

CORN-SOYBEAN UPDATE

MONDAY, JUNE 14, 2021



**MONTHLY
OUTLOOK**

**PURDUE CENTER FOR
COMMERCIAL AGRICULTURE**

James Mintert, Professor & Director, Center for Commercial Agriculture

Nathan Thompson, Assistant Professor, Dept. of Agricultural Economics

Michael Langemeier, Professor & Associate Director, Center for Commercial Agriculture



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CORN - June World Ag Supply & Demand Estimates (WASDE) Highlights

▪ **Change in U.S. Corn 2020 Crop Balance Sheet**

- Raised Corn export forecast by 75 m. bu. to total 2.850 billion bushels
- No change in projected feed usage
- Raised projected ethanol usage by 75 million bushels
- Reduced projected carryover by 150 m. bu. to total 1.107 billion bushels, **equal to 7.4% of usage**
- No Change in U.S. 2020 MYA Corn Price

▪ **U.S. Corn 2021 Crop Balance Sheet**

- No change in 2021 yield projection, 179.5 bu./acre
- Expected corn production = 14.99 billion bushels is unchanged
- Ethanol usage = 5.2 billion bu., 5% higher than in 2020
- Projected exports = 2.45 billion bu., 12% below 2020
- Projected Ending Stocks down to 1.35 billion bu., 150 million bushels lower than May projection
- Ending Stocks in 2021 = 9% of usage, 1% lower than projected in May

▪ **World Estimates**

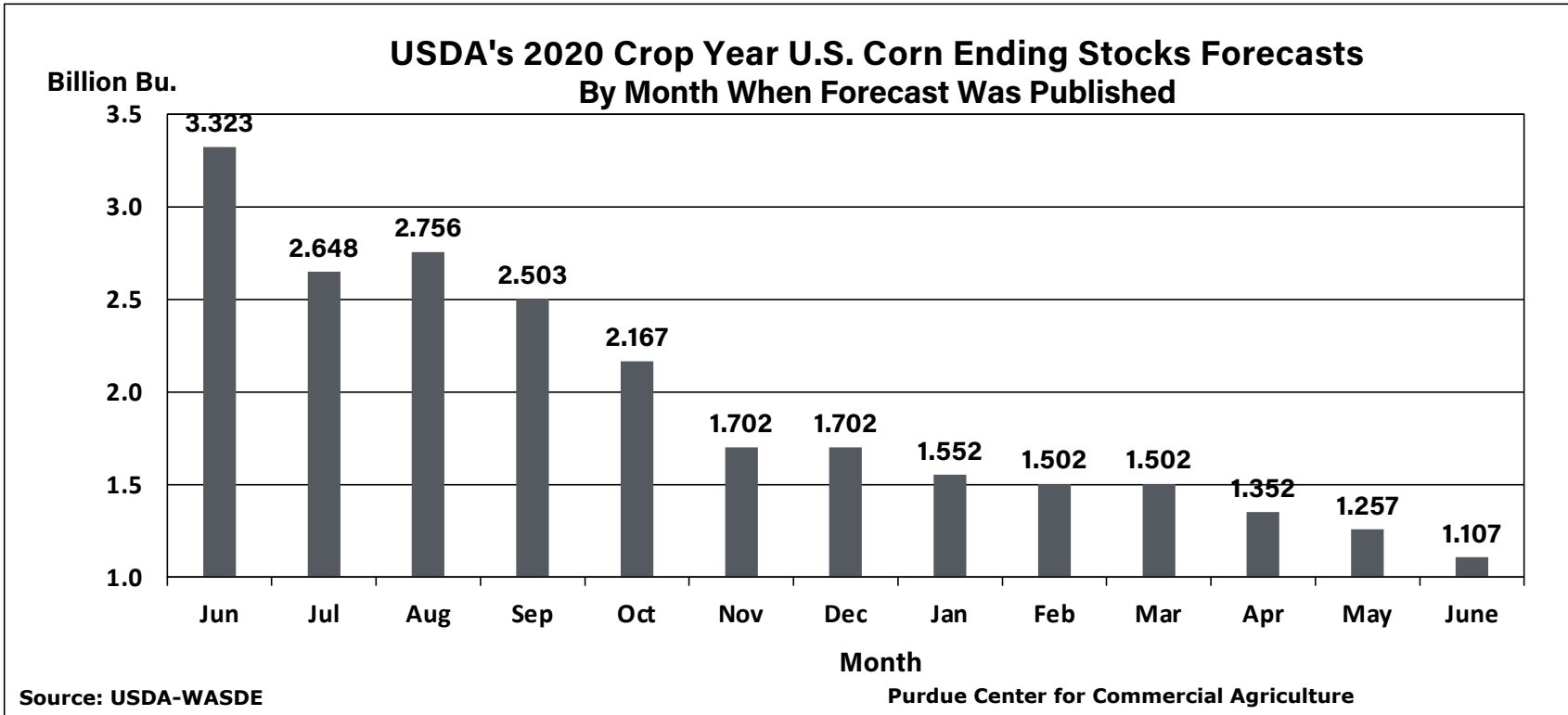
- No change in Brazil's 2021 corn production from May estimate
- No change in China's expected imports from all sources compared to May estimate



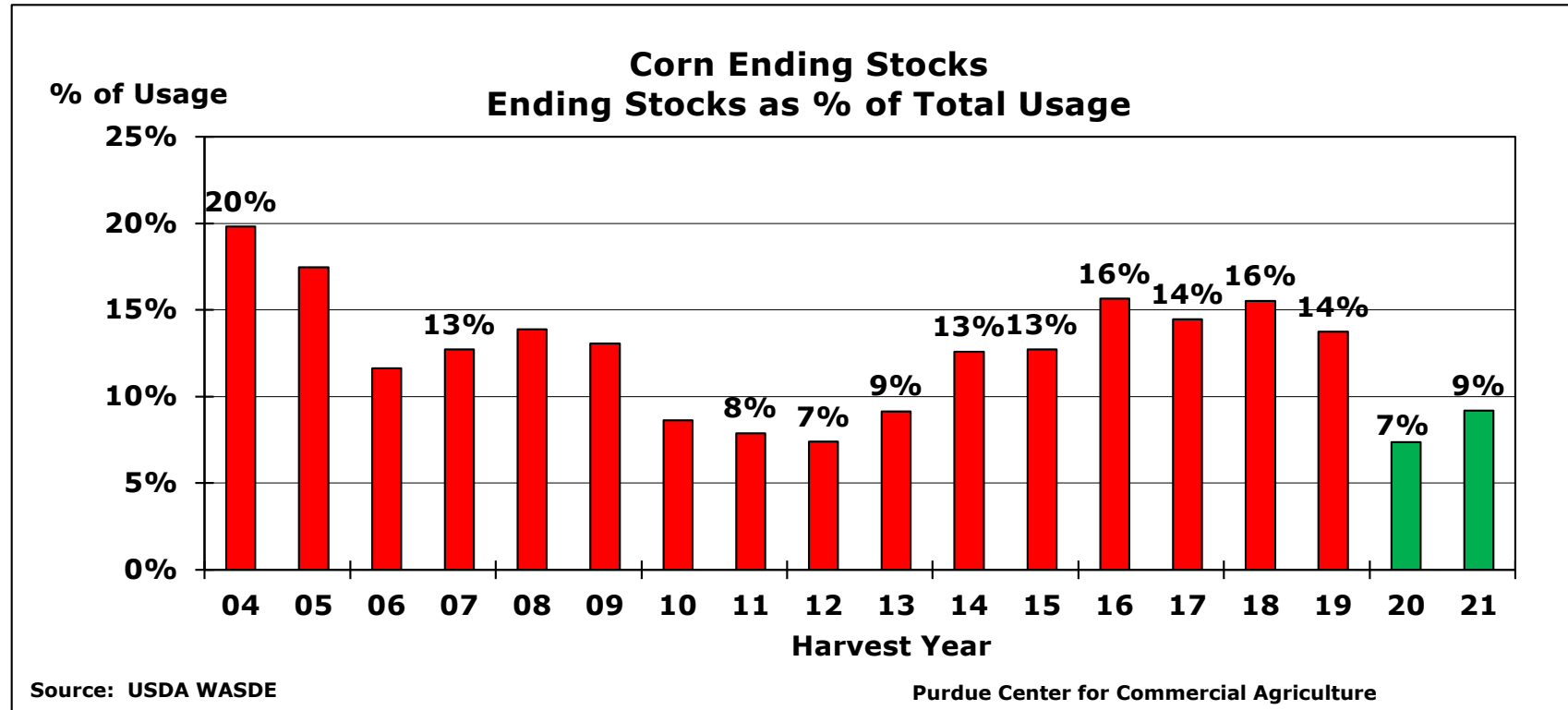
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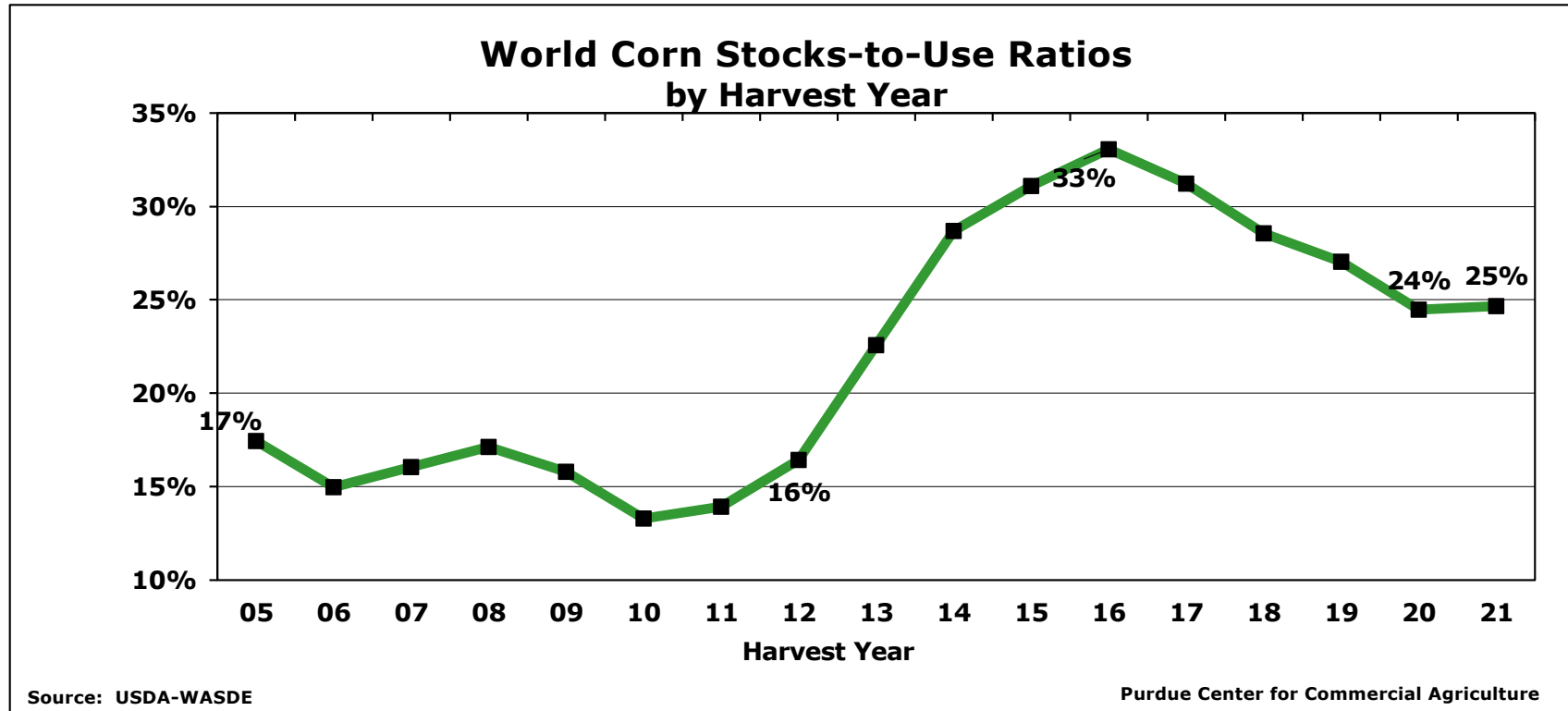
2020 Crop Ending Stocks Tightened Once Again



