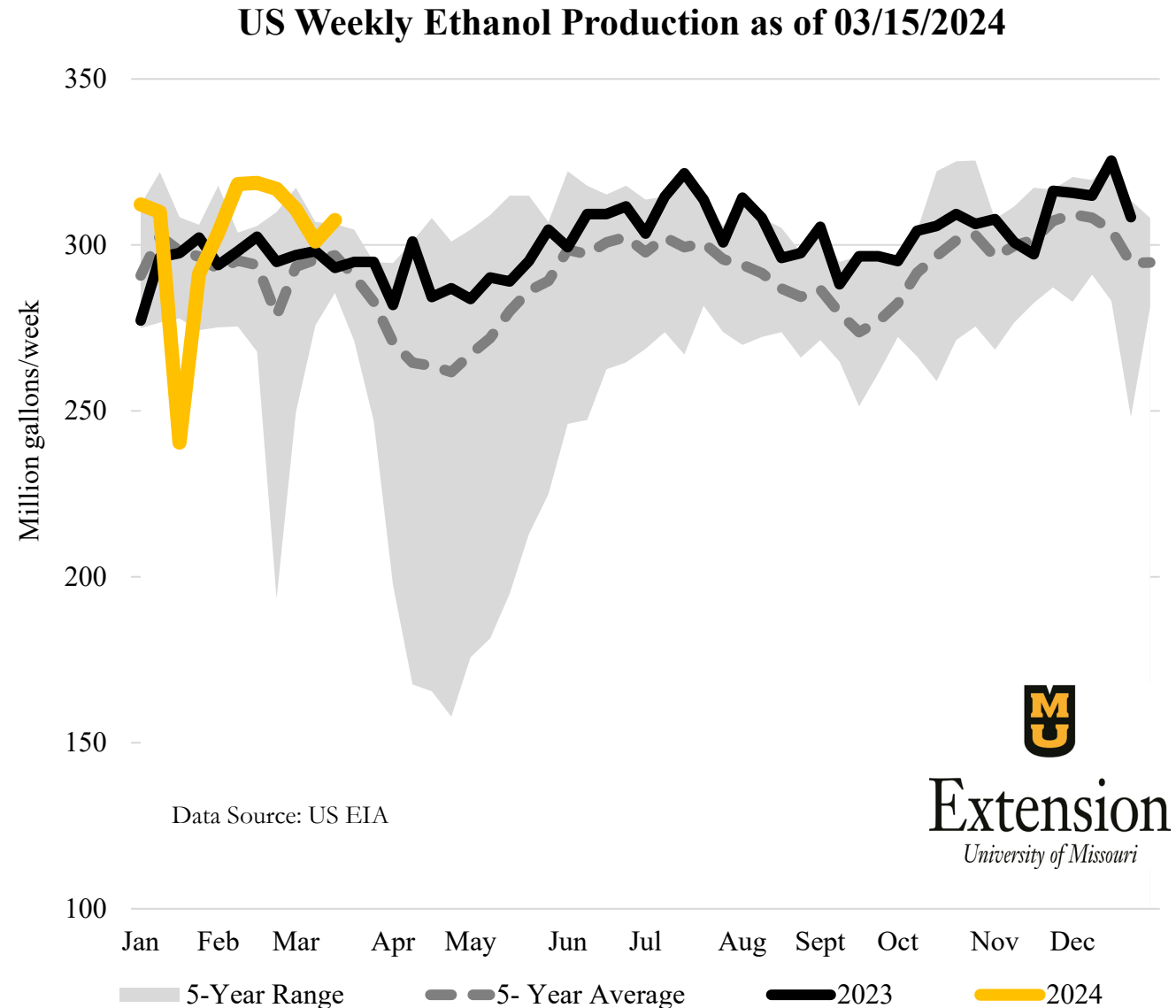


Corn Outlook



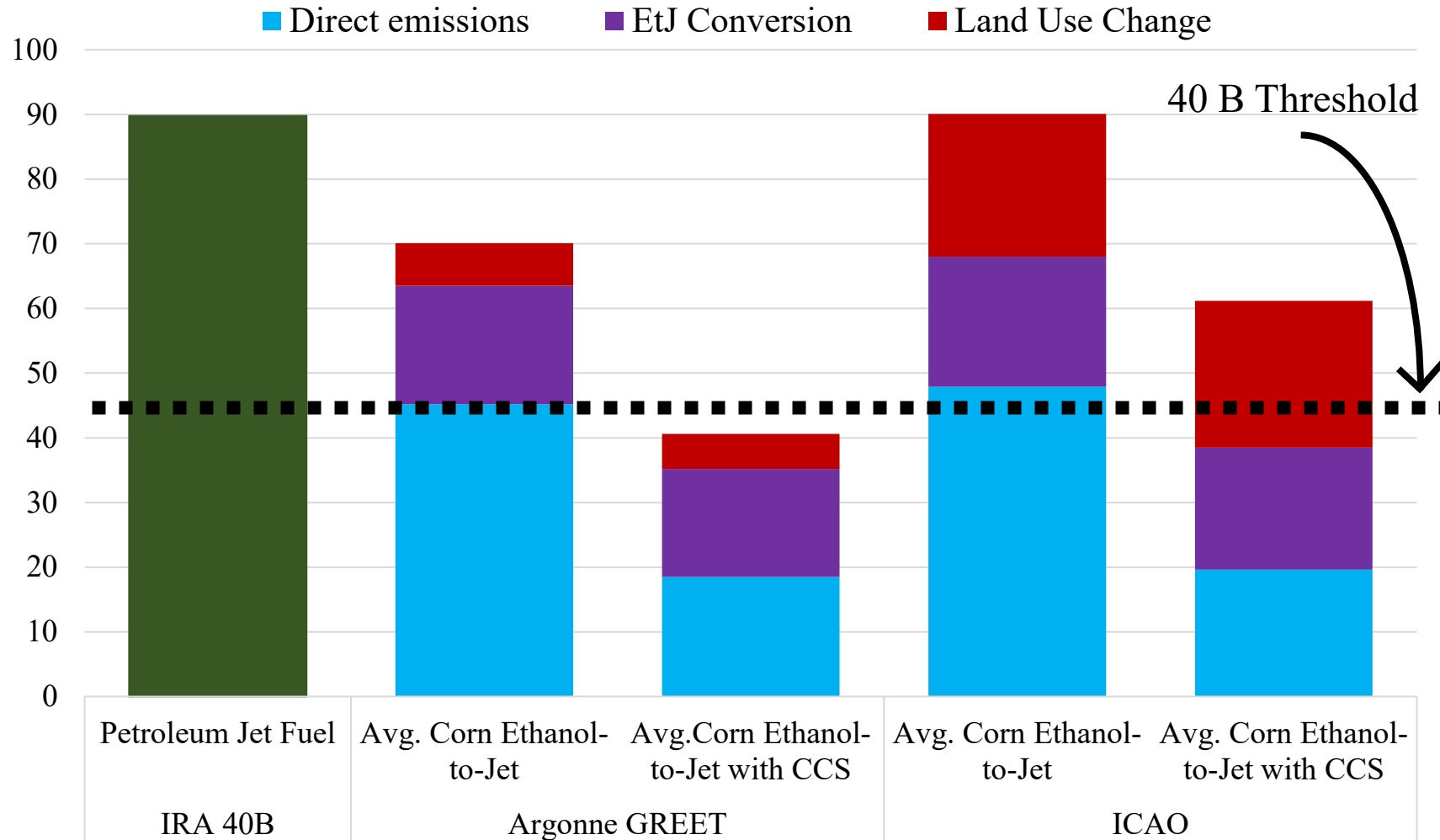
Corn Demand: Domestic gasoline and ethanol use

- ❑ Since 2010, almost all gasoline sold in U.S. is a 10% ethanol blend
- ❑ Gasoline use dropped in 2020 with pandemic, only partially recovered
- ❑ Could slide in the future with adoption of electric vehicles
- ❑ Thus, will require some higher-level blends just to hold current ethanol use levels



