

CORN & SOYBEAN UPDATE

APRIL 12, 2022

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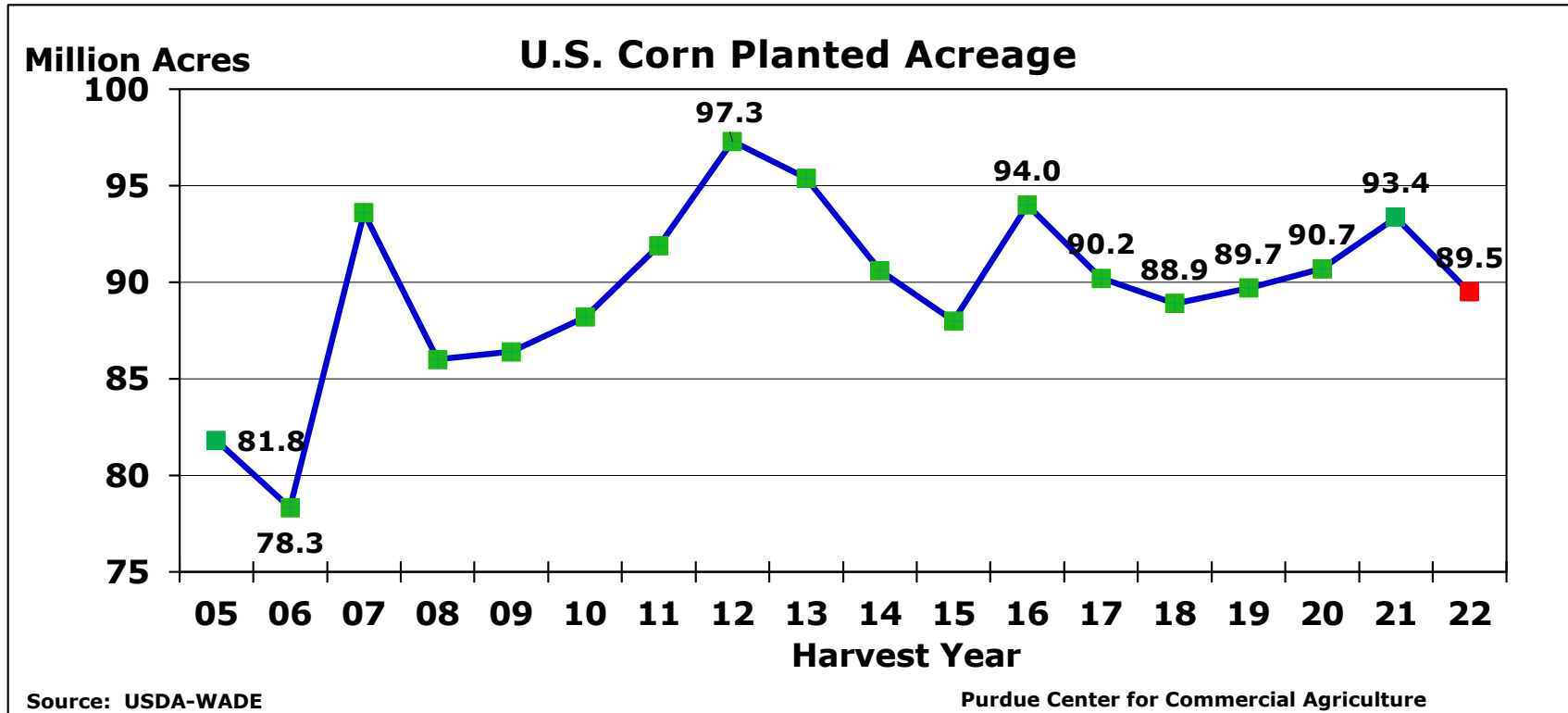


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Key Changes to Corn Balance Sheet in USDA's April WASDE

- ✓ **Reduced estimated feed usage 25 million bushels to 5.625 billion bushels**
- ✓ **Raised ethanol usage 25 m. bu. to 5.375 billion bu., up from 5.350 billion bu.**
- ✓ **No change in export forecast, held steady at 2.5 billion bu.**
- ✓ **No change in U.S. corn ending stocks estimate, still at 1.44 billion bushels**
- ✓ **But USDA did make some changes in the world corn trade matrix**
 - ✓ **Raised Brazil's corn exports to 44.5 million metric tons, up from 43 mmt (3.5% increase)**
 - ✓ **Reduced Ukraine's corn exports to 23 million metric tons, down from 27.5 mmt (21% decrease)**