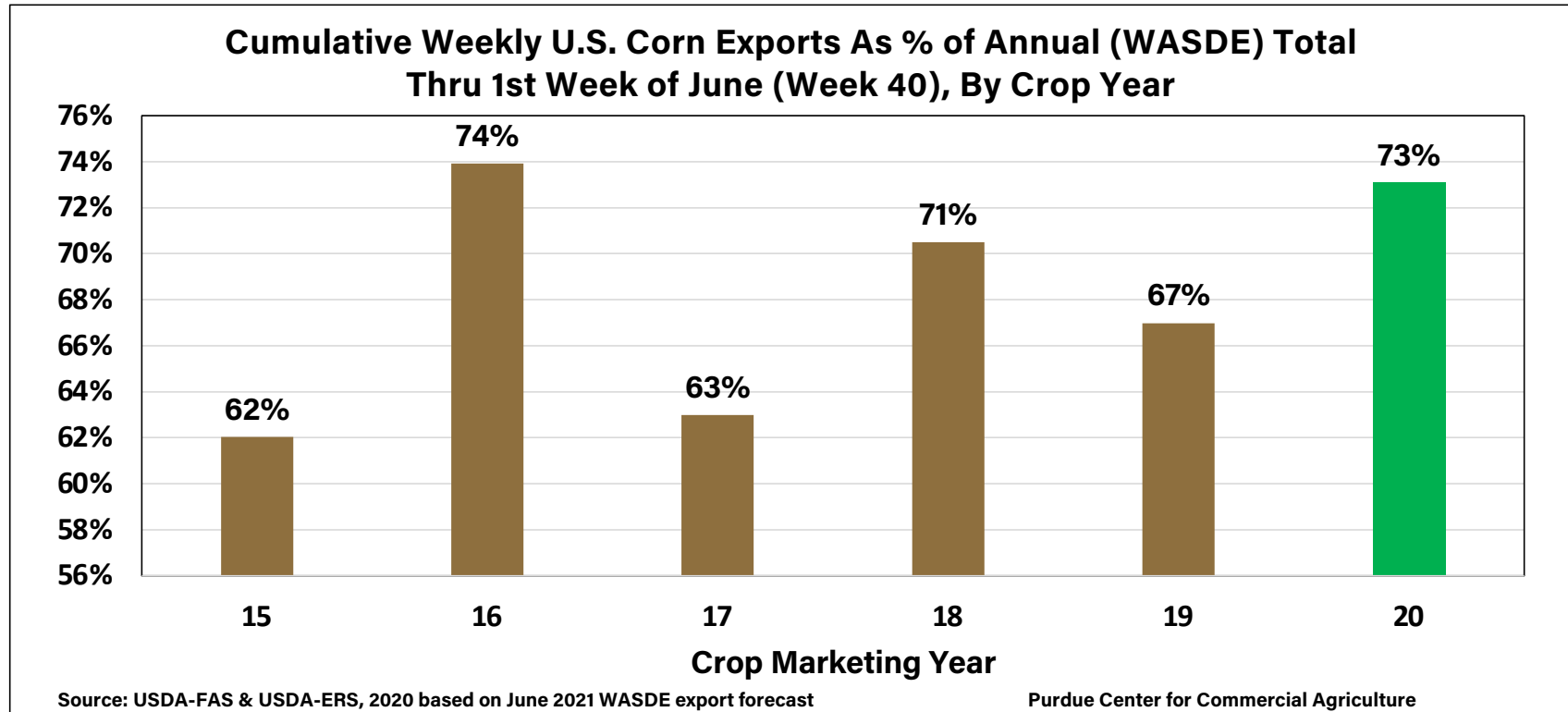
Reduction in 2020 Crop Carryover Puts More Pressure on 2021 Crop Production



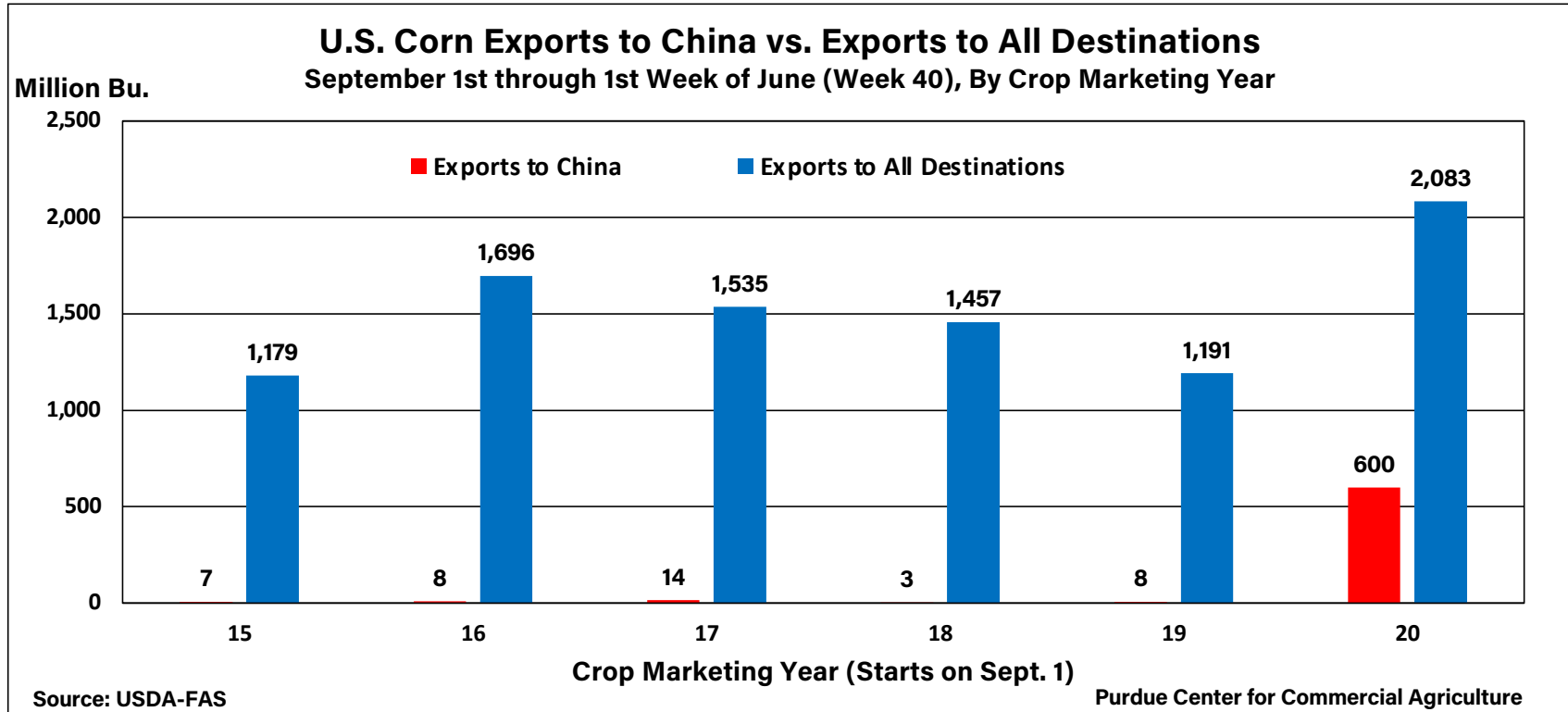
2020 World Corn Stock Ending Levels Down 1% vs. May Estimate