Corn Outlook: Where the Rubber Meets the Road

GREET Vs. ICAO: Why it Matters

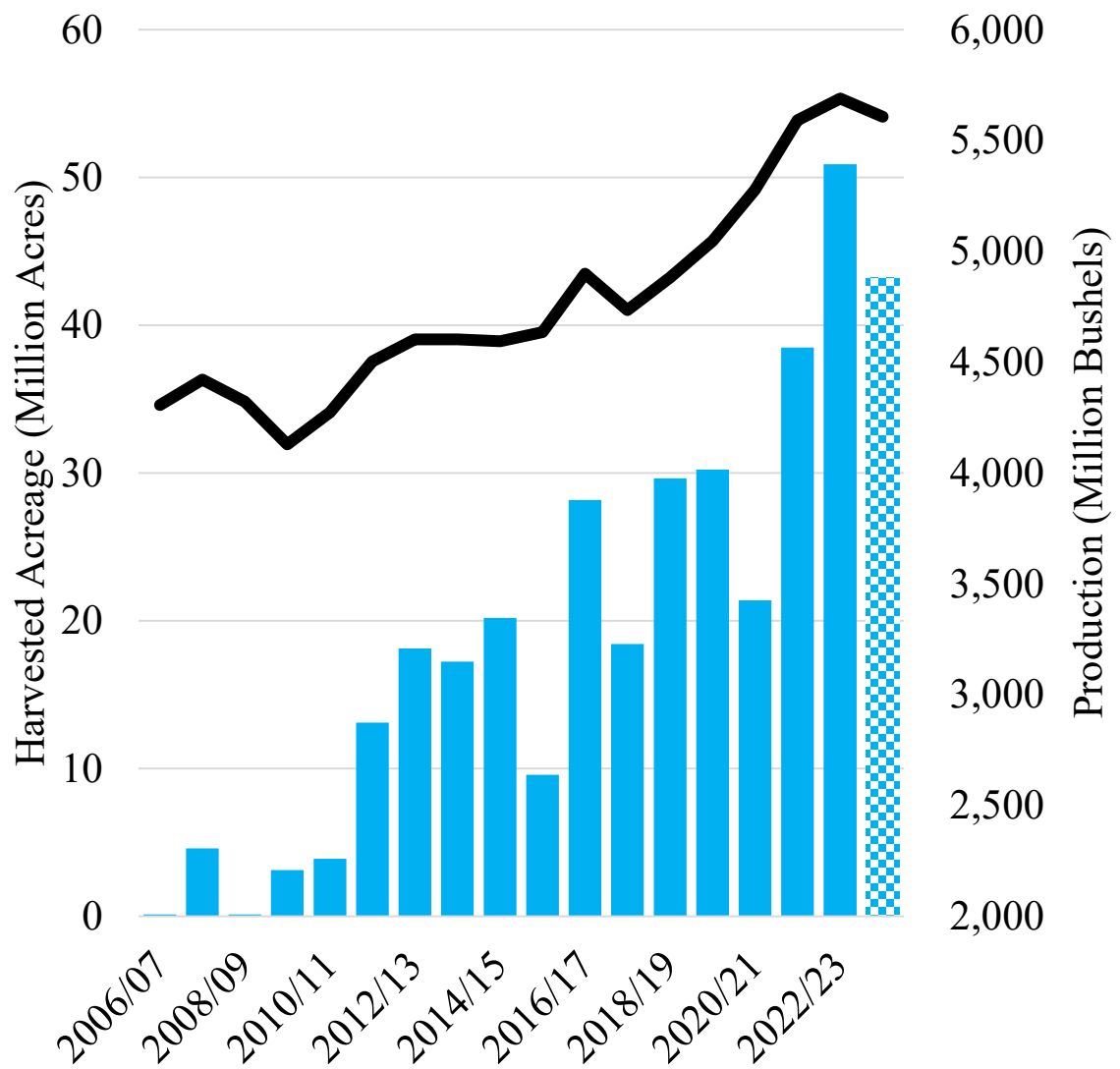


Questions:

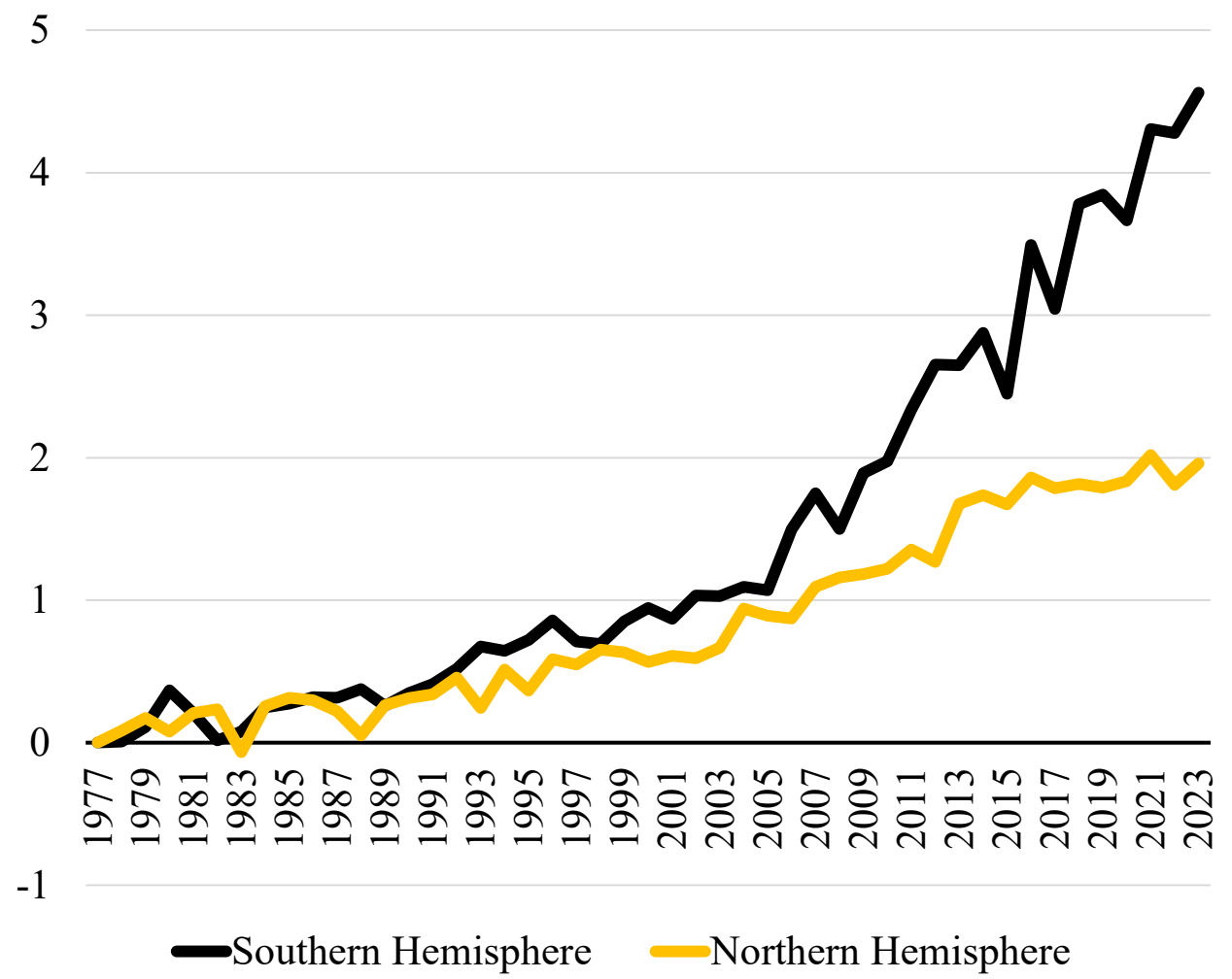
- How will IRA tax credits (40B, 45Z) be implemented?
- Will we see continued push for reductions in tailpipe emissions and state EV mandates?
- Will CCUS projects get final approval and move forward?
- What happens with presidential election?