Prospective Plantings report estimates corn plantings down 4 million acres



2022 U.S. CORN PLANTED ACREAGE

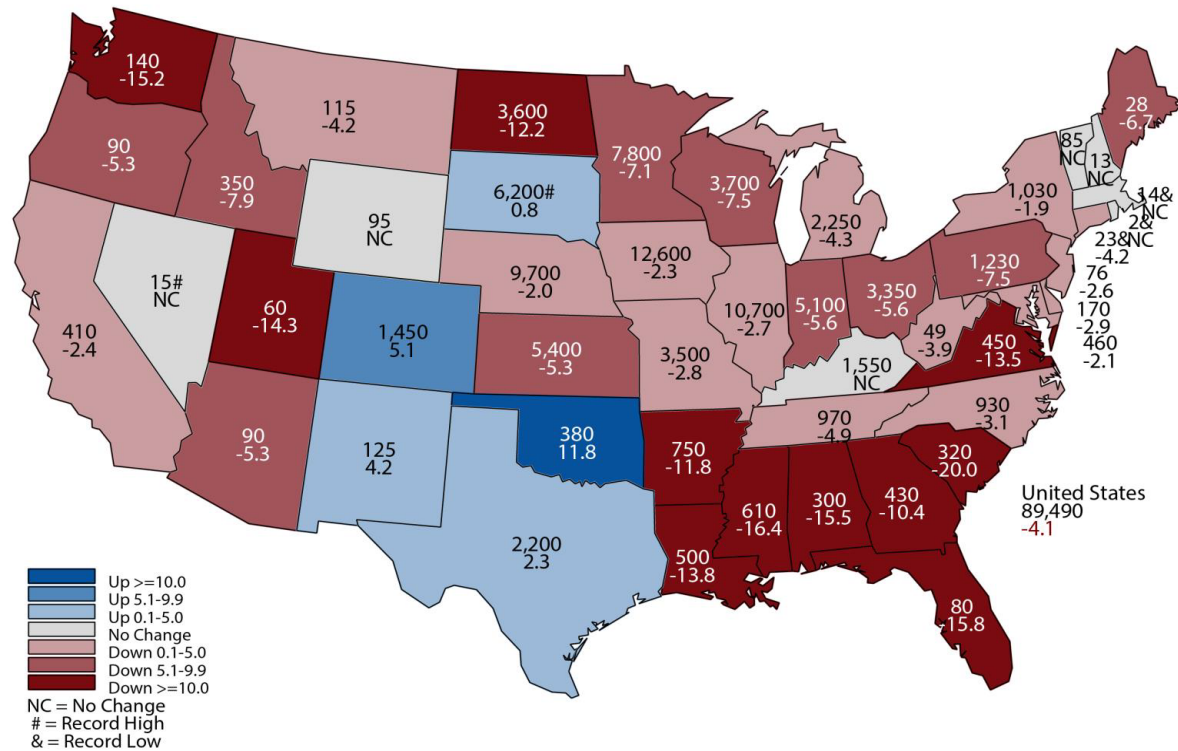
INDUSTRY EXPECTATIONS VS NASS



● Individual Industry Expectation ■ NASS Estimate

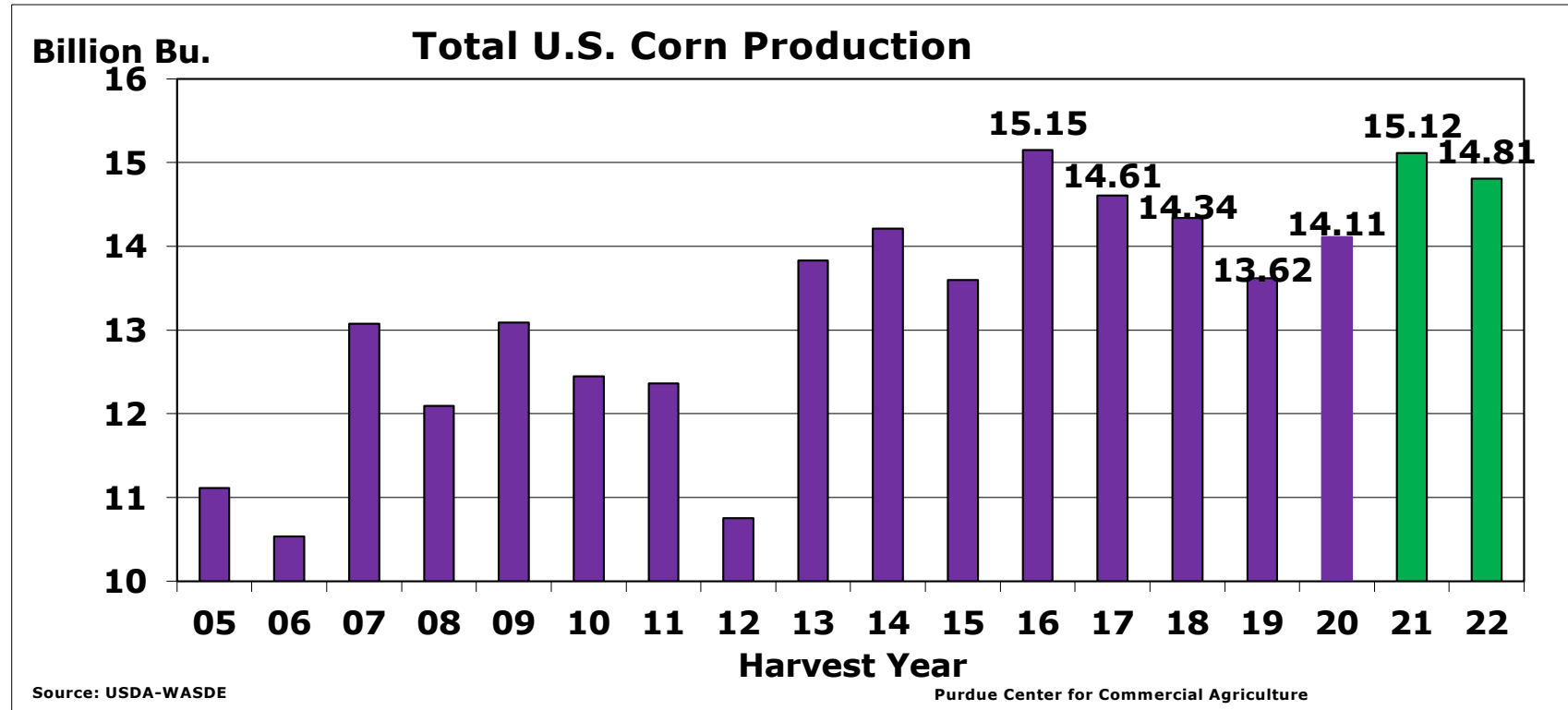
2022 CORN PLANTED ACREAGE

THOUSAND ACRES AND PERCENT CHANGE FROM PREVIOUS YEAR



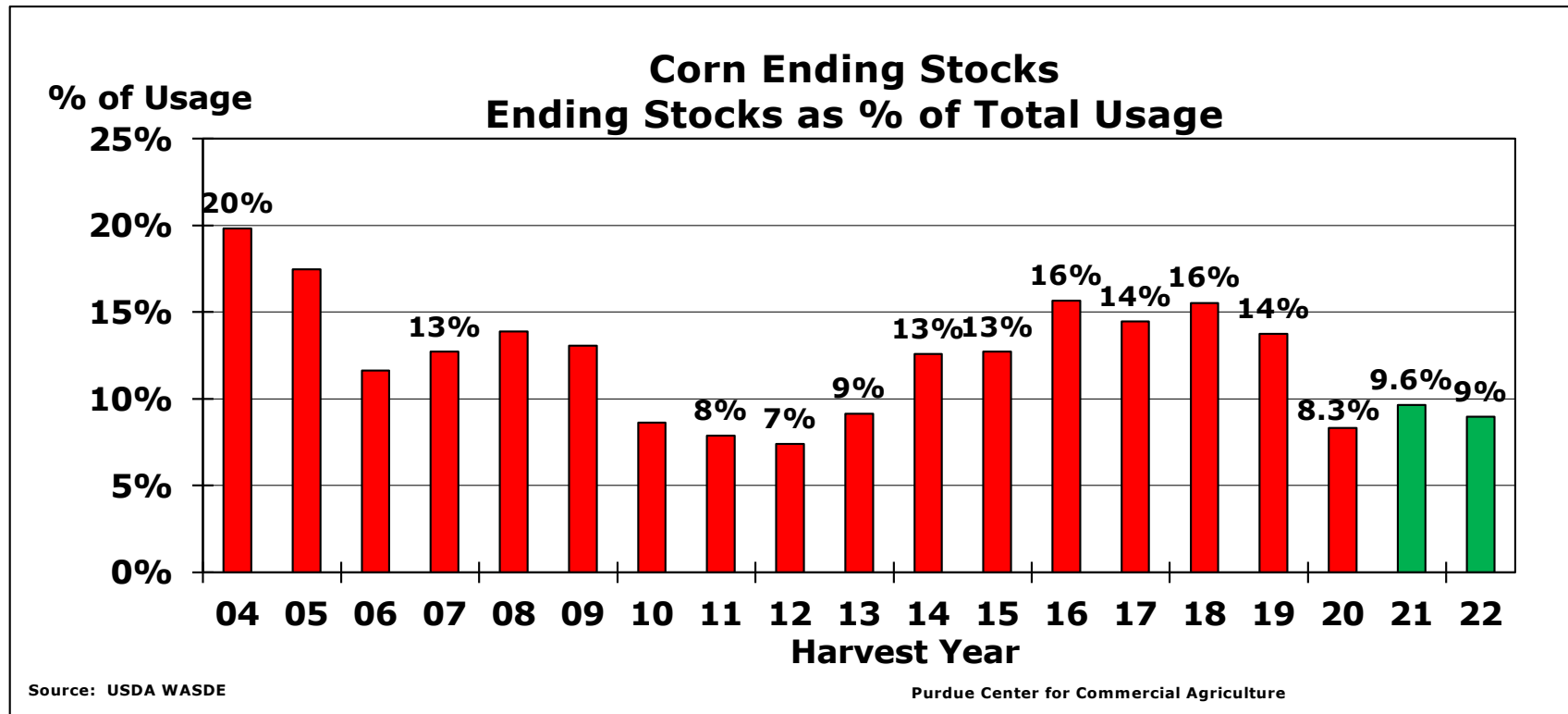
How Much Corn Will U.S. Produce in 2022?

Using Prospective Plantings Acreage Estimate & Trend Yield for 2022



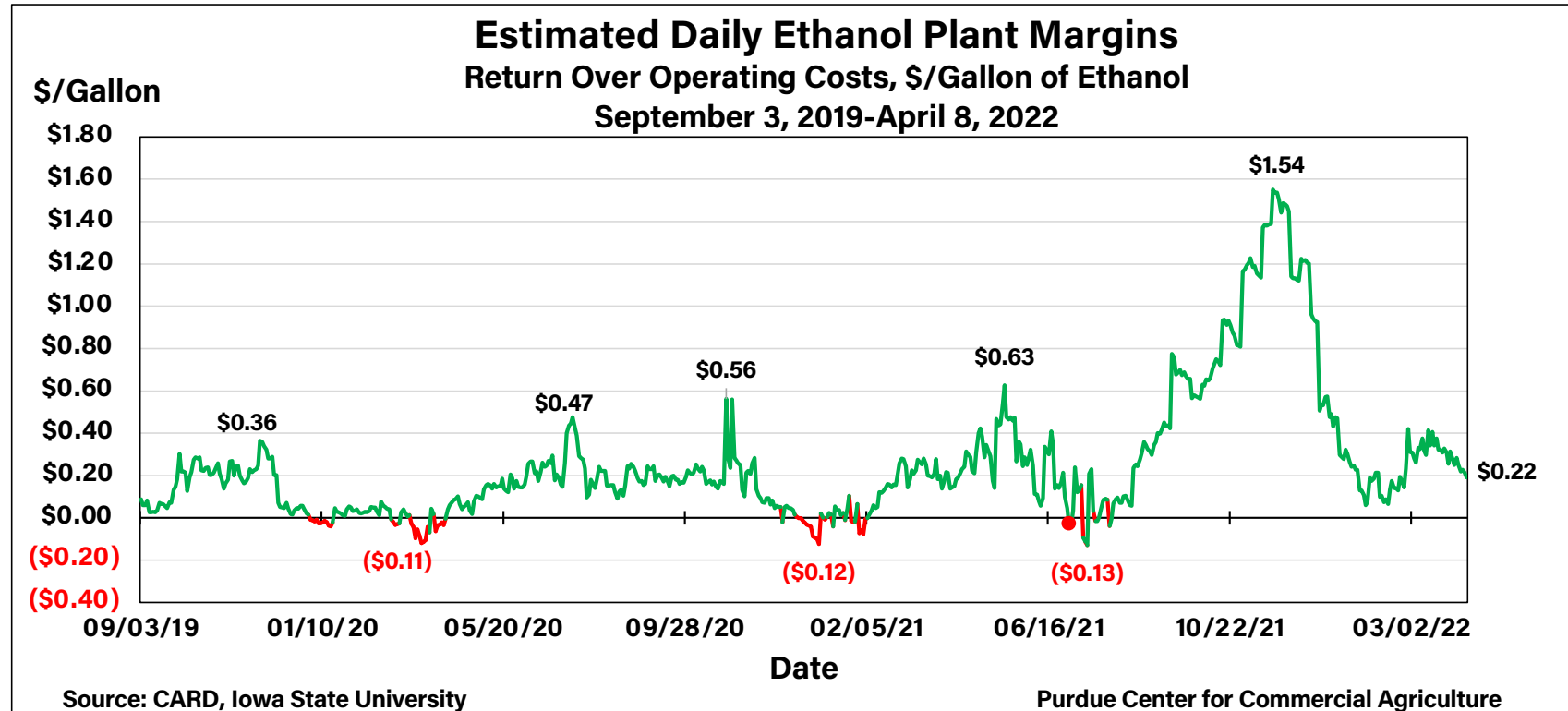
Using 2021's usage estimates, corn stocks will tighten

Ending stocks vulnerable to yields falling below trend & uncertainty about exports & ethanol usage



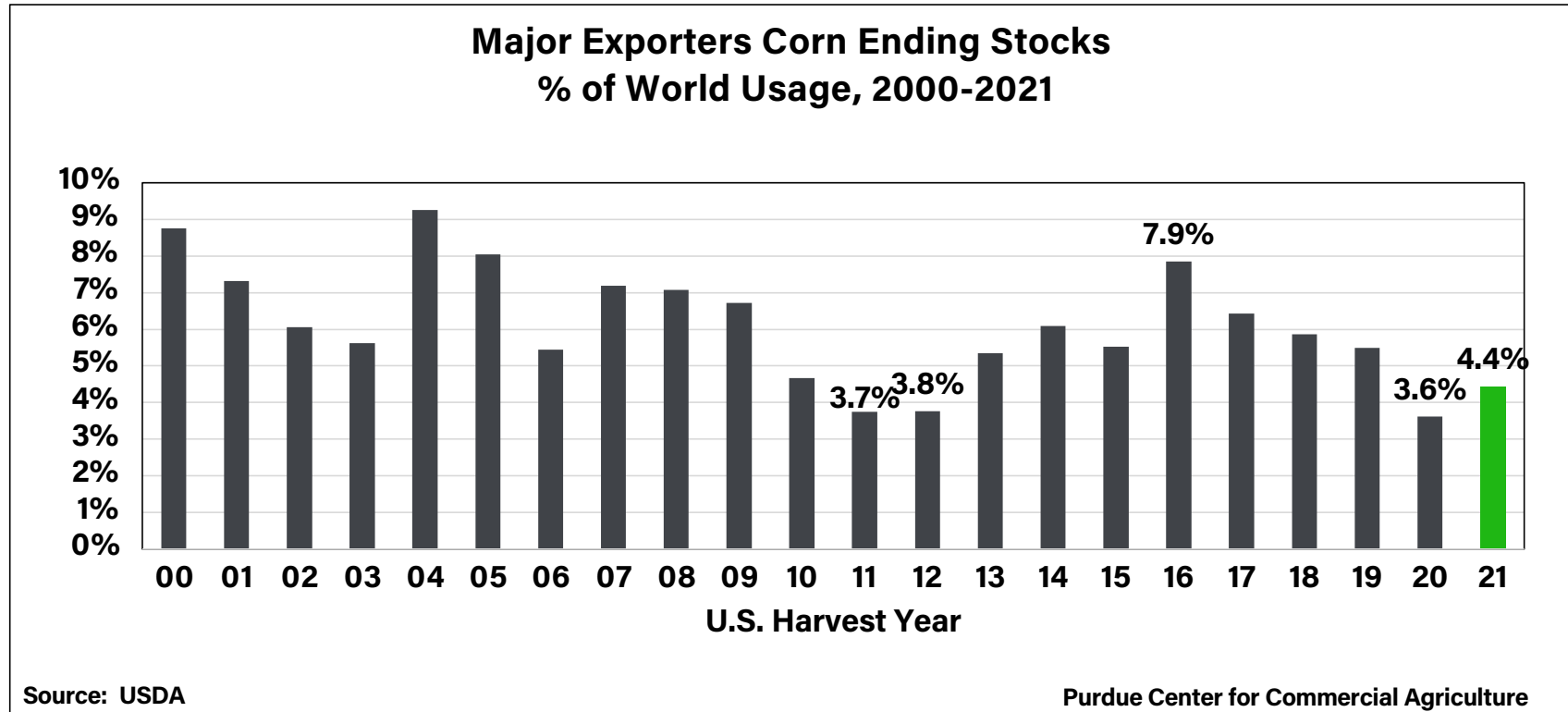
Ethanol Production Is Up 11% Since Start of 2021 Crop Year