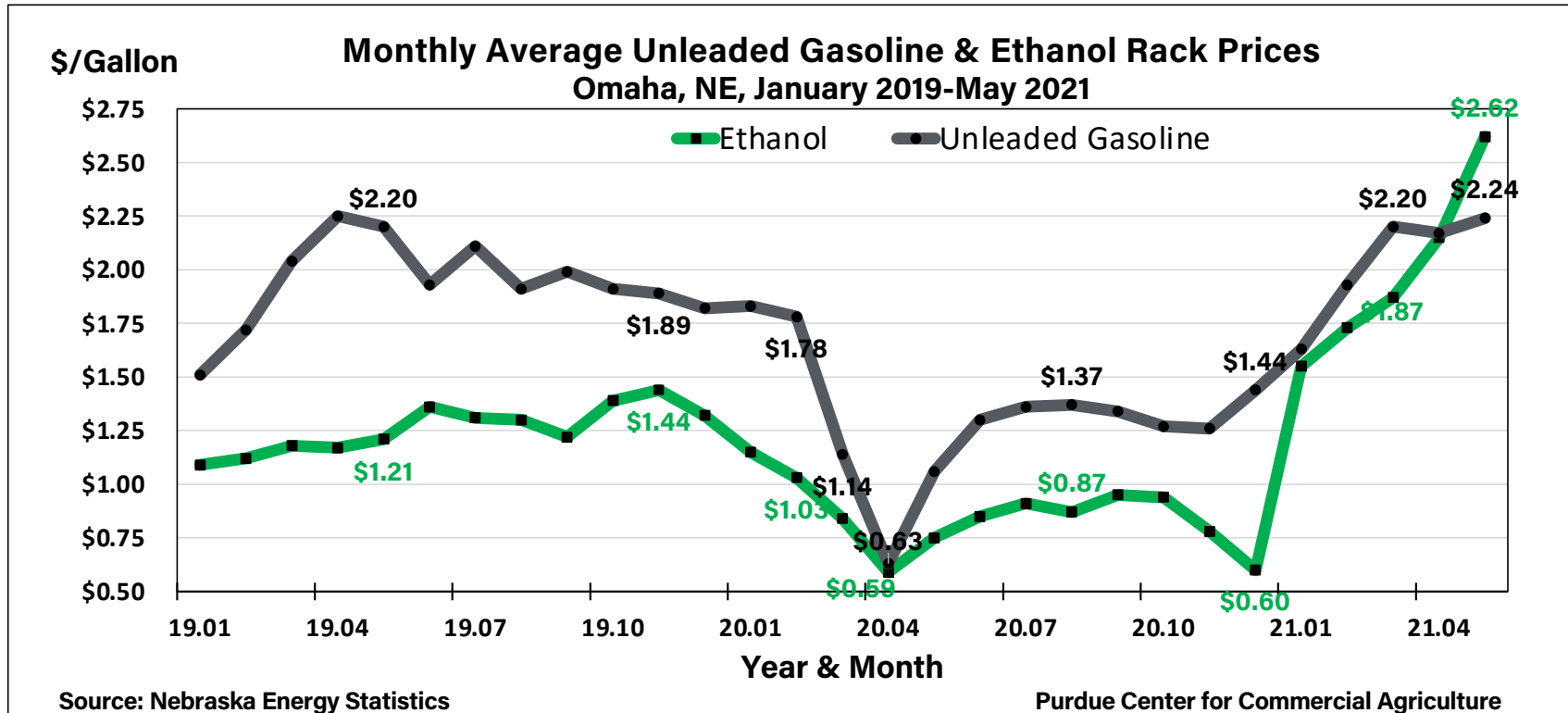
So Far, Total Corn Export Shipments As % of WASDE Forecast Are Still Above 5-Year Average



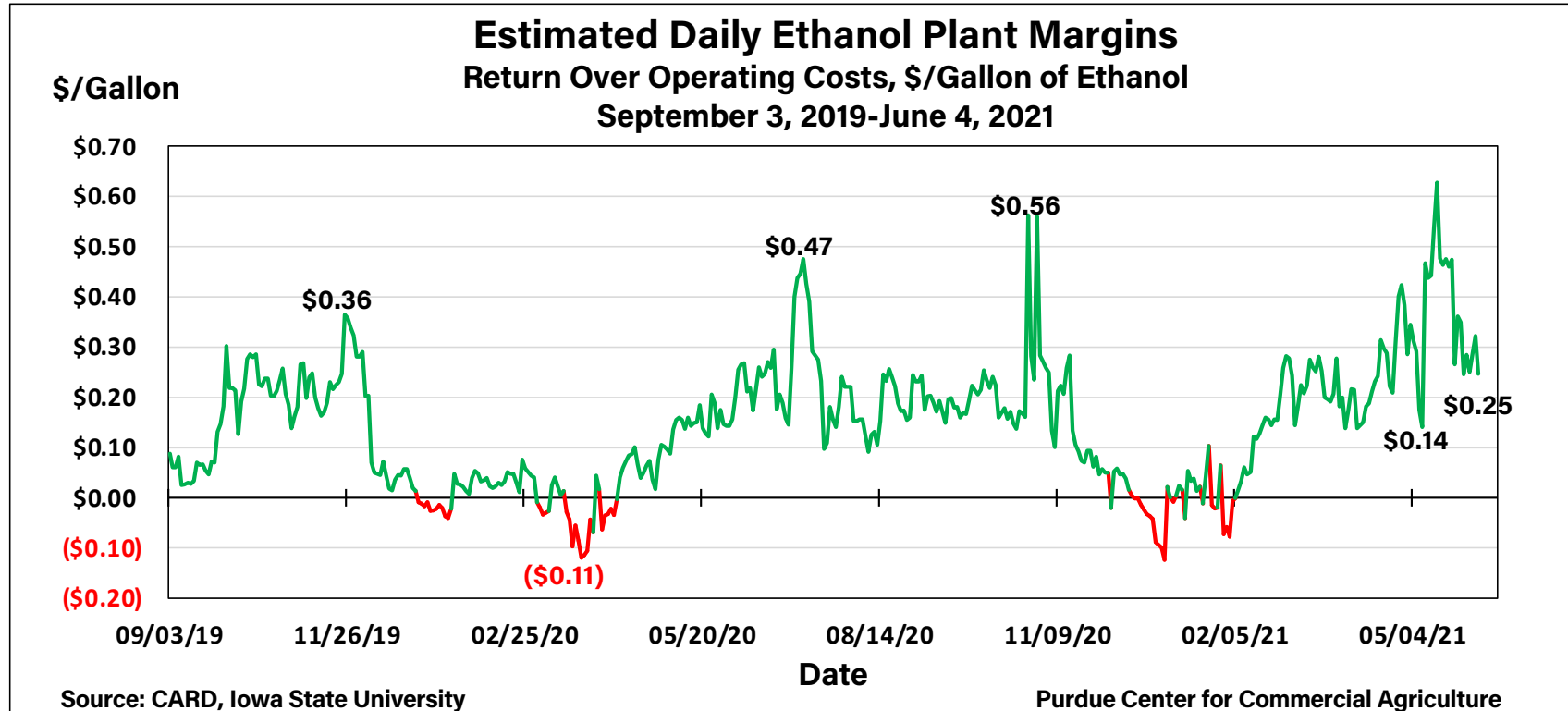
**Total Corn Exports Up 75% This Year, Rise in Exports to China Accounts for 66% of Increase
What Will China Do During the Rest of the Summer?**



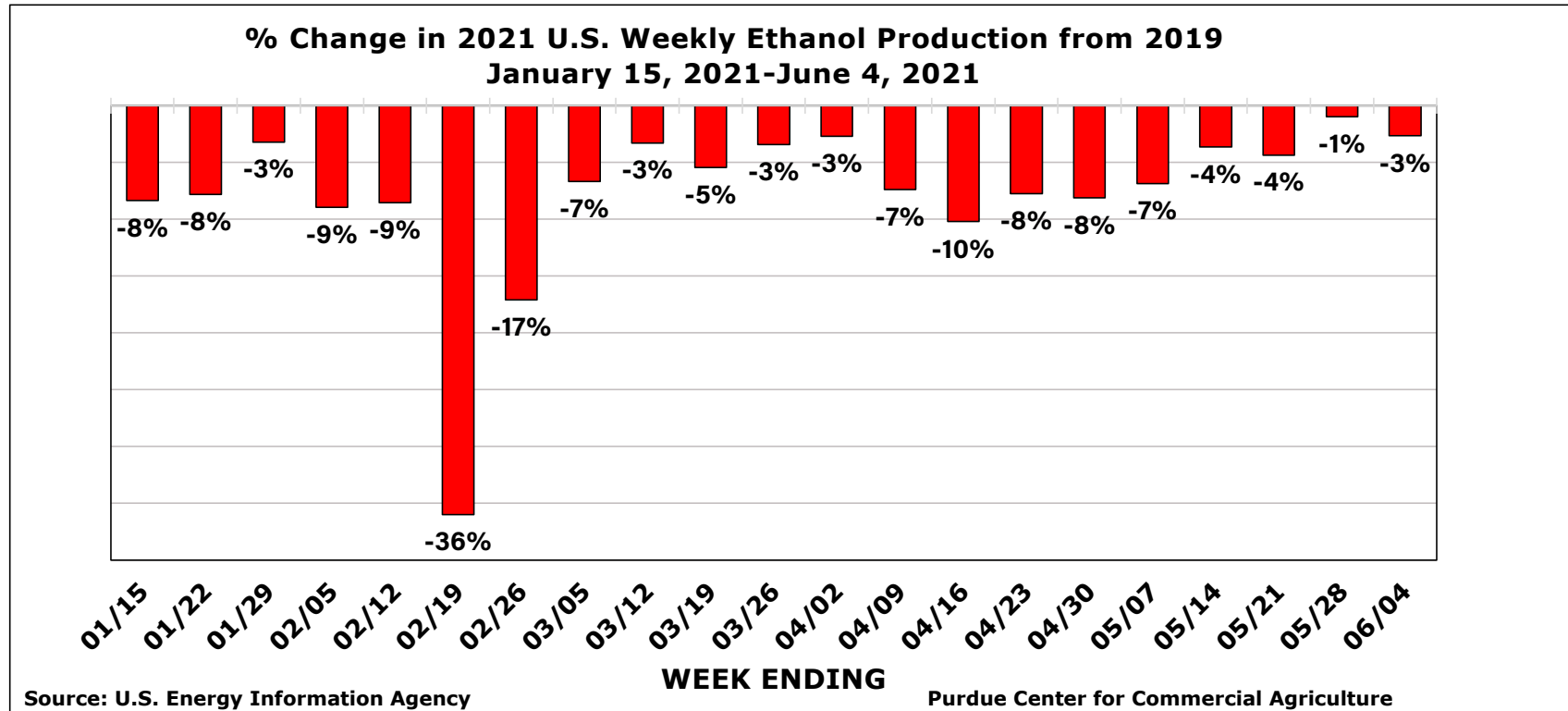
Ethanol Prices Surged on U.S. Travel Rebound



Ethanol Margins Remain Positive Despite Sharp Increase in Corn Prices



Ethanol Production Is Approaching 2019 Levels



***U.S. Corn Crop Conditions Off to a Good Start
But Not Everywhere...MI (56%), MO (57%), ND (42%), & SD (46%) Are Struggling***

Percentage of Corn Ranked Good and Excellent

Week Ending	IN – 5-Year Average	IN - 2021	18 Major States
5/30	64%	74%	76%
6/6	66%	73%	72%
6/13	63%		
6/20	62%		
6/27	59%		
7/4	60%		