Corn Outlook: South America Production Growth

Brazil Corn Acreage and Production

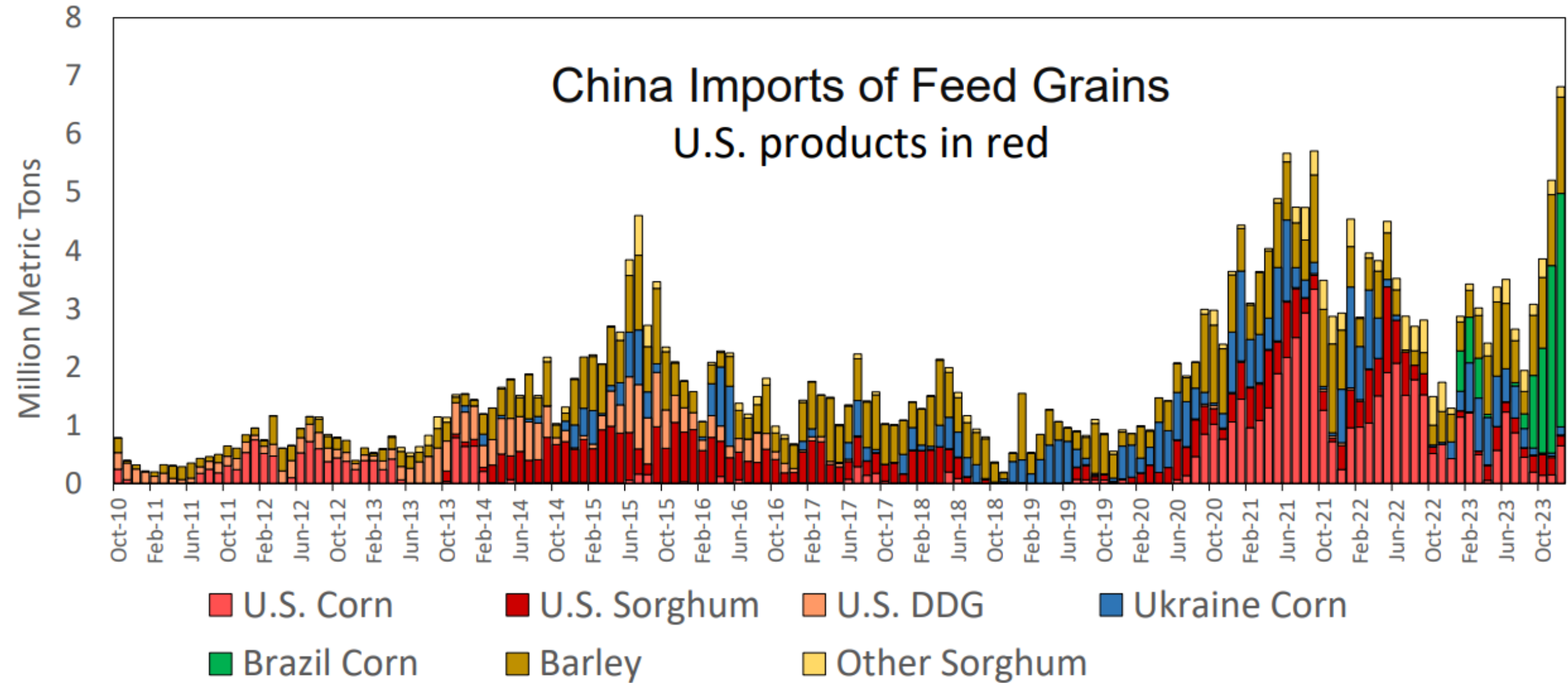


Global Corn Production Index by Hemisphere



Data Source: USDA-FAS

Corn Outlook: China lifts restrictions on Brazil Corn

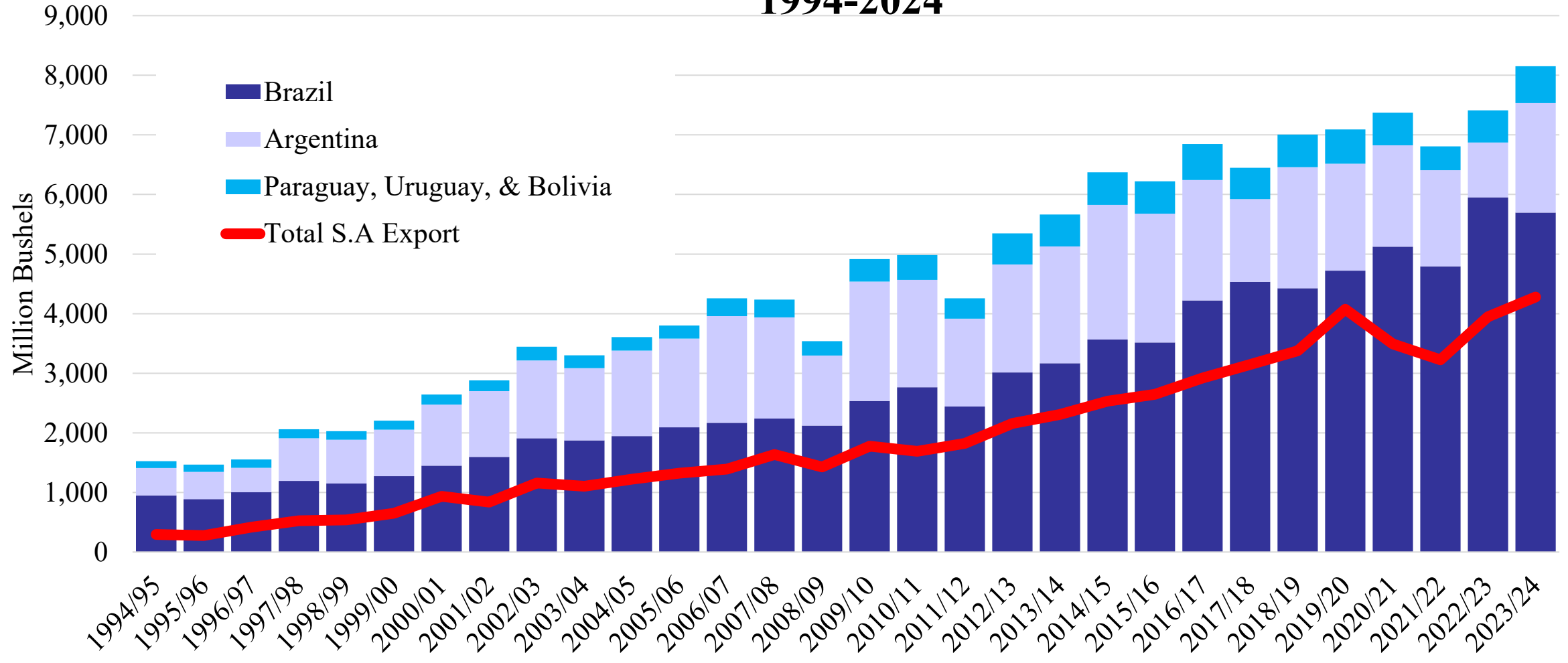


2024 Soybean Outlook



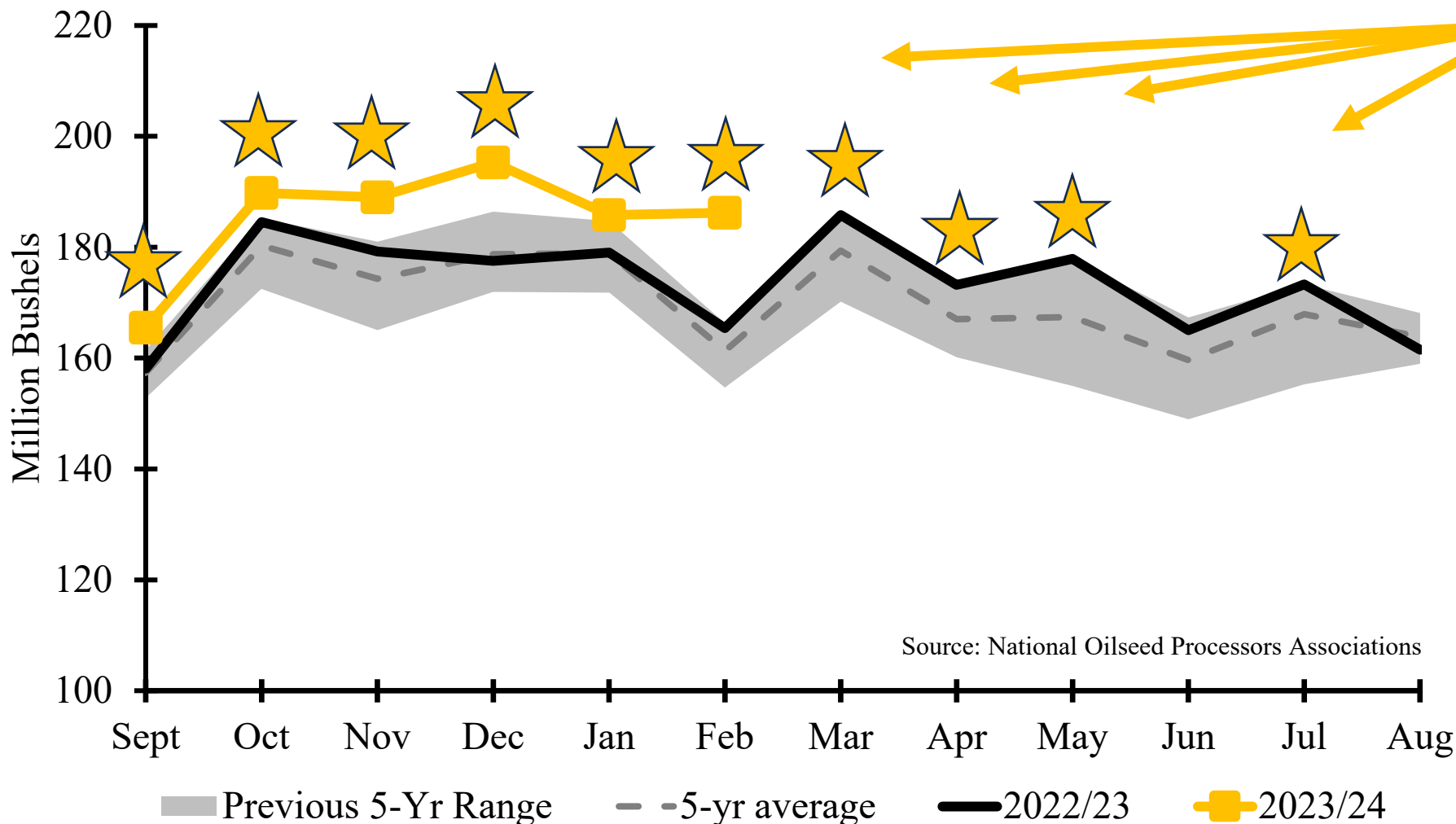
Soybean Outlook: South America Production

South America Soybean Production and Exports 1994-2024



Soybean Outlook: Growth in Crush

NOPA Soybean Monthly Crush – Through February



10 of the last 12 months have set new monthly soybean crush records.

- ❑ The expectation is 2023/24 will be a big soybean crush year.
- ❑ The demand for soybean oil has been extremely high this year as more and more gets used for renewable fuels.
- ❑ However, soybean crush might be starting to exceed soybean oil demand.