But USDA's Corn Usage Estimate is only Up 7% from Prior Year



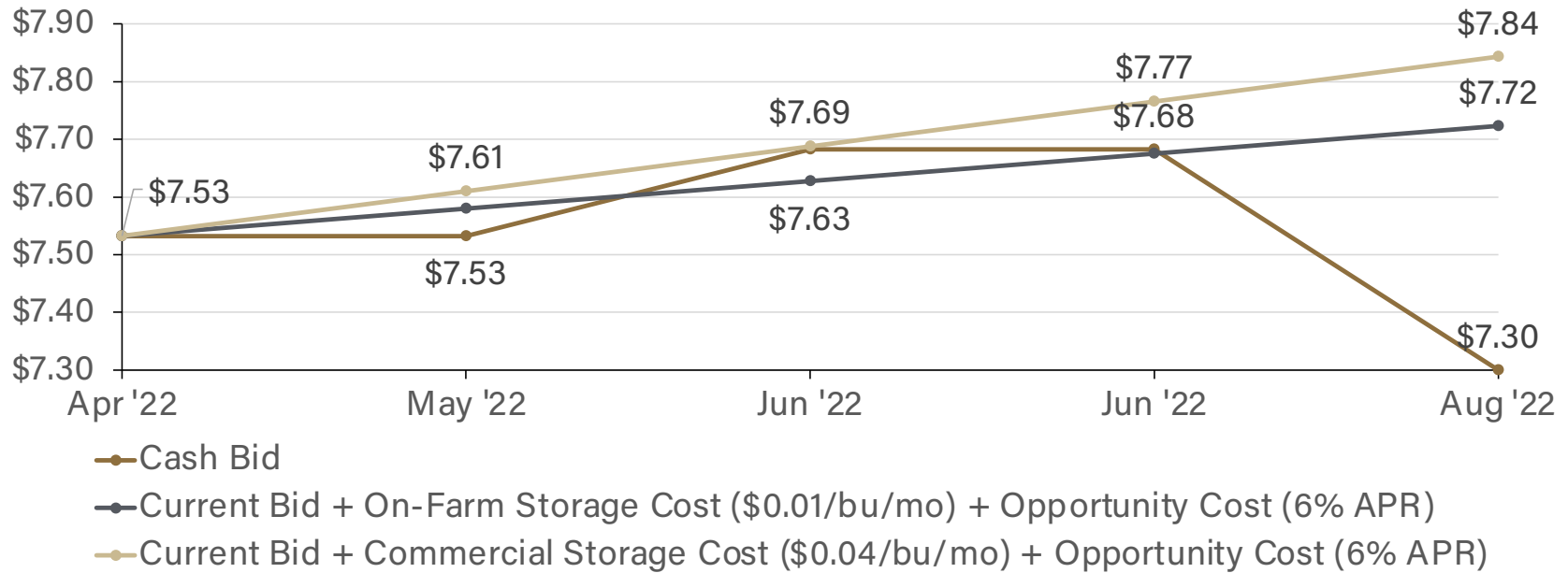
Major Exporter Ending Stocks Are Tighter Than They Appear

Ukraine accounts for 12 % of estimated world corn ending stocks...but how much of that is actually available?



Storage opportunities for corn?

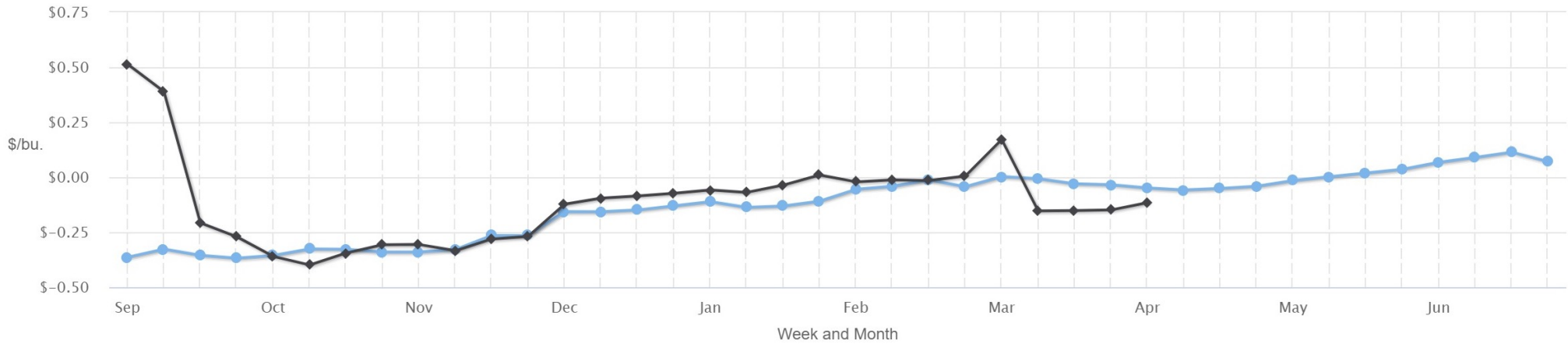
Cash Forward Contract Corn Bids
Central Indiana



Corn basis - Central Indiana - 3 year average

Purdue Center for Commercial Agriculture Crop Basis Tool

Corn: IN CENTRAL Region, July Contract Basis, Weekly
 Avg. of Selected Historical Crop Years [2018-2019,2019-2020,2020-2021]
 vs. Current Crop Year

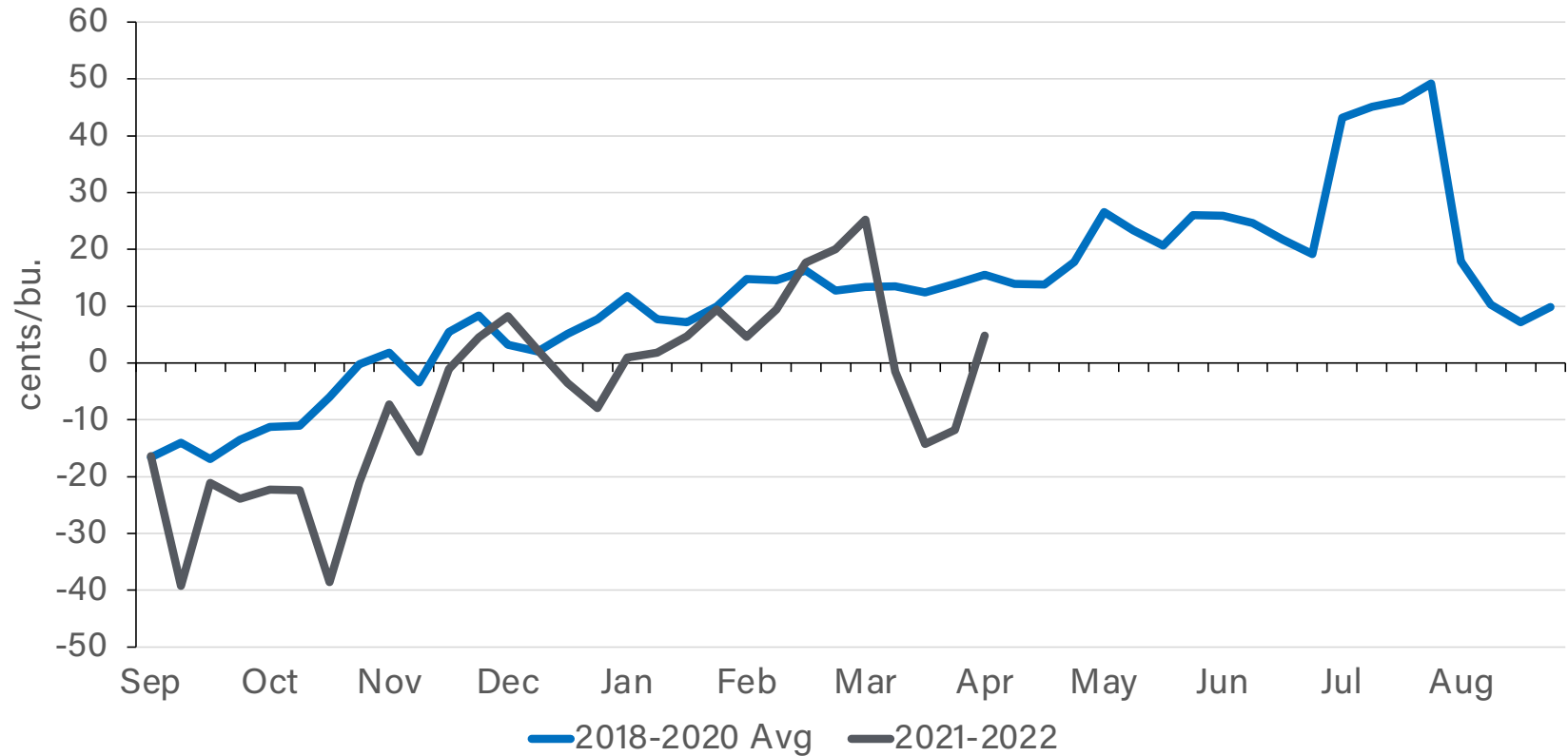


◆ Historical July Contract Basis, Avg of Selected Crop Years
 ◆ 2021-2022 Regional July Contract Basis
<https://www.purdue.edu/commercialag>