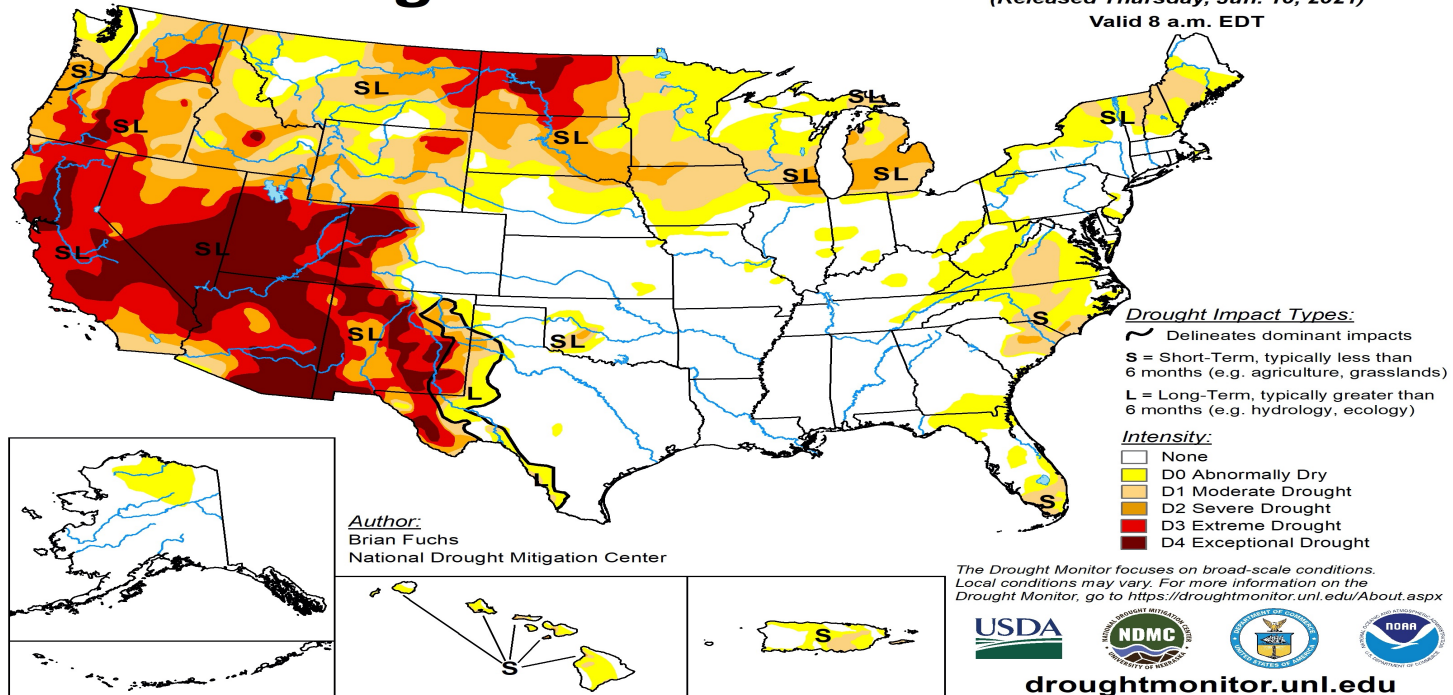


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Drought Monitor Suggests Timely Rains Will Be Needed in NW Corn Belt This Summer

U.S. Drought Monitor

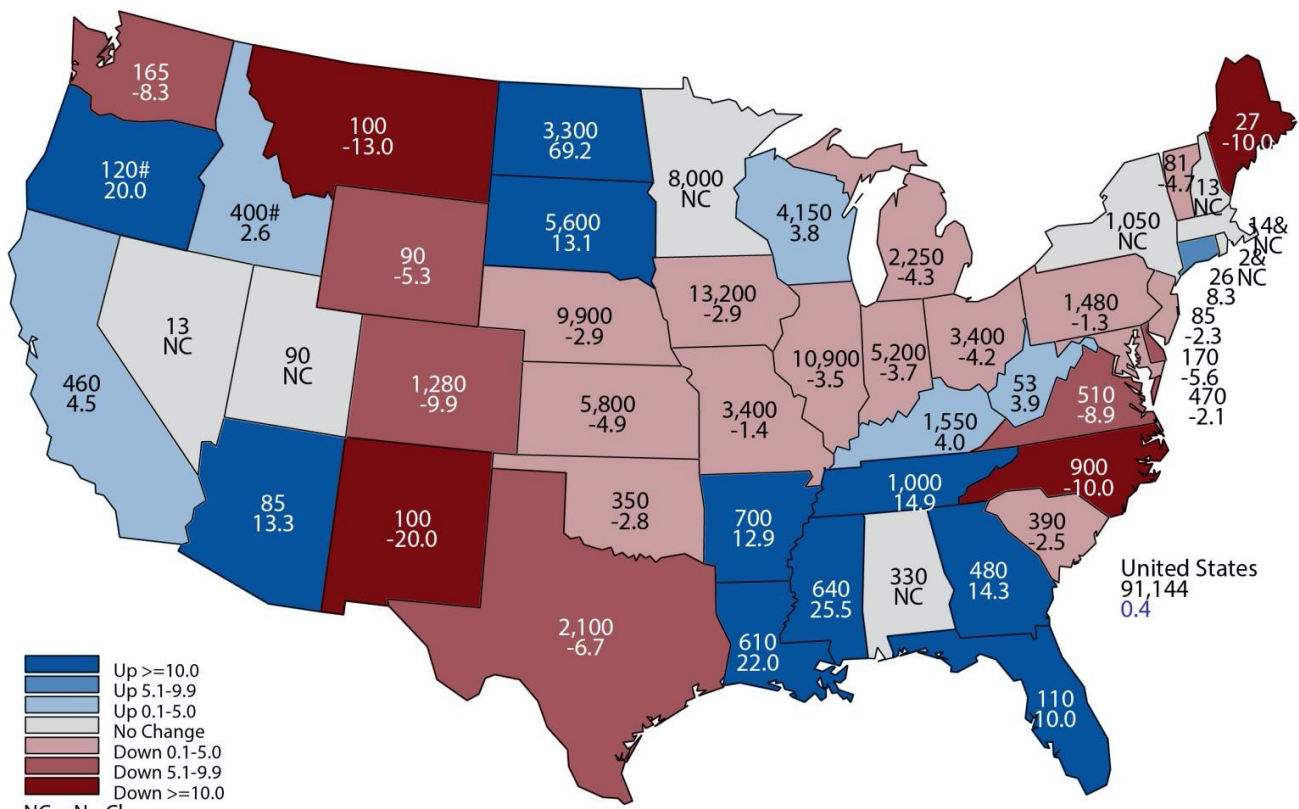
June 8, 2021
 (Released Thursday, Jun. 10, 2021)
 Valid 8 a.m. EDT



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2021 Corn Planting Intentions...How Much Will This Change on June 30th Acreage Report?

Thousand Acres and Percent Change from Previous Year



■ Up >=10.0
■ Up 5.1-9.9
■ Up 0.1-5.0
■ No Change
■ Down 0.1-5.0
■ Down 5.1-9.9
■ Down >=10.0

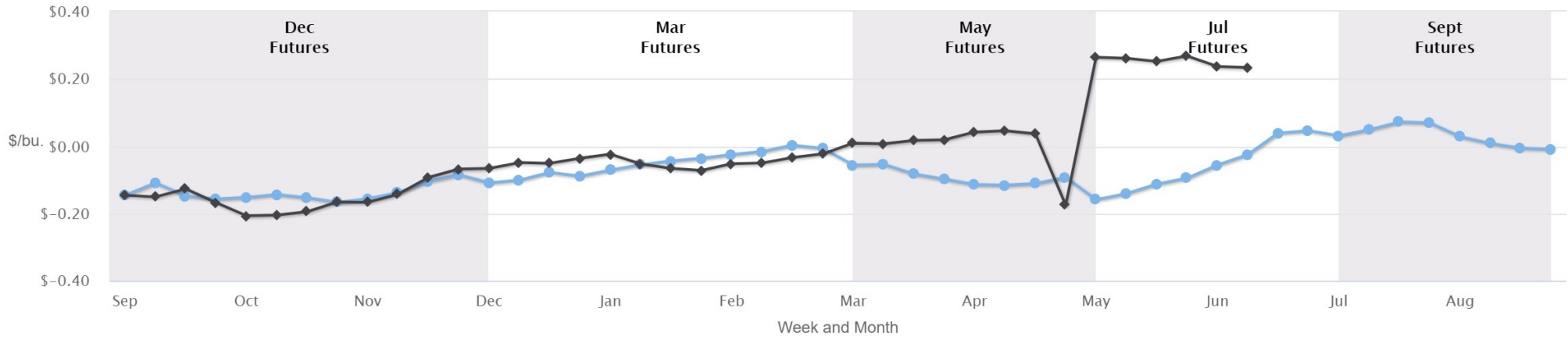
NC = No Change
 # = Record High
 & = Record Low



Corn basis - Central Indiana - 3 year average

Purdue Center for Commercial Agriculture Crop Basis Tool

Corn: IN CENTRAL Region, Nearby Basis, Weekly
 Avg. of Selected Historical Crop Years [2017-2018, 2018-2019, 2019-2020]
 vs. Current Crop Year



—●— Historical Nearby Basis, Avg of Selected Crop Years —◆— 2020-2021 Regional Nearby Basis

<https://www.purdue.edu/commercialag>

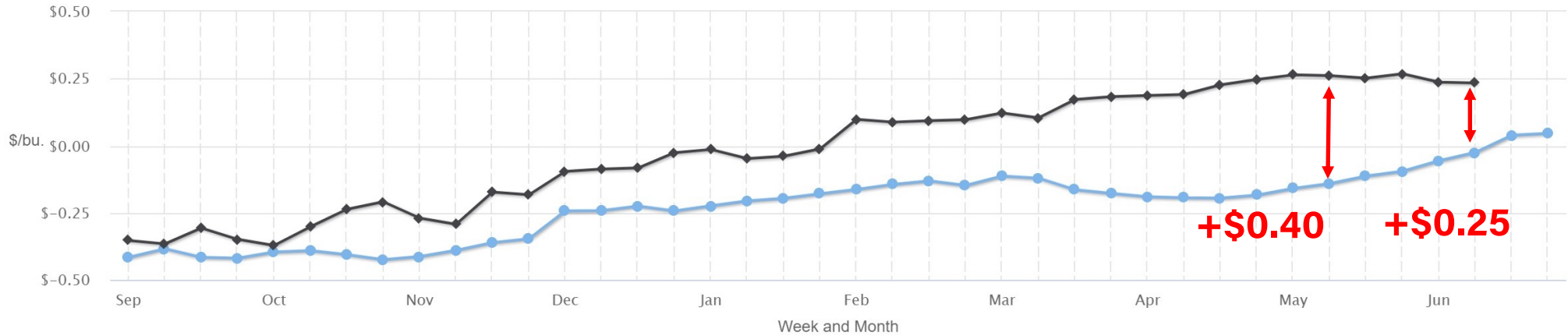


Center for Commercial Agriculture

Corn basis - Central Indiana - 3 year average - July Corn Futures

Purdue Center for Commercial Agriculture Crop Basis Tool

Corn: IN CENTRAL Region, July Contract Basis, Weekly
 Avg. of Selected Historical Crop Years [2017-2018,2018-2019,2019-2020]
 vs. Current Crop Year