Soybean Outlook: Selling Opportunity

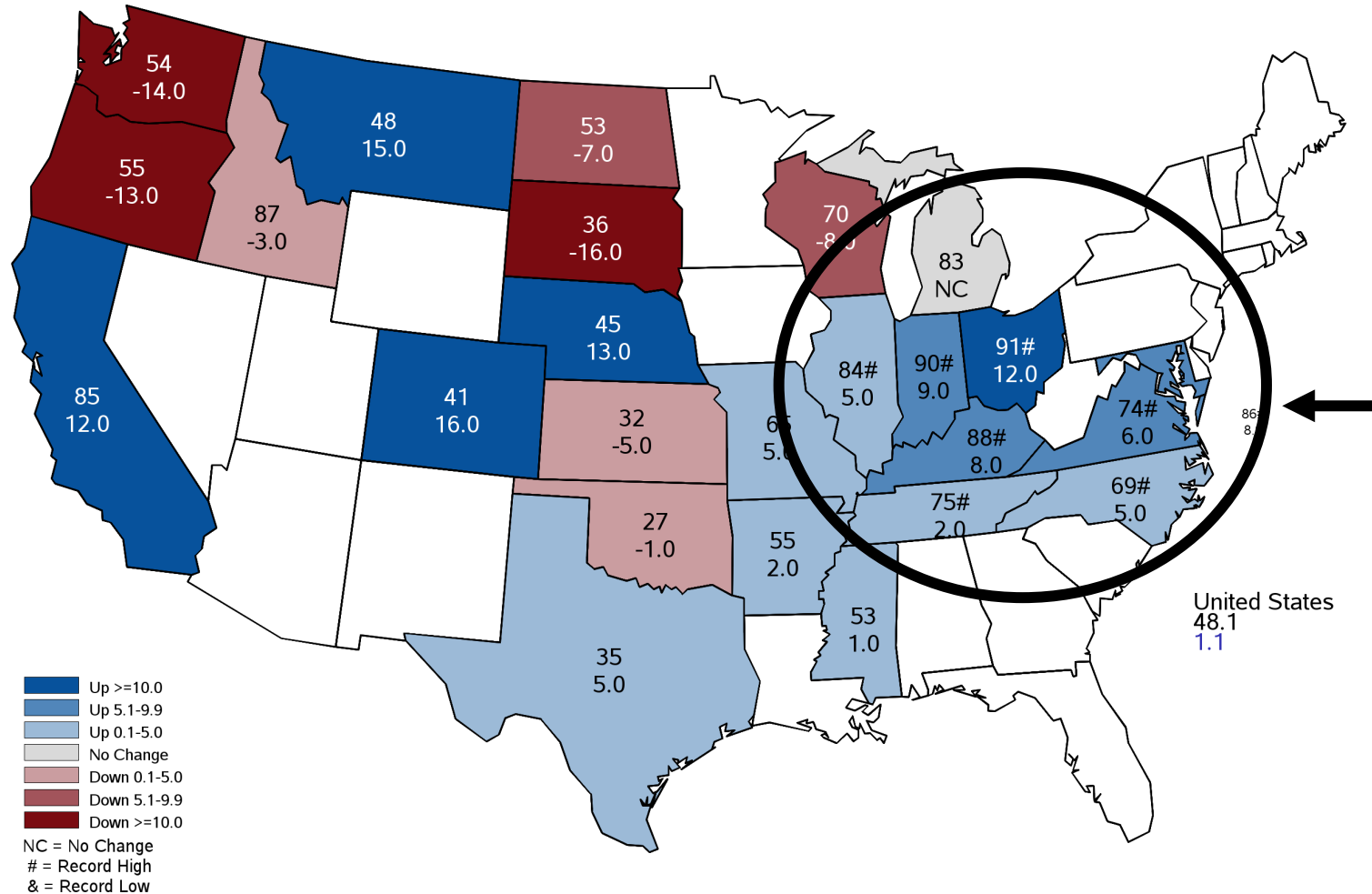




2024 SRW Wheat Outlook

US Wheat: The Many Stories of Wheat

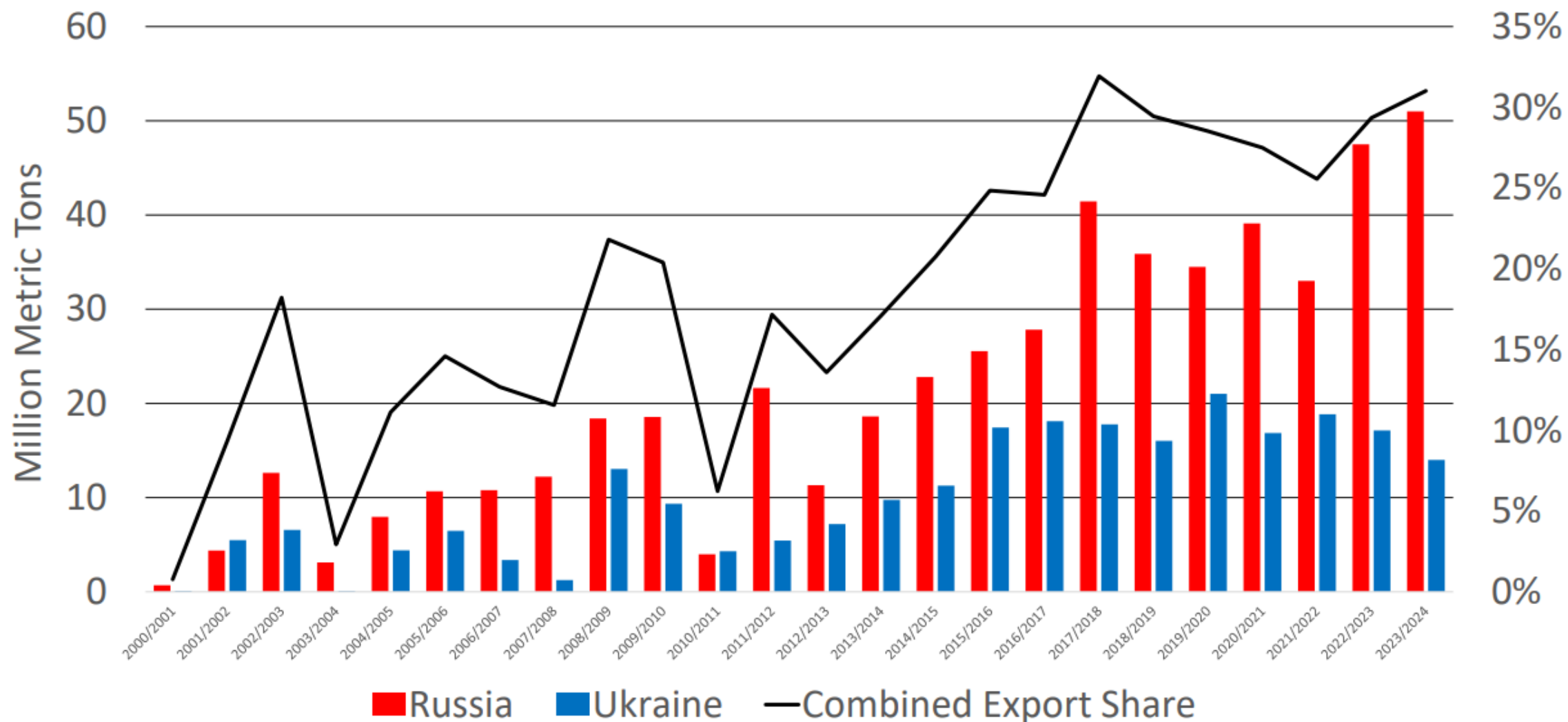
August 2023 Winter Wheat Yield Bushels and Change from Previous Year



The majority of the Soft Red Winter Wheat production region had just outstanding yields.

US Wheat: The Many Stories of Wheat

The Black Sea continues to dominate wheat trade

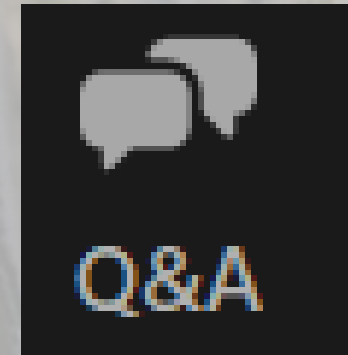


Crop Summary

- ❑ It might seem hard to believe- but the US produced a **RECORD** corn crop in 2023. What happens in 2024 if we have *average* weather?
- ❑ Total principal crop acreage fell 6.3 million acres in 2024 with corn and soybean combined acreage down 1.7 million acres year over year helps improve chances of profitability in 2024/25.