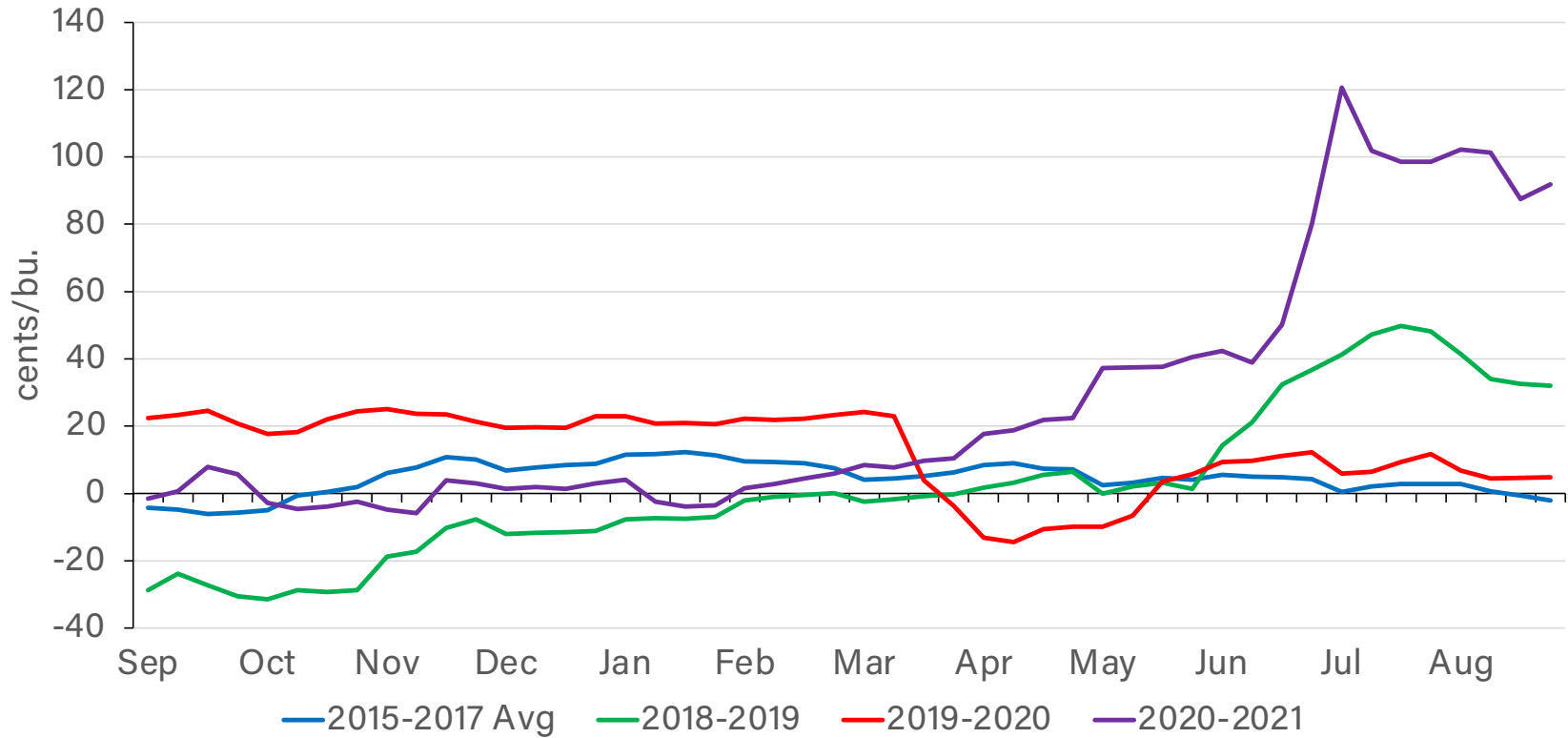


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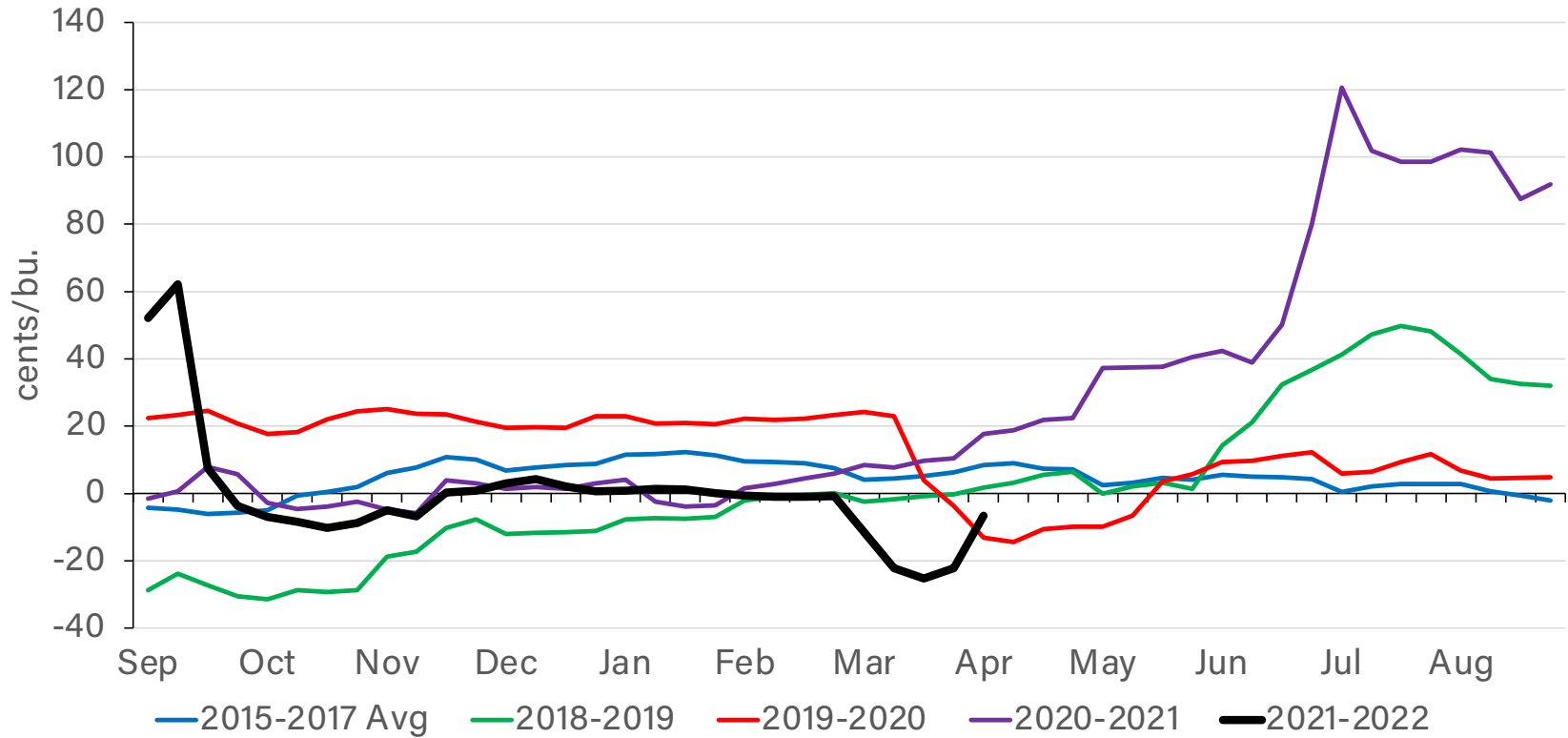
Corn River Basis-Southern Indiana and Southern Illinois River Terminals



Indiana ethanol plant basis



Indiana ethanol plant basis



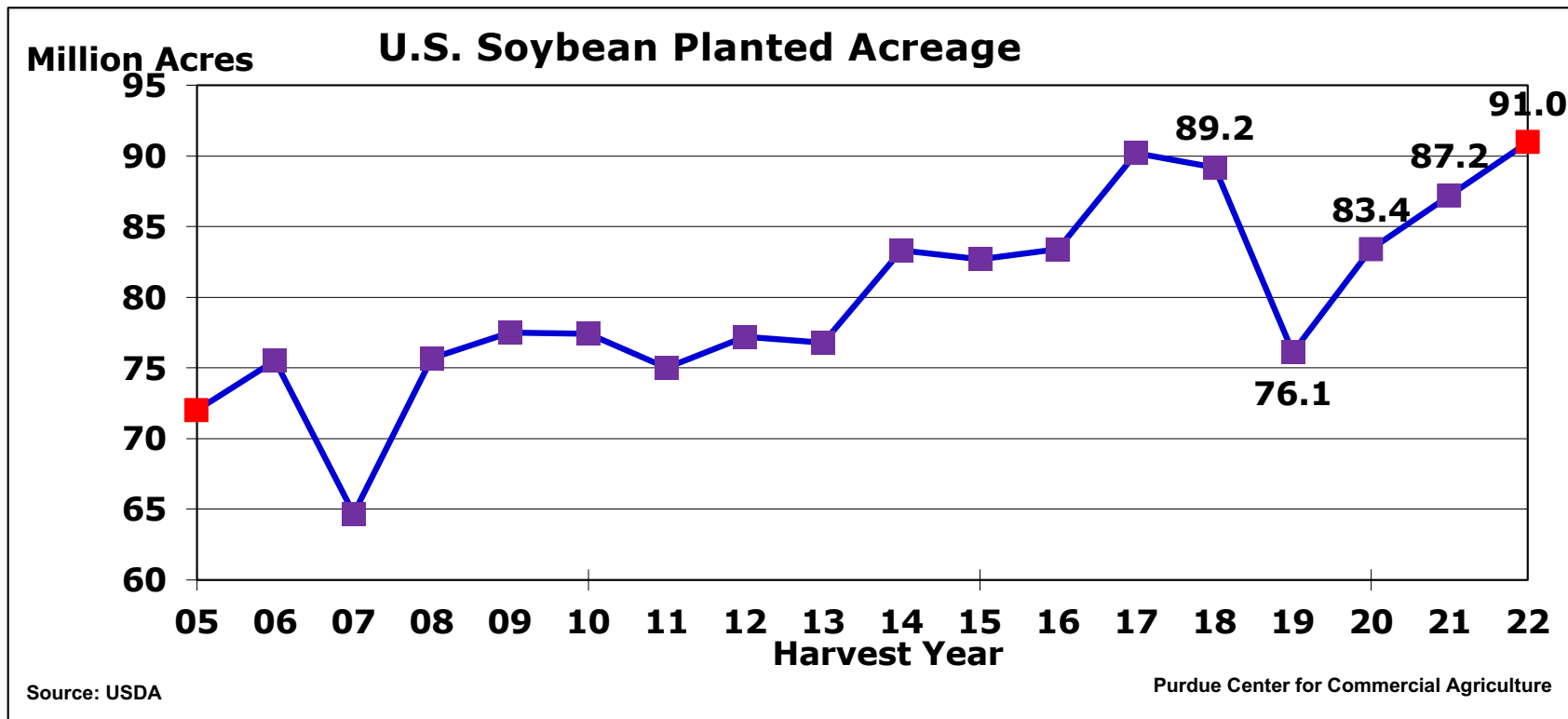
Corn cash price opportunities?

May '22 Delivery	Jan.	Feb.	Mar.	Apr.
CBOT Jul. '22 Corn futures	\$5.88	\$6.40	\$7.18	\$7.73
Expected corn basis May '22 in Central IN	+\$0.02	+\$0.02	+\$0.02	+\$0.02
Expected May cash price	\$5.90/bu.	\$6.42/bu.	\$7.20/bu.	\$7.75/bu.
Harvest '22 Delivery				
CBOT Dec. '22 Corn futures	\$5.59	\$5.89	\$6.42	\$7.27
Expected corn basis Oct. '22 in Central IN	-\$0.20	-\$0.20	-\$0.20	-\$0.20
Expected harvest cash price	\$5.39/bu.	\$5.69/bu.	\$6.22/bu.	\$7.07/bu.