◆ Historical July Contract Basis, Avg of Selected Crop Years
 ◆ 2020-2021 Regional July Contract Basis

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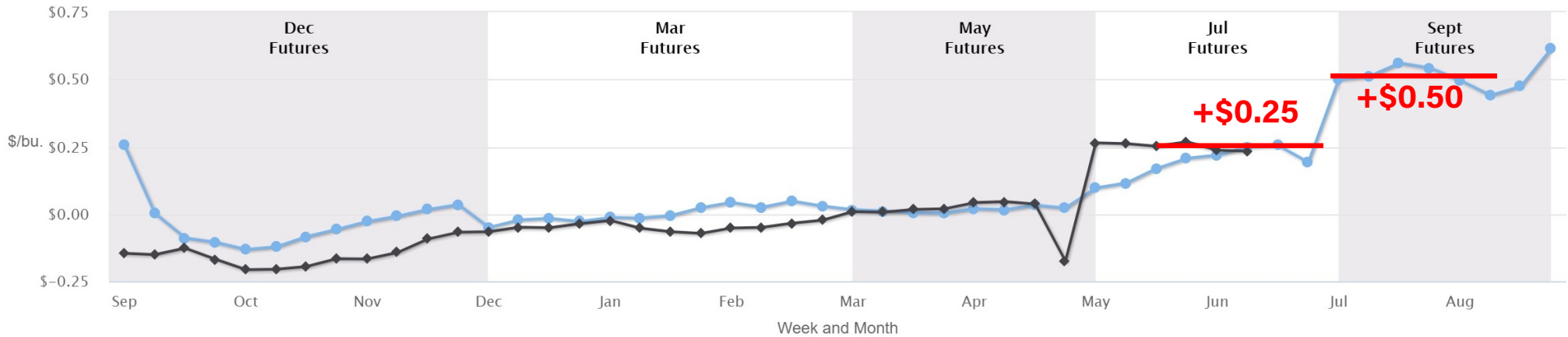


Center for Commercial Agriculture

Corn basis - Central Indiana - 2010, 2011, 2012, and 2013 harvest years

Purdue Center for Commercial Agriculture Crop Basis Tool

Corn: IN CENTRAL Region, Nearby Basis, Weekly
 Avg. of Selected Historical Crop Years [2010-2011, 2011-2012, 2012-2013, 2013-2014]
 vs. Current Crop Year



— Historical Nearby Basis, Avg of Selected Crop Years — 2020-2021 Regional Nearby Basis

<https://www.purdue.edu/commercialag>

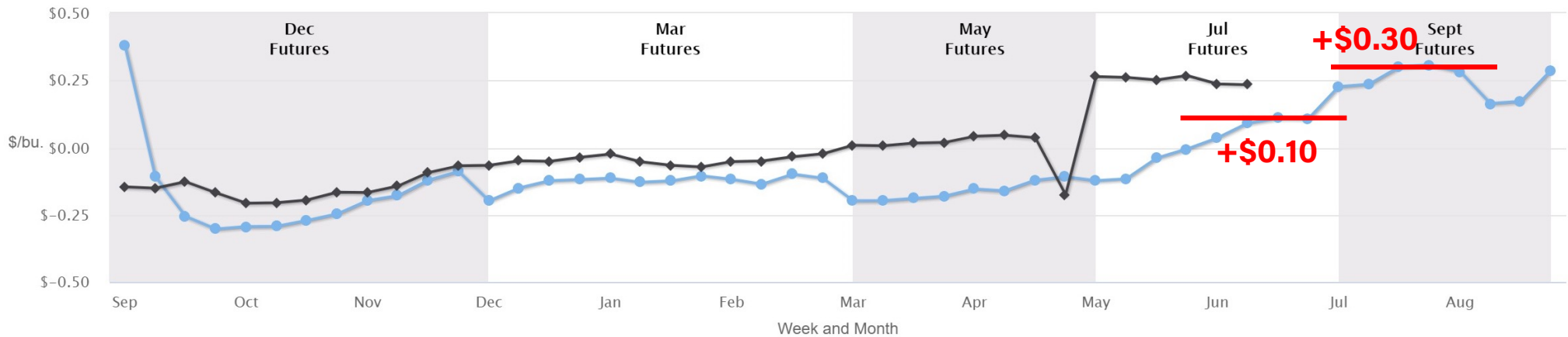


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Corn basis - Central Indiana - 2010 and 2013 harvest years

Purdue Center for Commercial Agriculture Crop Basis Tool

Corn: IN CENTRAL Region, Nearby Basis, Weekly
 Avg. of Selected Historical Crop Years [2010-2011, 2013-2014]
 vs. Current Crop Year



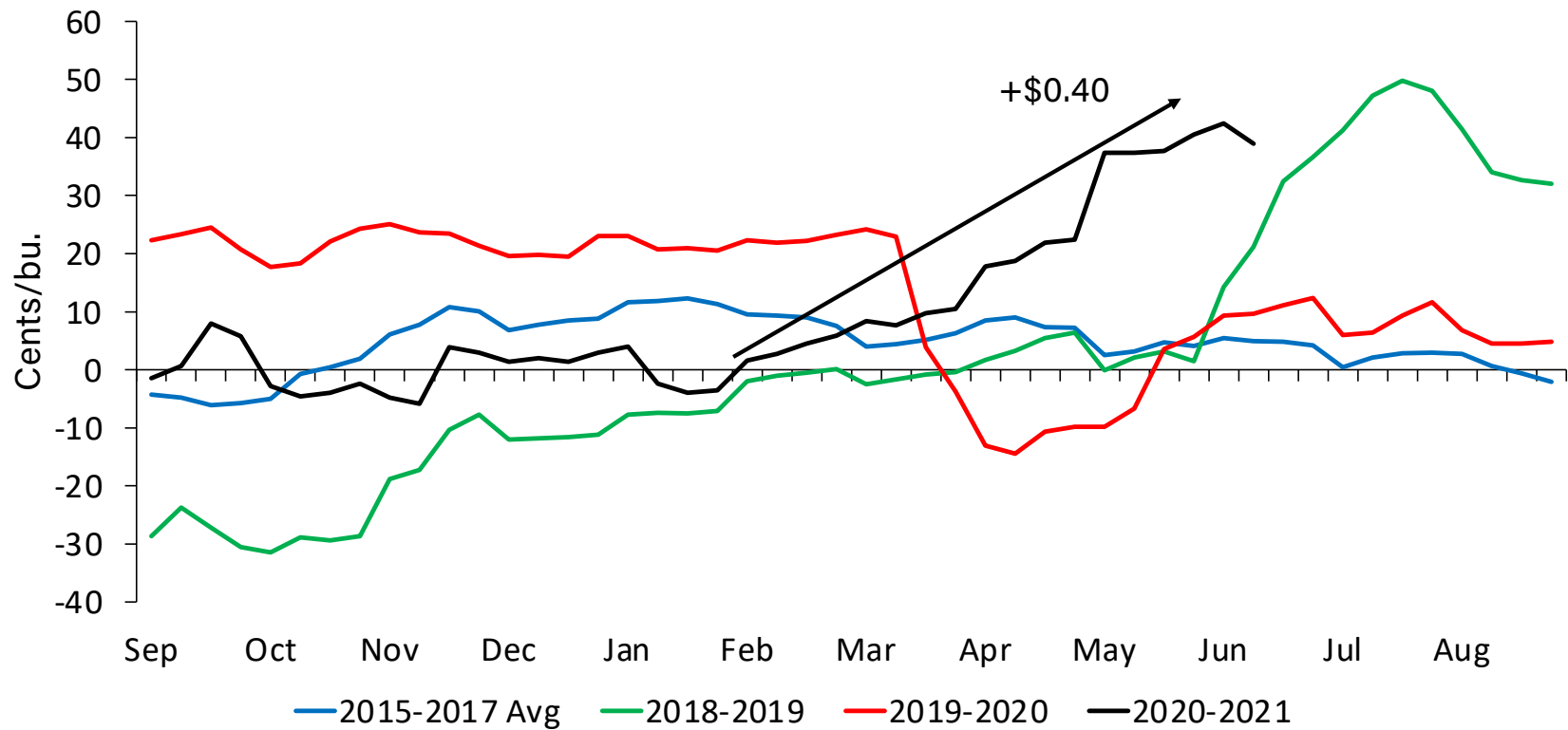
— Historical Nearby Basis, Avg of Selected Crop Years — 2020-2021 Regional Nearby Basis