- ❑ Renewable diesel continues to build out. The process has largely followed the ethanol boom of the mid 2000s with setbacks from time to time, but the market is growing. States like Massachusetts and New York will be important states to watch.
- ❑ Outside adverse weather, prices are moderating back to equilibrium and putting pressure on operations to find cost savings on the input side.
- ❑ Coordination within the supply chain likely creates opportunities and challenges to come.

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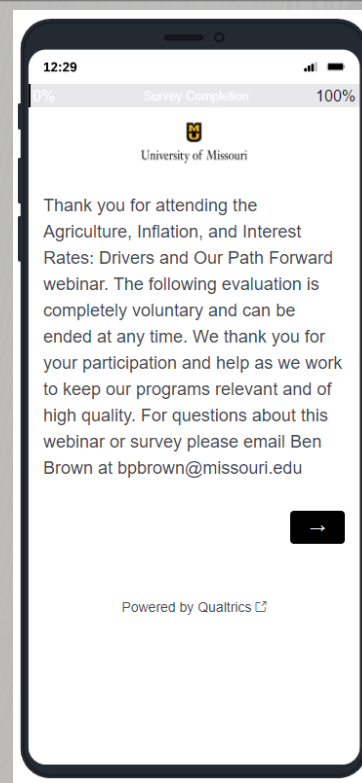
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Thank you!



University of Missouri

This program is possible due to the work of the presenters, the Food and Agricultural Policy Research Institute, the Rural and Farm Finance Policy Analysis Center, and MU Extension.

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