Key Changes to Soybean Balance Sheet in USDA's April WASDE

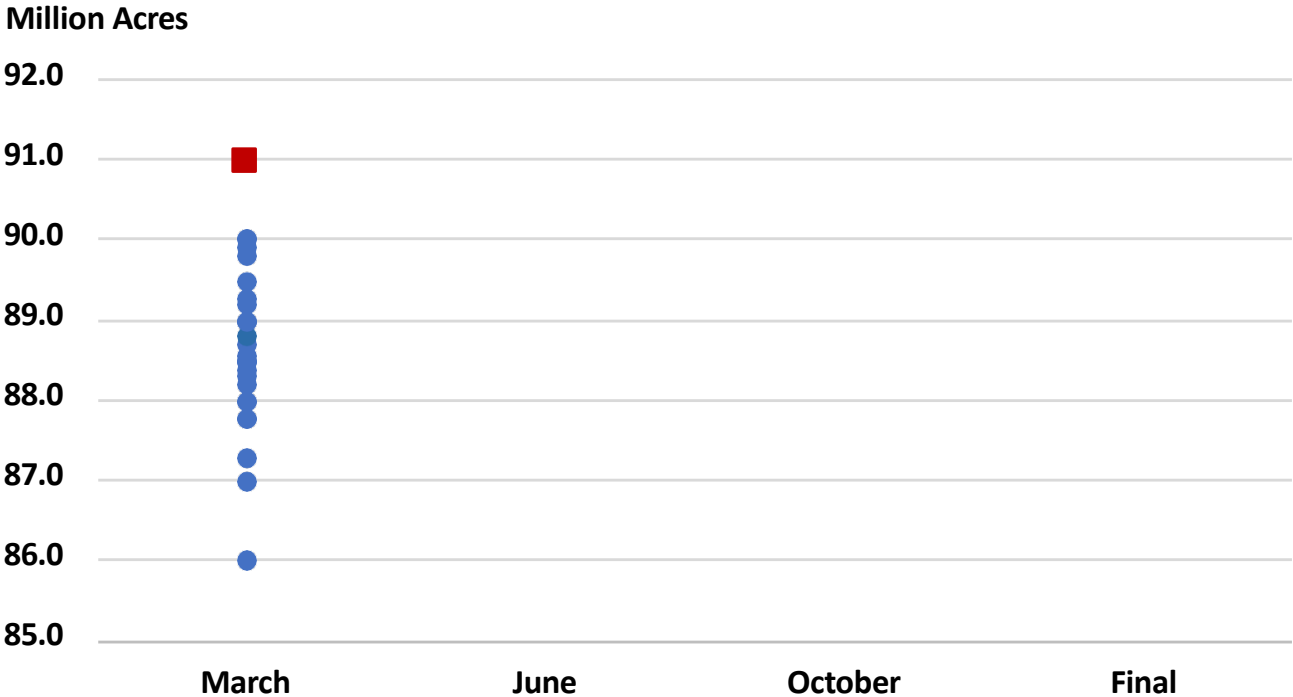
- ✓ **Increased export forecast by 25 million bushels to 2.215 billion bushels**
- ✓ **Ending stocks estimate declined 25 million bushels to 260 million bushels**
- ✓ **Also made some changes in world soybean trade matrix**
 - ✓ **Reduced Brazil's expected exports by 2.75 million metric tons (3.2% reduction)**
 - ✓ **Pulled back Brazil's expected production to 125 mmt from 127 mmt**
 - ✓ **Paraguay expected production down to 2.90 mmt from 3.6 mmt**
 - ✓ **Reduced China's expected imports to 91 mmt total, down from 94 mmt on March report**

Prospective Plantings soybean acreage estimate up nearly 4 million acres vs. 2021



2022 U.S. SOYBEAN PLANTED ACREAGE

Industry Expectations vs NASS



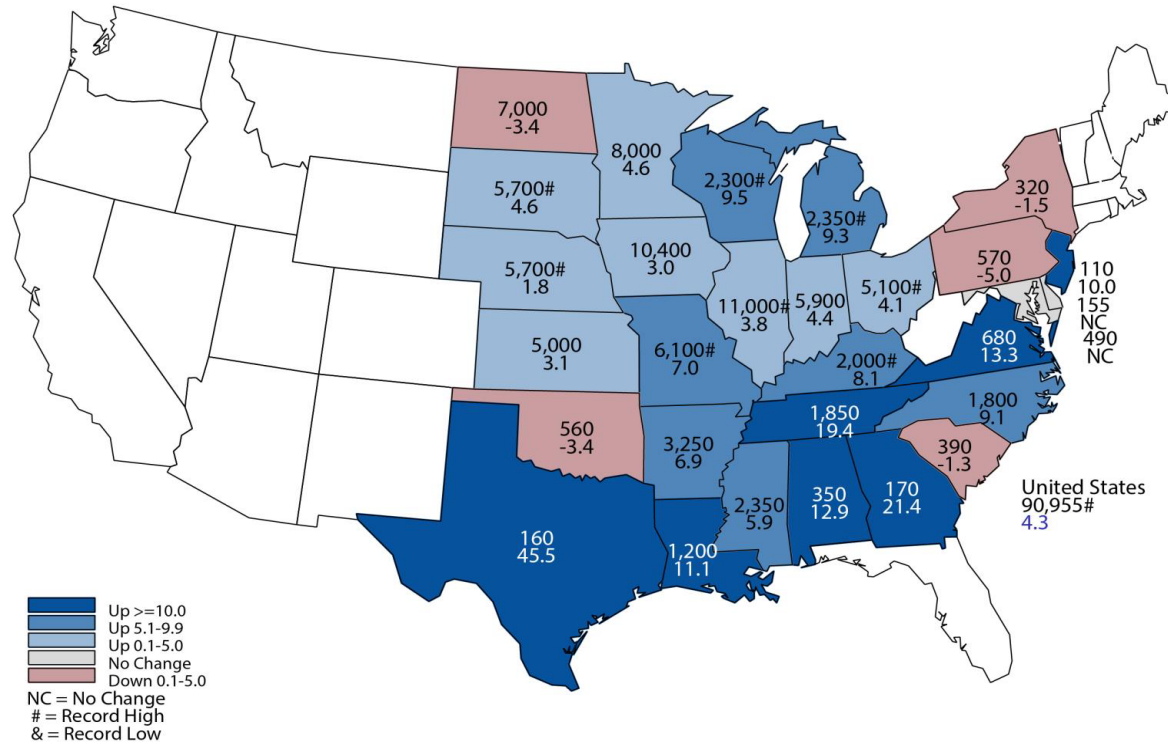
● Individual Industry Expectation ■ NASS Estimate



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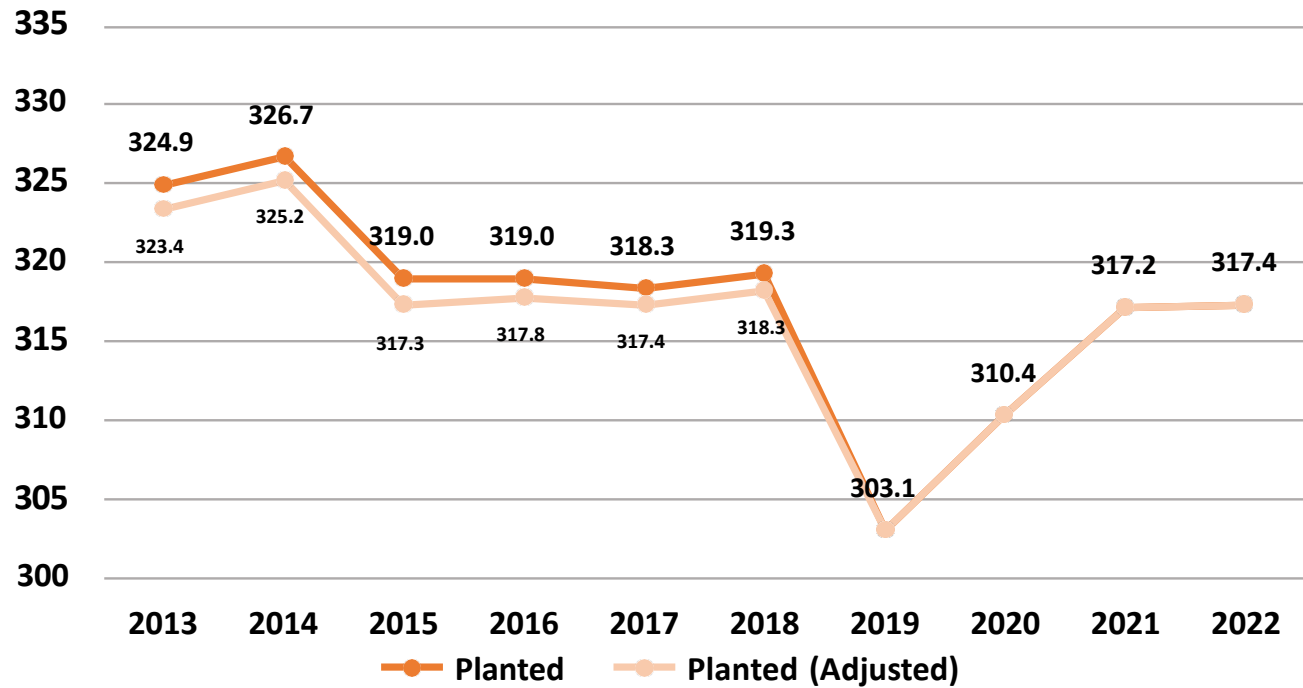
2022 SOYBEAN PLANTED ACREAGE