<https://www.purdue.edu/commercialag>



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Indiana ethanol plant basis

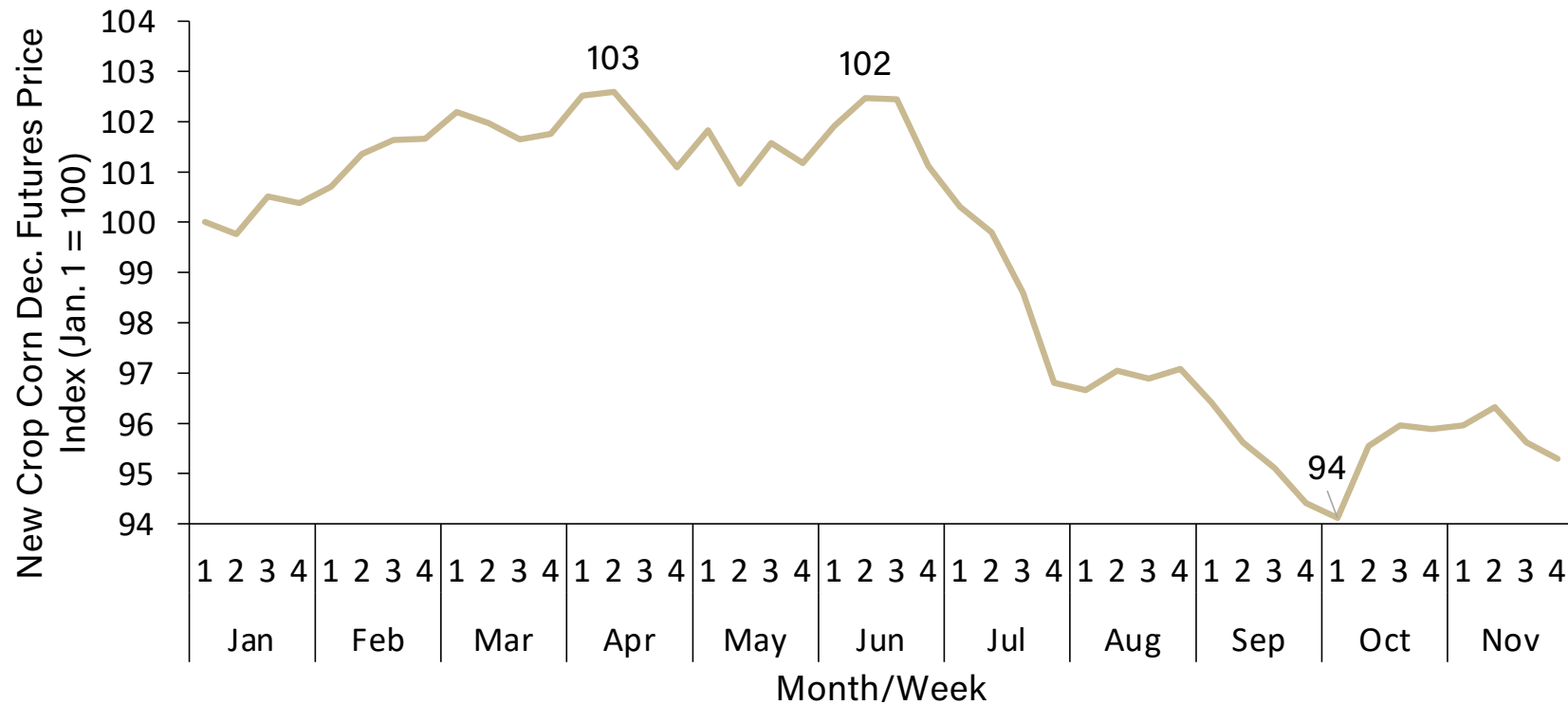


New crop corn opportunities?

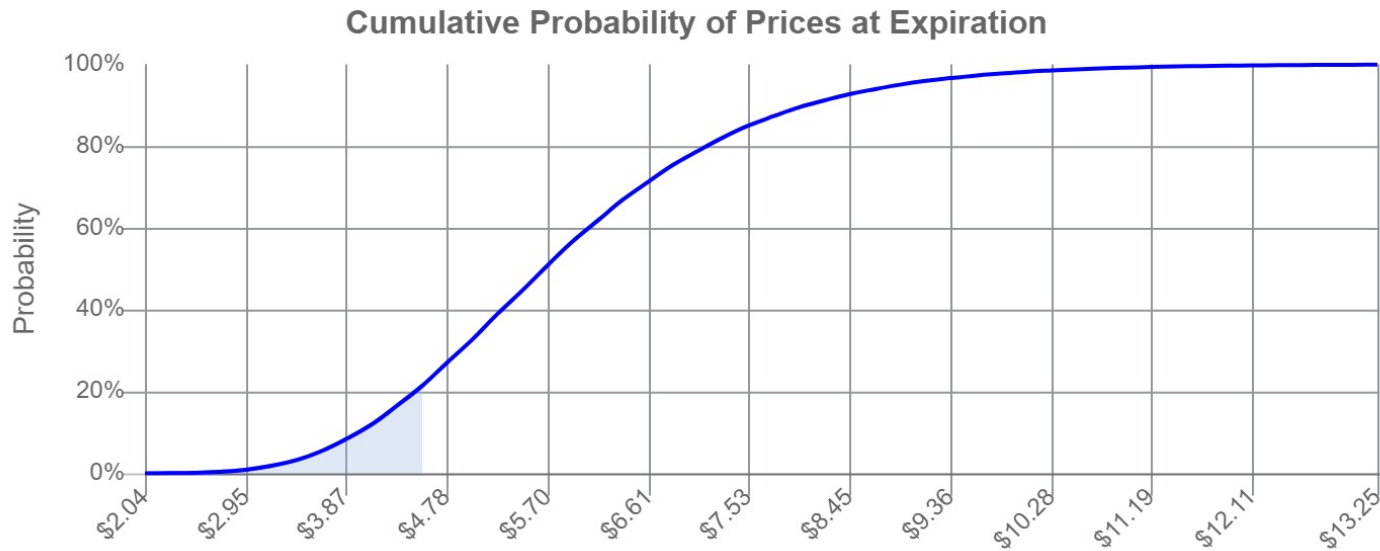
CBOT Dec. '21 Corn futures	\$5.75
<u>Expected corn basis October '21 in Central IN</u>	<u>-\$0.15</u>
Expected harvest cash price	\$5.60/bu.

- Think in terms of risk management
- How can you protect favorable price opportunities while leaving open upside potential?

30-Year Average New Crop Corn Dec. Futures Price Index (Jan. 1 = 100), 1990-2020



farmdoc Price Discovery Tool: Dec. '21 Corn Futures



Source: <https://fd-tools.ncsa.illinois.edu/pricedistribution>

Price at Expiration ▲	Probability Below ▲
\$4.75	26.08%
\$5.00	32.48%
\$5.25	39.09%
\$5.50	45.71%
\$5.75	52.15%
\$6.00	58.26%
\$6.25	63.95%
\$6.50	69.14%
\$6.75	73.79%

26% chance that Dec. '21 corn futures decline more than \$1 between now and expiration.

SOYBEANS - June World Ag Supply & Demand Estimates (WASDE) Highlights

▪ U.S. Soybean 2020 Crop Balance Sheet

- Reduced soybean crush estimate by 15 million bushels
- No change in projected 2020 crop exports
- Carryover increased to 135 m. bushels, **equal to 2.9% of usage (up from 2.6% projected in May)**
- No change in U.S. 2020 MYA Soybean Price, still projected to be \$11.25/bu.

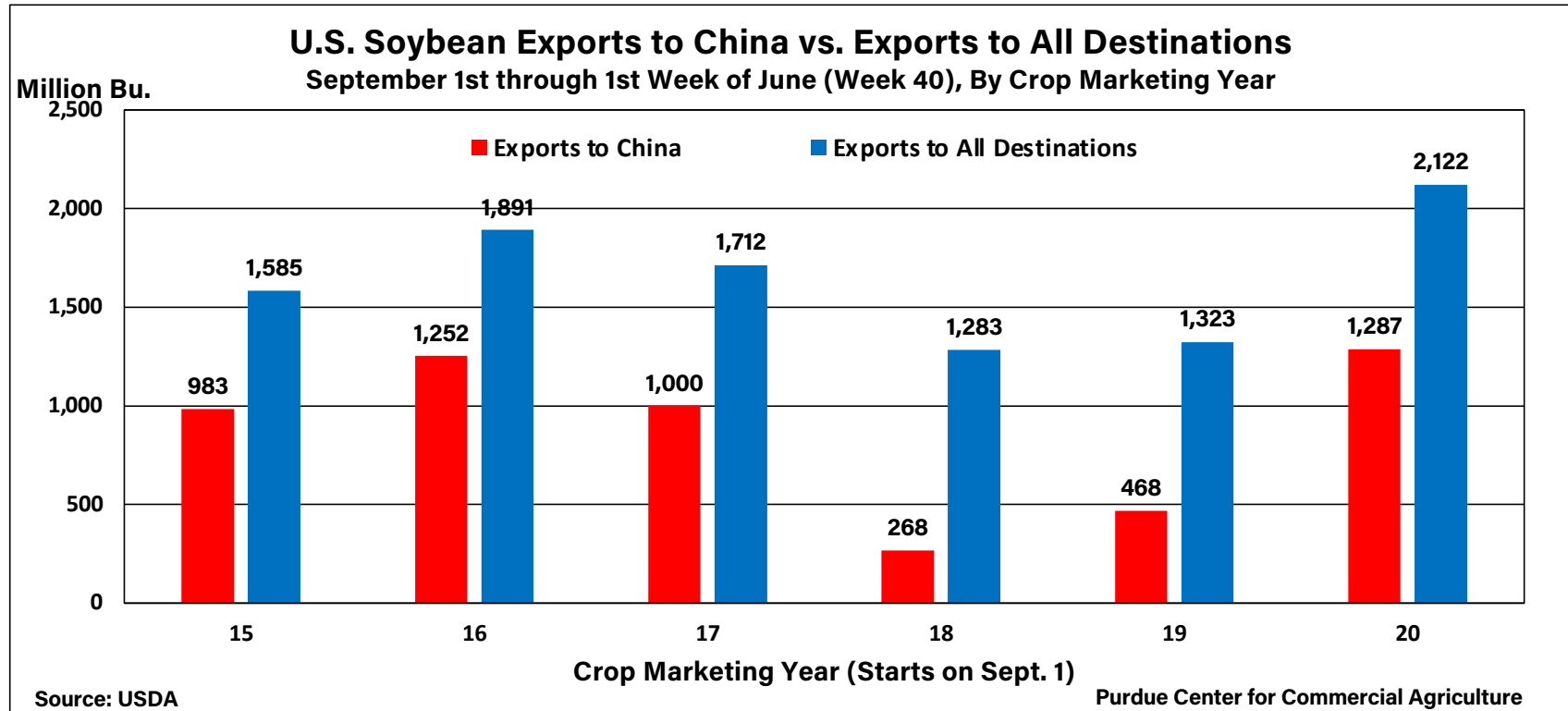
▪ U.S. Soybean 2021 Crop Balance Sheet

- Expected soybean production = 4.4 billion bushels, up 7% from 2020
- Projected soybean crush = 2.225 billion bu., up 2% from 2020
- Projecting strong growth in Biofuel usage of soybean oil, 26% higher than in 2020 marketing year
- Projected exports = 2.08 billion bu., 9% below 2020
- Ending stocks increased to 155 million bu., 20 million bu. higher than in 2020
- Ending stocks in 2021 = about 3% of usage, up slightly from 2.9% in 2020
- No change in US 2021 MYA Soybean Price projection, = \$13.85

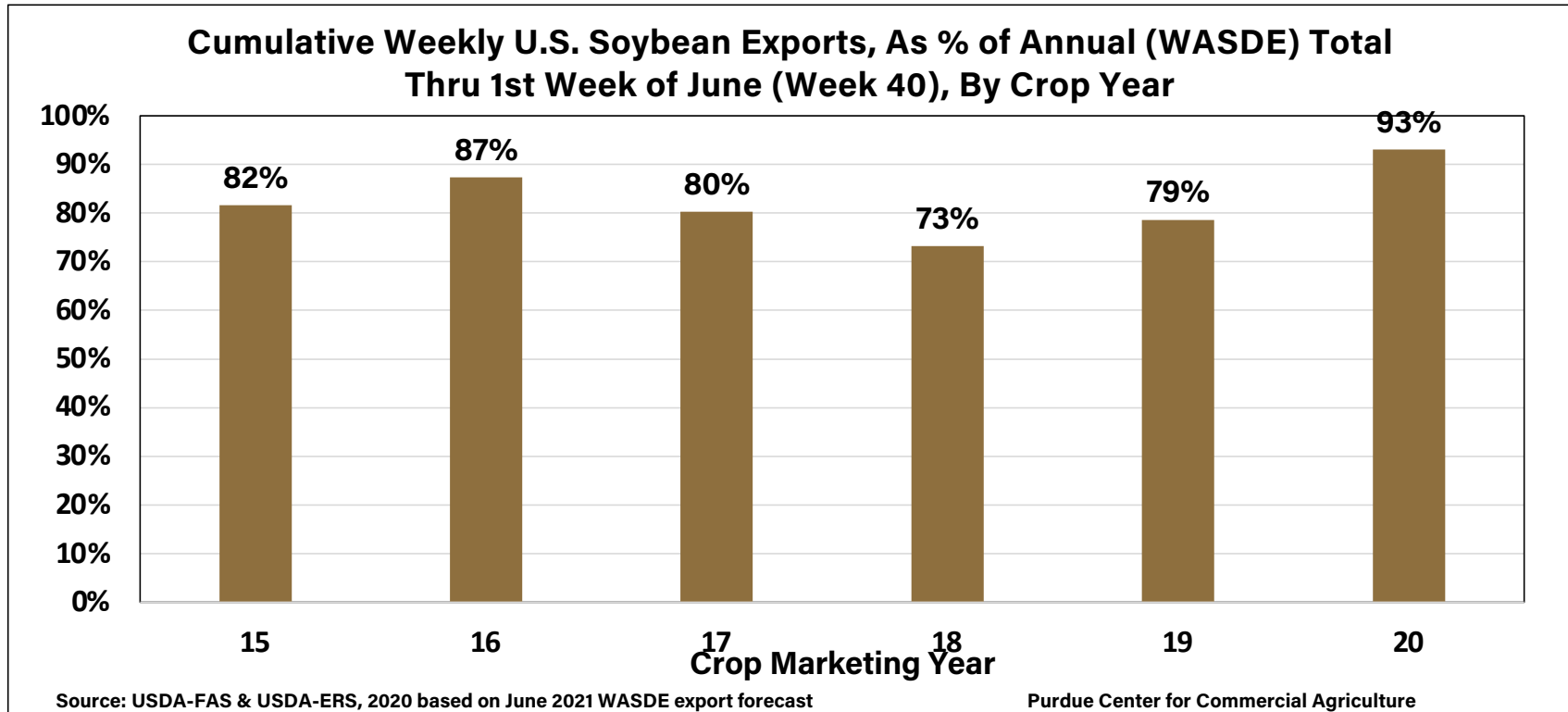
▪ World

- Increased Brazil's current soybean harvest by 37 million bu.
- No change in estimate of Brazil's 2022 harvest, but it is projected to be 260 million bushels larger than this year's crop
- No change in estimate of China's soybean imports from all sources

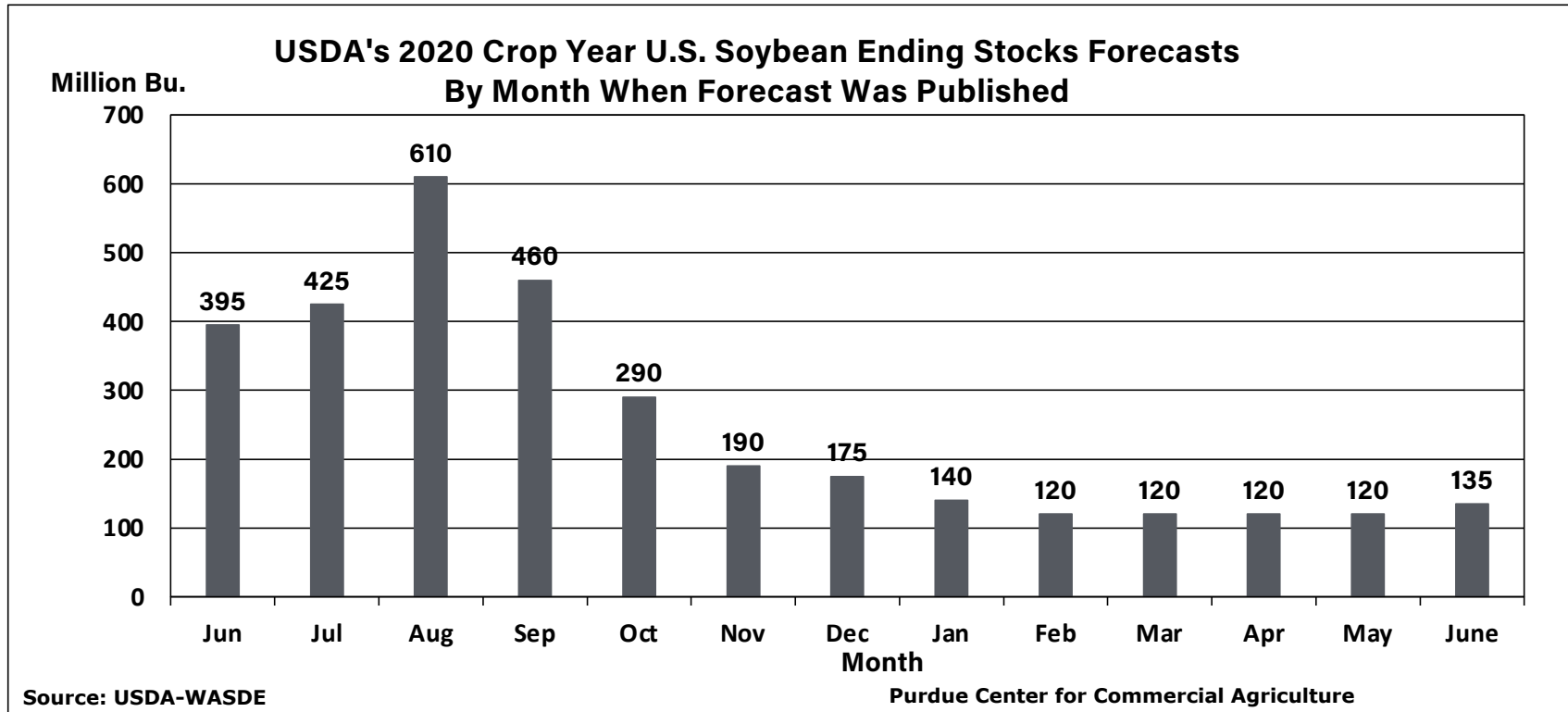
Recent Soybean Exports Have Dropped Off Sharply...What Will Happen In Late Summer?



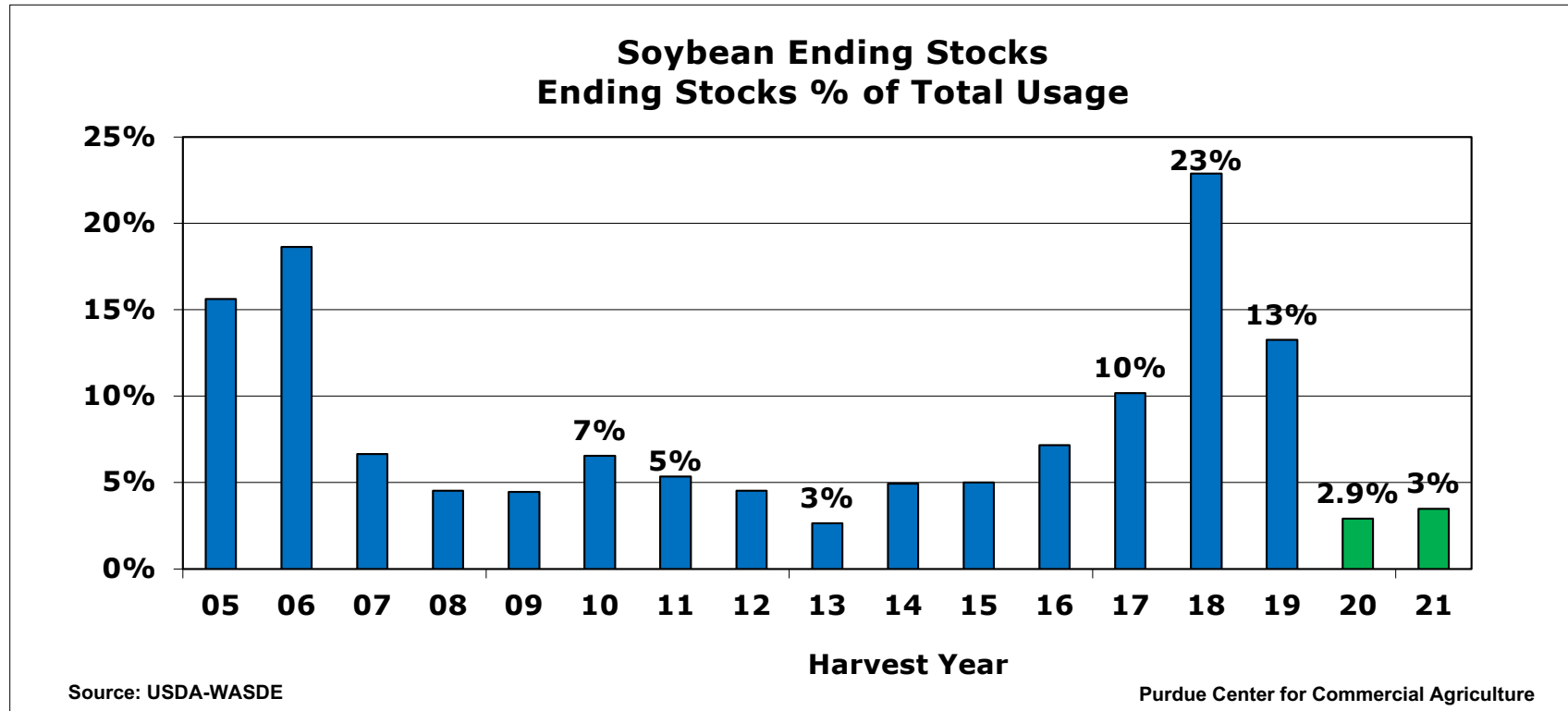
*YTD Weekly Soybean Export Total Equals 93% of USDA's June WASDE Forecast
But Only Picked Up 2% During May...Final Outcome Will Depend on Late Summer*