THOUSAND ACRES AND PERCENT CHANGE FROM PREVIOUS YEAR



PRINCIPAL CROP ACRES UNITED STATES

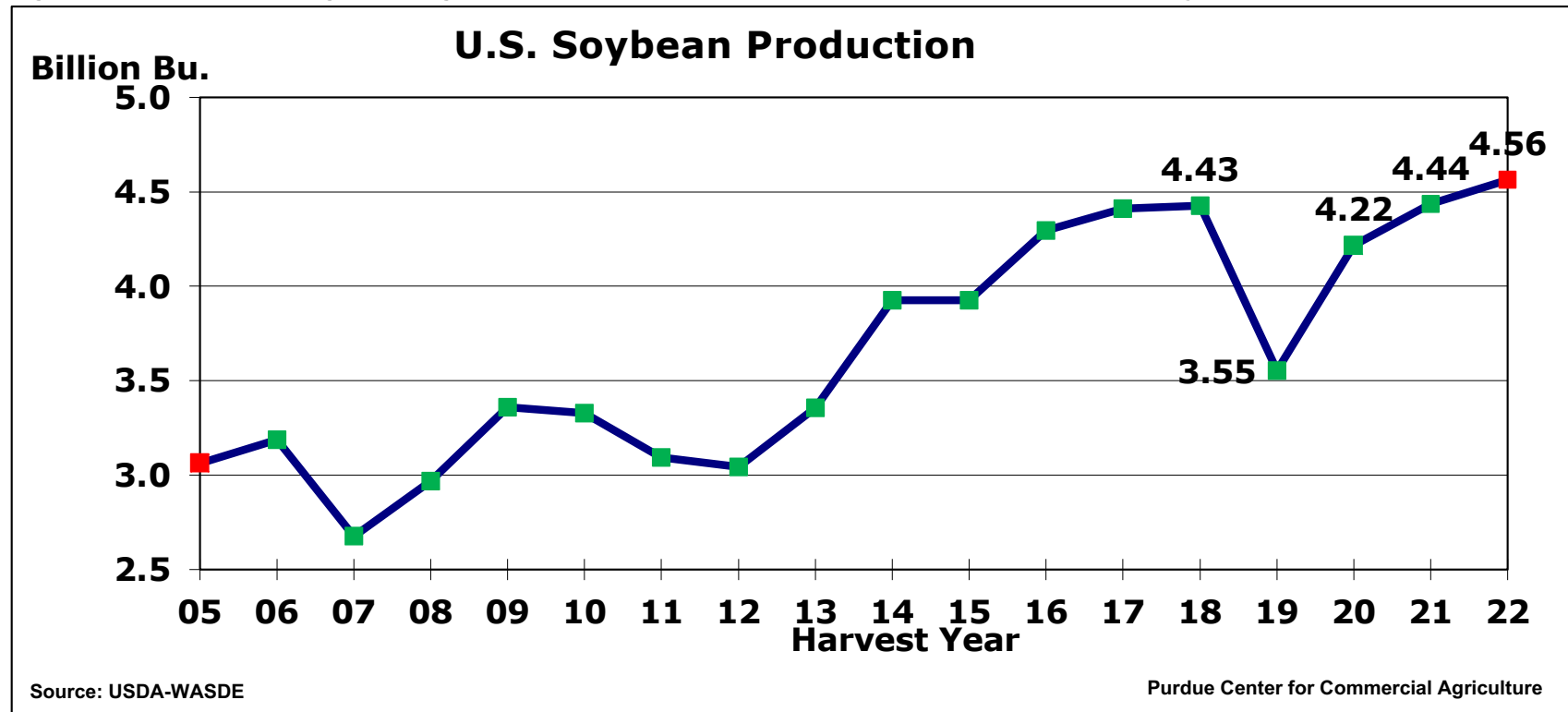
Million Acres



NASS implemented program changes beginning with the 2019 crop year. Full details of the changes can be found at https://www.nass.usda.gov/Surveys/Program_Review/index.php. The Planted (Adjusted) line in the chart provides principal crop totals for comparable estimates across all years.

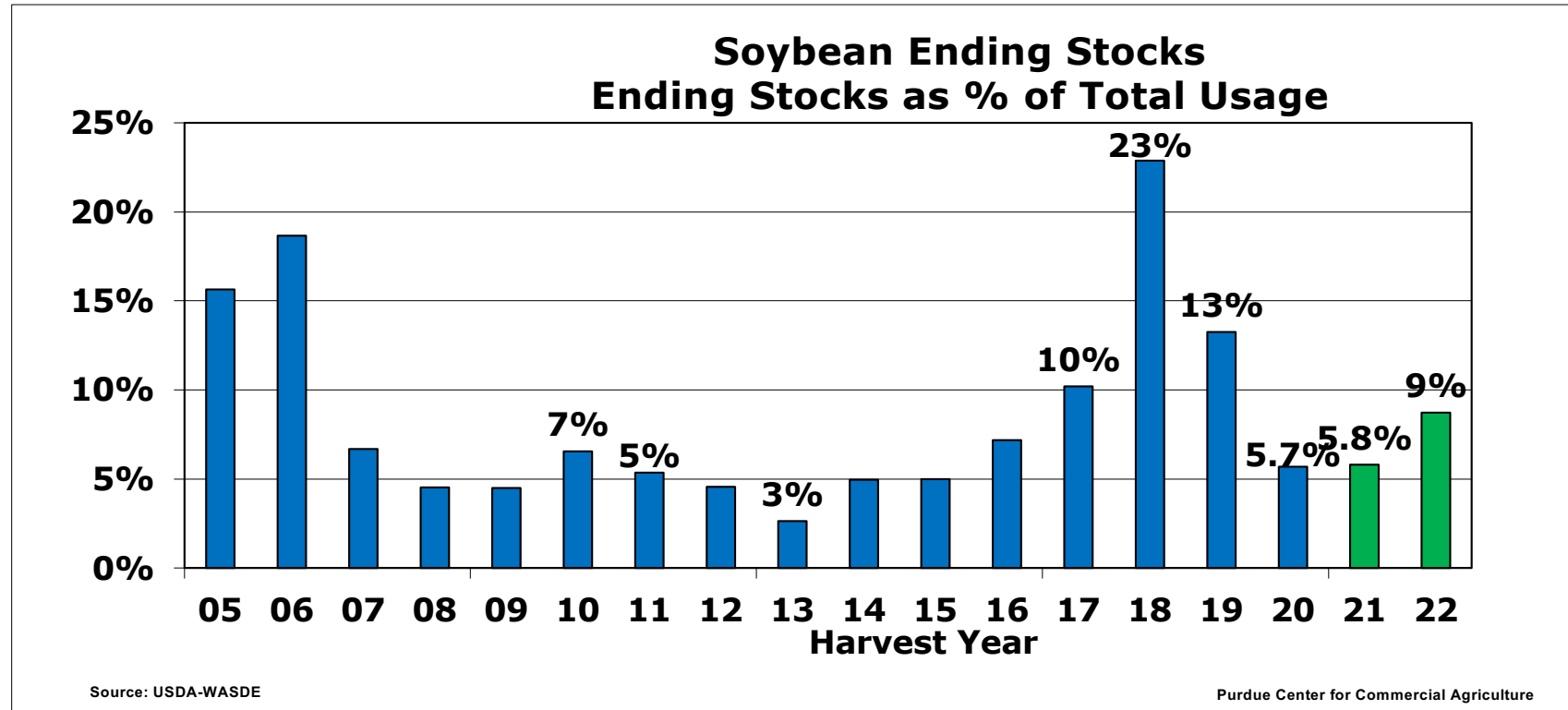
How Large Will 2022 U.S. Soybean Crop Be?

Using Prospective Plantings Acreage Estimate & Trend Yield for 2022 Leads to a Record Soybean Crop

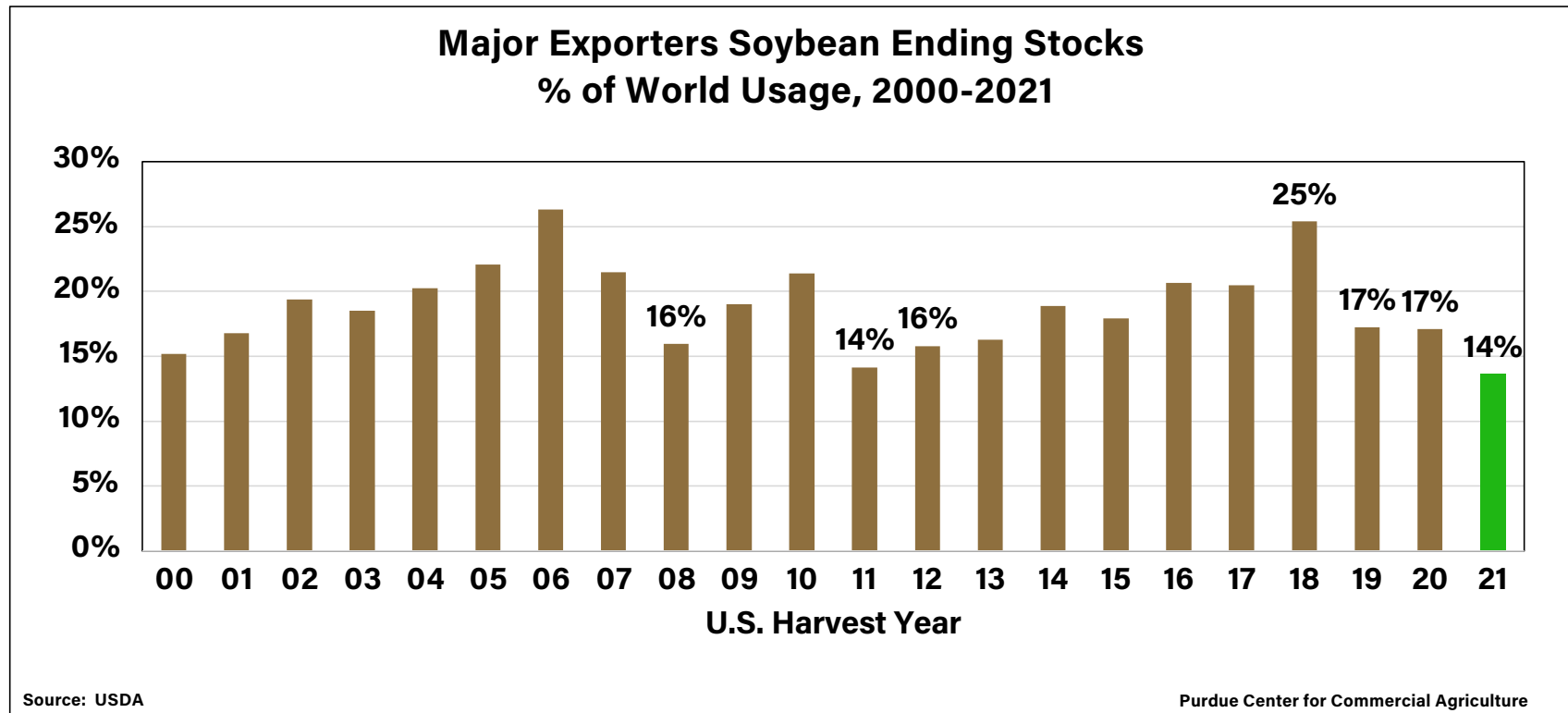


Record crop size & 2021 usage levels increases carryover projection

But Brazil's crop size & impact on U.S. exports is still a big issue

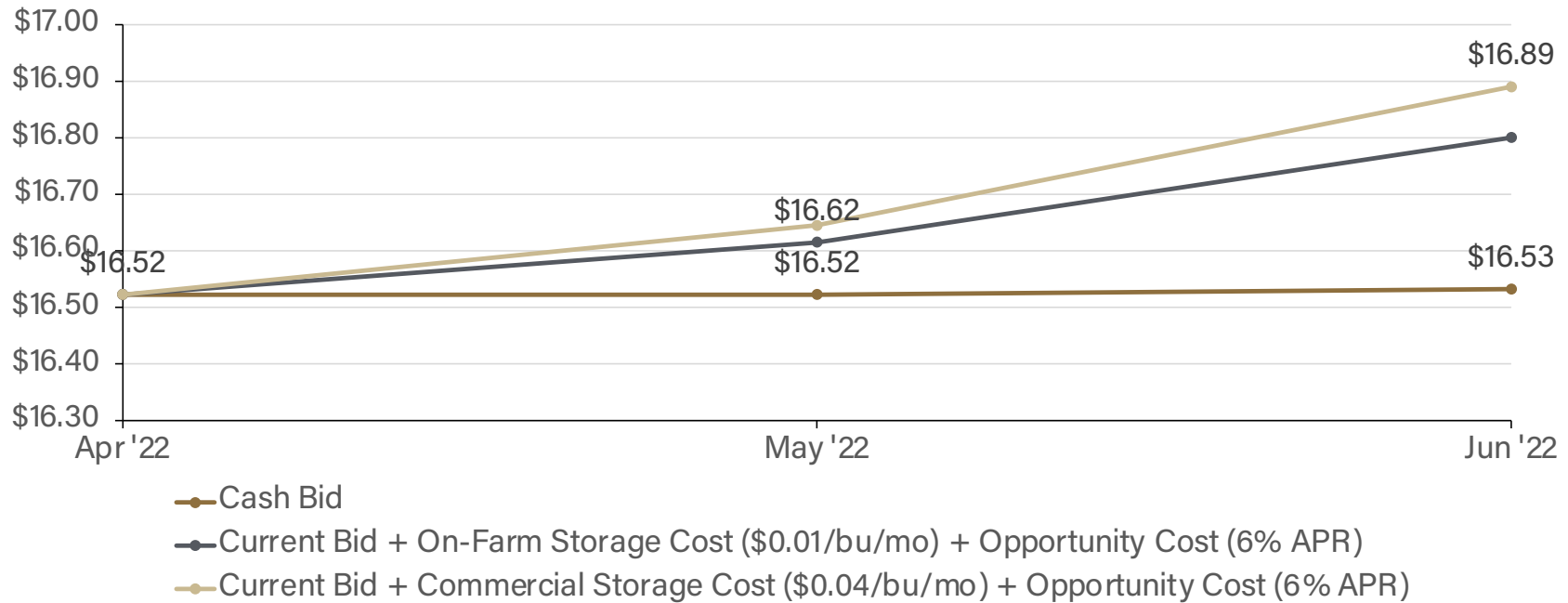


Size of Major Exporter's Ending Stocks Still Dependent on Weather in Brazil



Storage opportunities for soybeans?

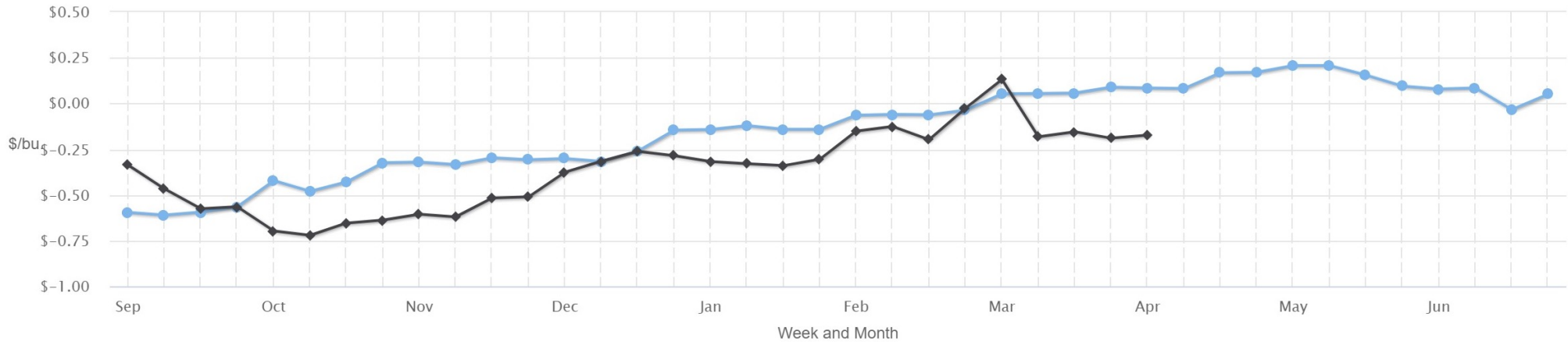
Cash Forward Contract Soybean Bids
Central Indiana



Soybean basis - Central Indiana - 2 year average

Purdue Center for Commercial Agriculture Crop Basis Tool

Soybeans: IN CENTRAL Region, July Contract Basis, Weekly
 Avg. of Selected Historical Crop Years [2019-2020, 2020-2021]
 vs. Current Crop Year



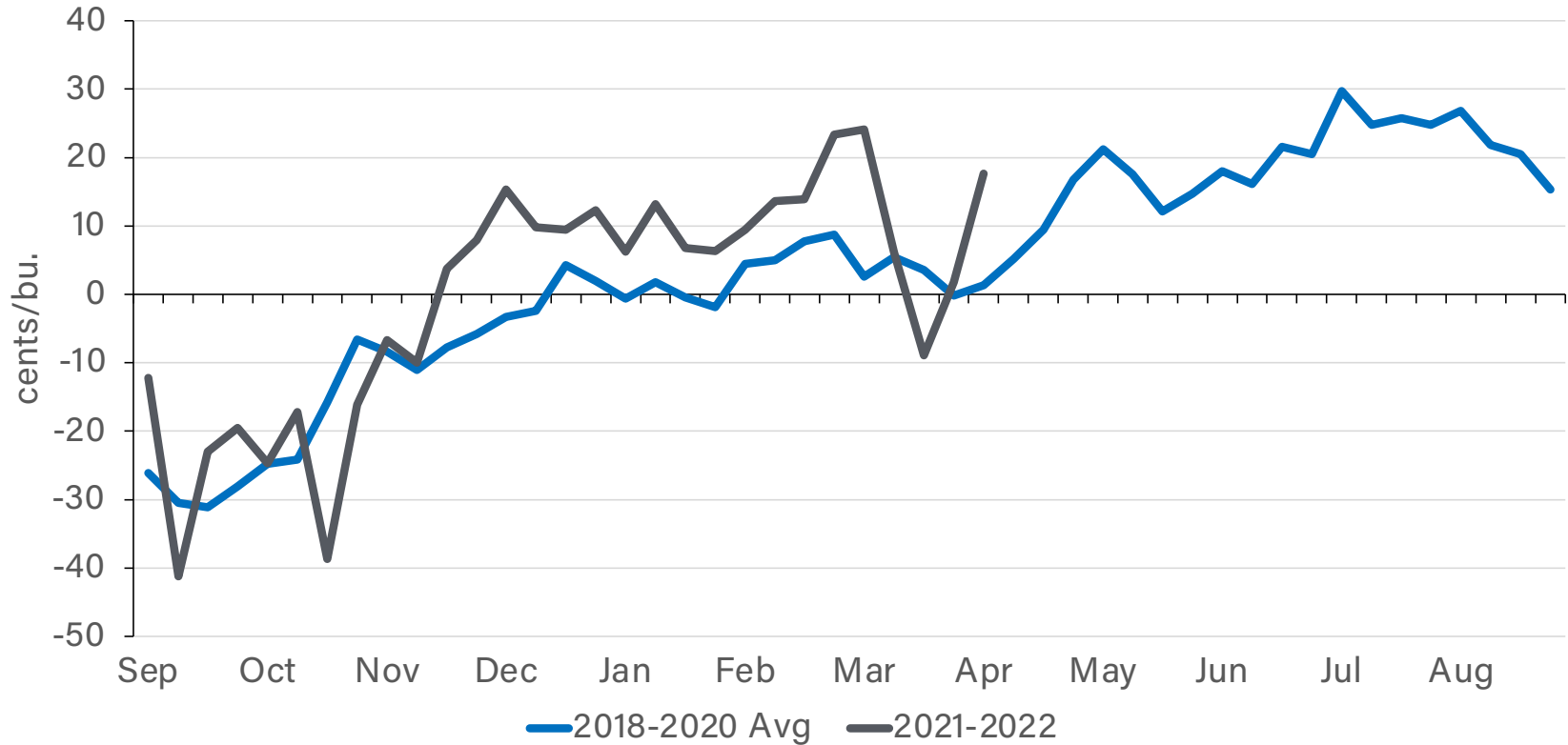
◆ Historical July Contract Basis, Avg of Selected Crop Years
 ◆ 2021-2022 Regional July Contract Basis

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Soybean River Basis-Southern Indiana and Southern Illinois River Terminals



Soybean cash price opportunities?

May '22 Delivery

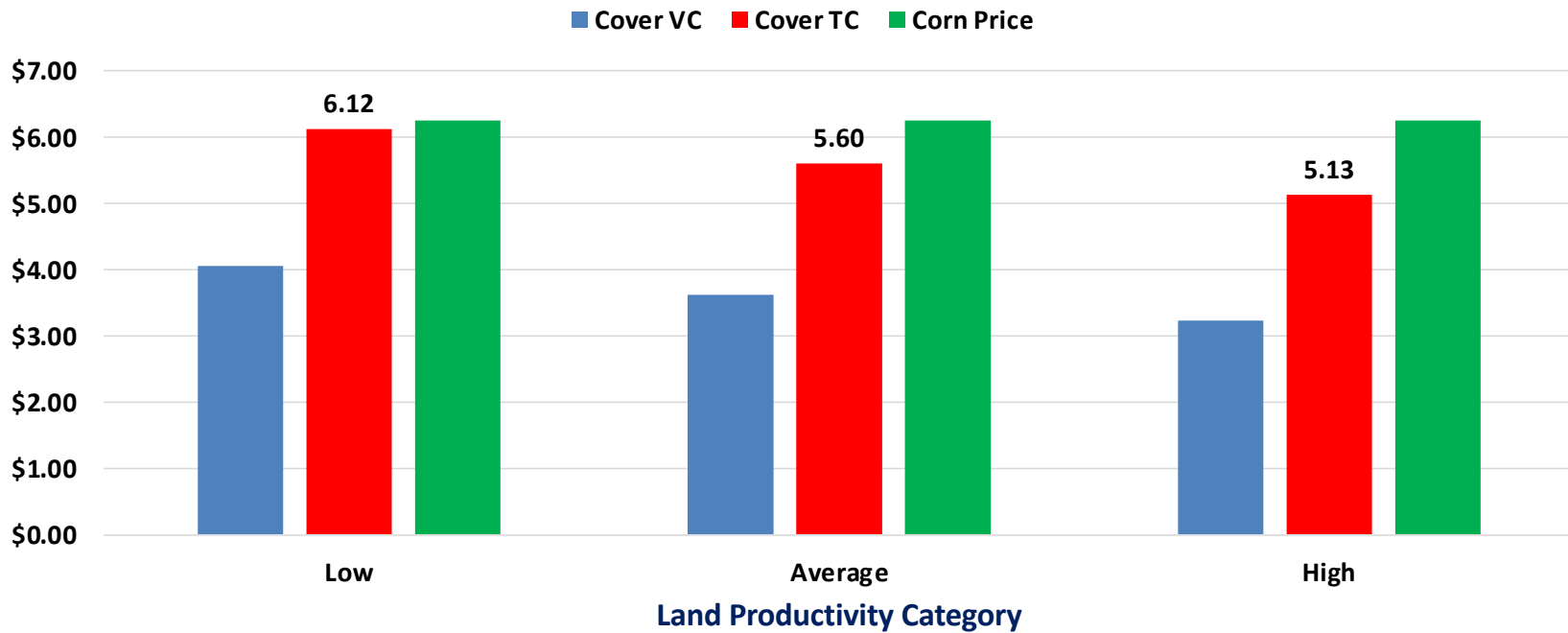
	Jan.	Feb.	Mar.	Apr.
CBOT Jul. '22 Soybean futures	\$13.95	\$16.15	\$16.60	\$16.70
Expected soybean basis May '22 in Central IN	+\$0.15	+\$0.15	+\$0.15	+\$0.15
Expected May cash price	\$14.10/bu.	\$16.30/bu.	\$16.75/bu.	\$16.85/bu.

Harvest '22 Delivery

CBOT Nov. '22 Soybean futures	\$13.00	\$14.58	\$14.84	\$14.97
Expected soybean basis Oct. '22 in Central IN	-\$0.30	-\$0.30	-\$0.30	-\$0.30
Expected harvest cash price	\$12.70/bu.	\$14.28/bu.	\$14.54/bu.	\$14.67/bu.

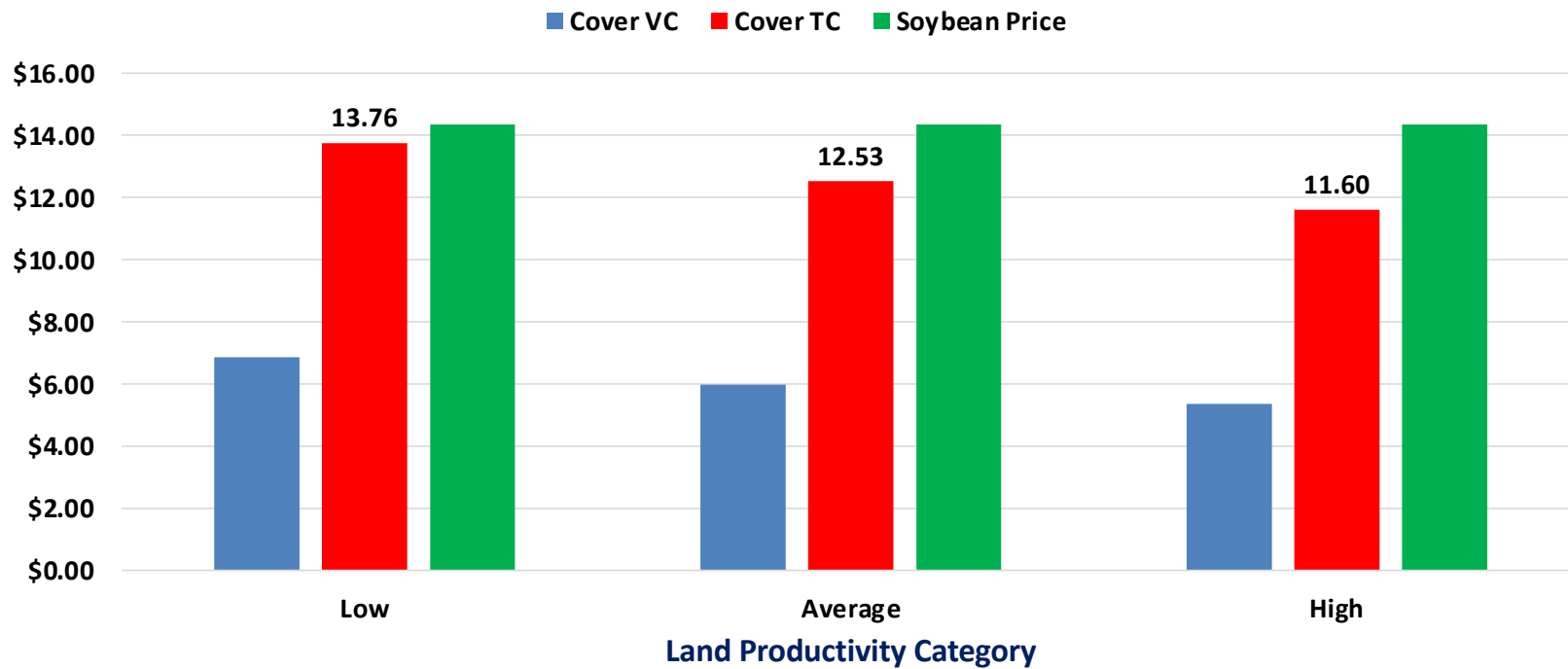
Corn Breakeven Prices by Land Productivity Category

2022 Breakeven Prices for Rotation Corn in Indiana



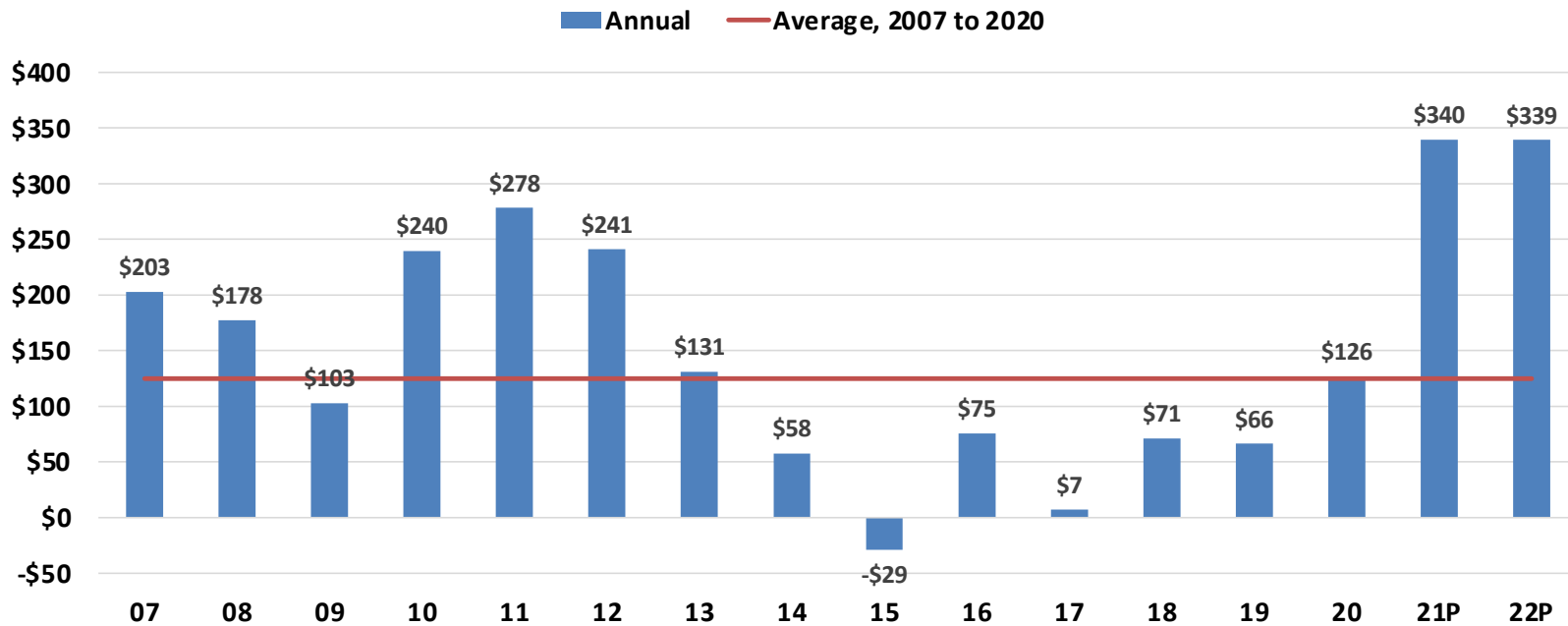
Soybean Breakeven Prices by Land Productivity Category

2022 Breakeven Prices for Soybeans in Indiana



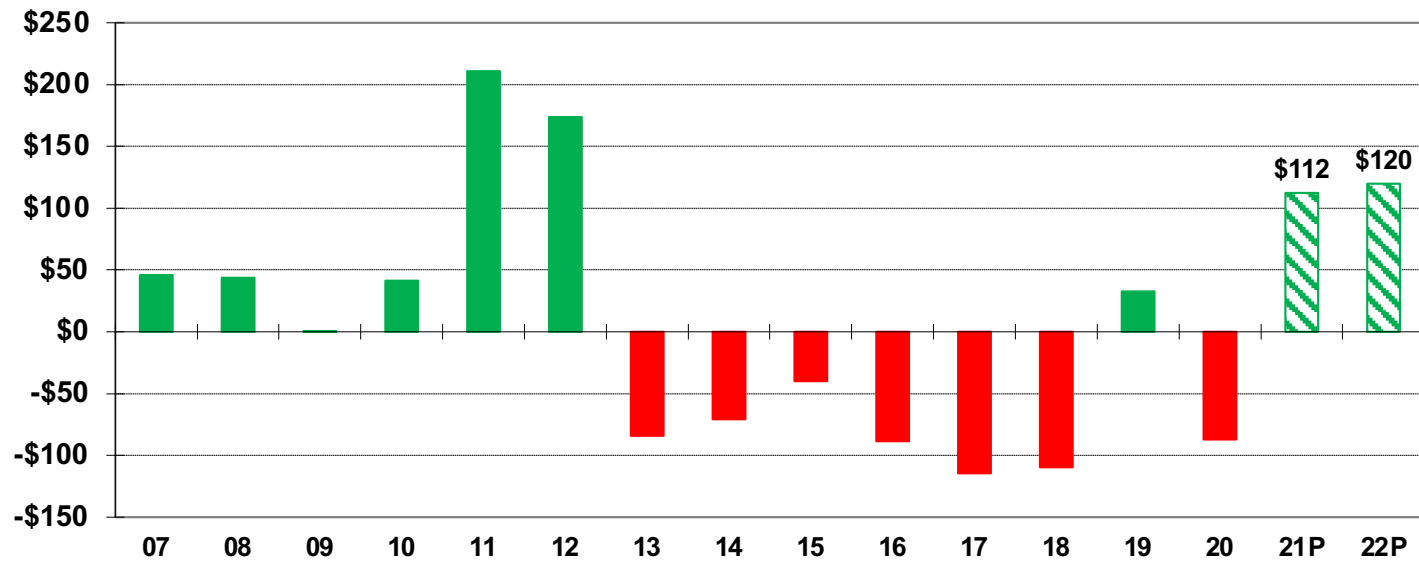
Net Farm Income per Acre for West Central Indiana Case Farm

Net Farm Income, Corn/Soybean Rotation (\$ per Acre)
West Central Indiana Case Farm



Is Corn or Soybean Production Favored in 2022?

Difference in Earnings per Acre
West Central Indiana (Corn Minus Soybeans)



Second Year Soybeans versus Rotation Corn in the Eastern Corn Belt?

Corn Prices Required to Produce Per Acre Returns Equivalent to Soybeans

Soybean Price	Low Productivity (C=150; SB=45)	Avg. Productivity (C=182; SB=55)	High Productivity (C=214; SB=66)
\$13.00	\$5.89	\$5.75	\$5.56
\$13.50	\$6.04	\$5.90	\$5.71
\$14.00	\$6.19	\$6.05	\$5.86
\$14.50	\$6.34	\$6.20	\$6.01
\$15.00	\$6.49	\$6.35	\$6.16
\$15.50	\$6.64	\$6.50	\$6.32



MONTHLY OUTLOOK

PURDUE CENTER FOR
COMMERCIAL AGRICULTURE

Next *Crop Outlook Webinar* will be on Monday, May 16

Details Available at
purdue.edu/commercialag



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