USDA Pushed Up 2020 Ending Stocks Estimate by 15 Million Bushels
1st Increase in Estimated Carryover Stocks Since Last August

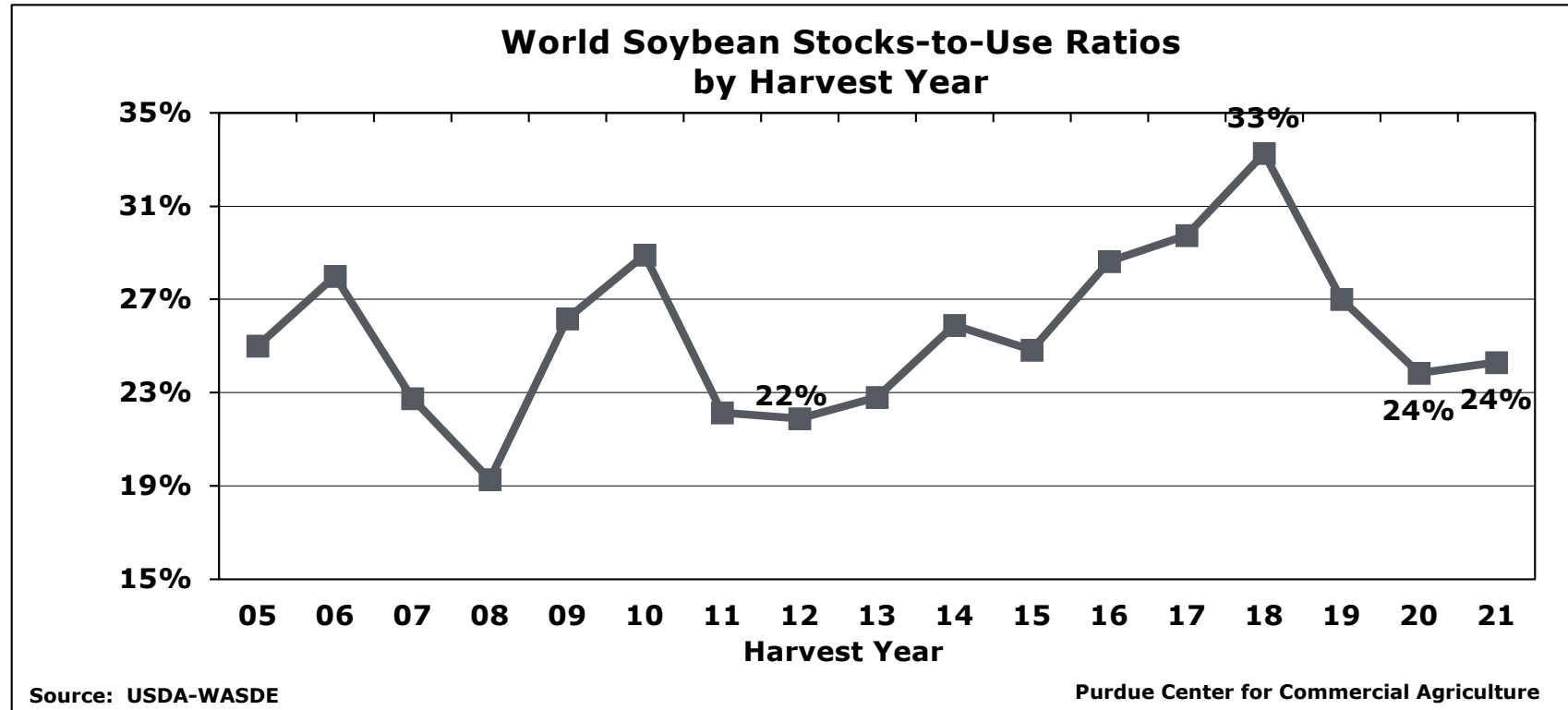


Soybean Ending Stocks for 2021 Will Still Be Tight



2020 World Carryover Soybean Stocks Up 1% vs. May Estimate

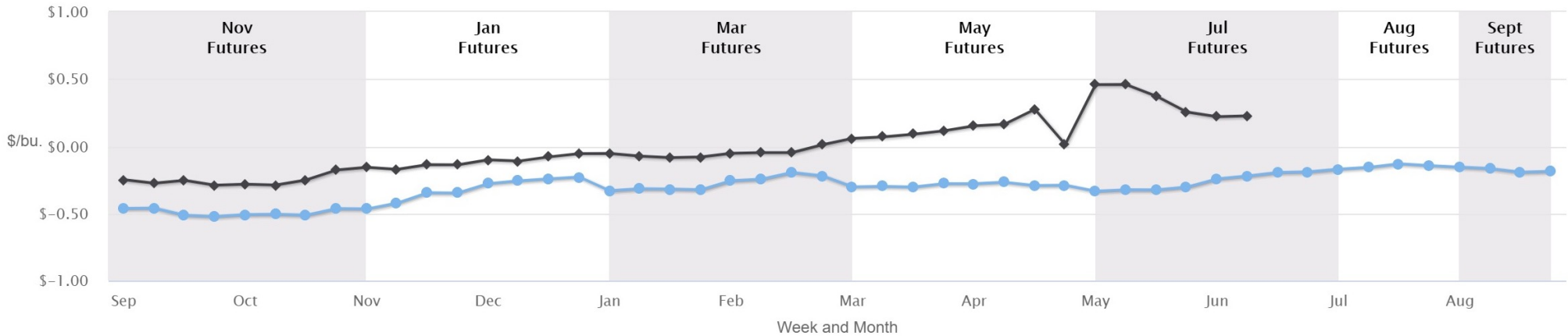
2021 Projection Is Only Slightly Higher than in 2011-2013 Time Frame



Soybean basis - Central Indiana - 2 year average

Purdue Center for Commercial Agriculture Crop Basis Tool

Soybeans: IN CENTRAL Region, Nearby Basis, Weekly
 Avg. of Selected Historical Crop Years [2018-2019, 2019-2020]
 vs. Current Crop Year



● Historical Nearby Basis, Avg of Selected Crop Years ◆ 2020-2021 Regional Nearby Basis

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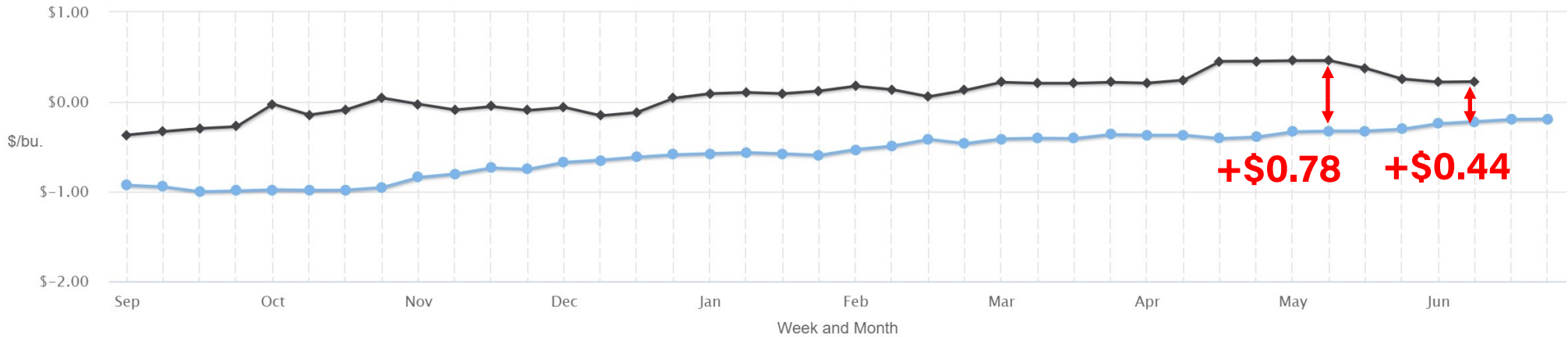


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Soybean basis - Central Indiana - 2 year average - July Soybean Futures

Purdue Center for Commercial Agriculture Crop Basis Tool

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



◆ Historical July Contract Basis, Avg of Selected Crop Years
 ◆ 2020-2021 Regional July Contract Basis

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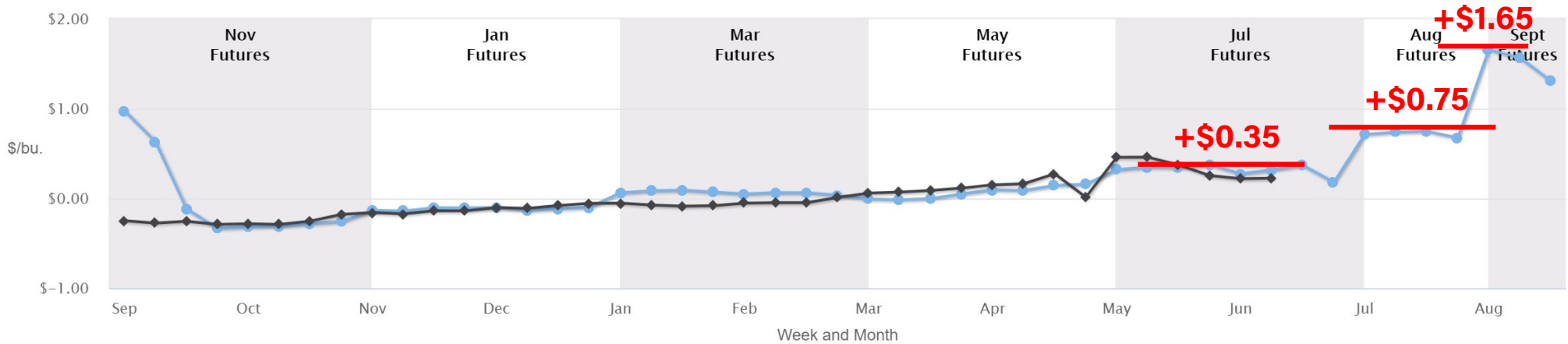


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Soybean basis - Central Indiana - 2013 harvest year

Purdue Center for Commercial Agriculture Crop Basis Tool

Soybeans: IN CENTRAL Region, Nearby Basis, Weekly
 Avg. of Selected Historical Crop Years [2013-2014]
 vs. Current Crop Year



● Historical Nearby Basis, Avg of Selected Crop Years ◆ 2020-2021 Regional Nearby Basis

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NOV. 2021 SOYBEAN FUTURES PRICES



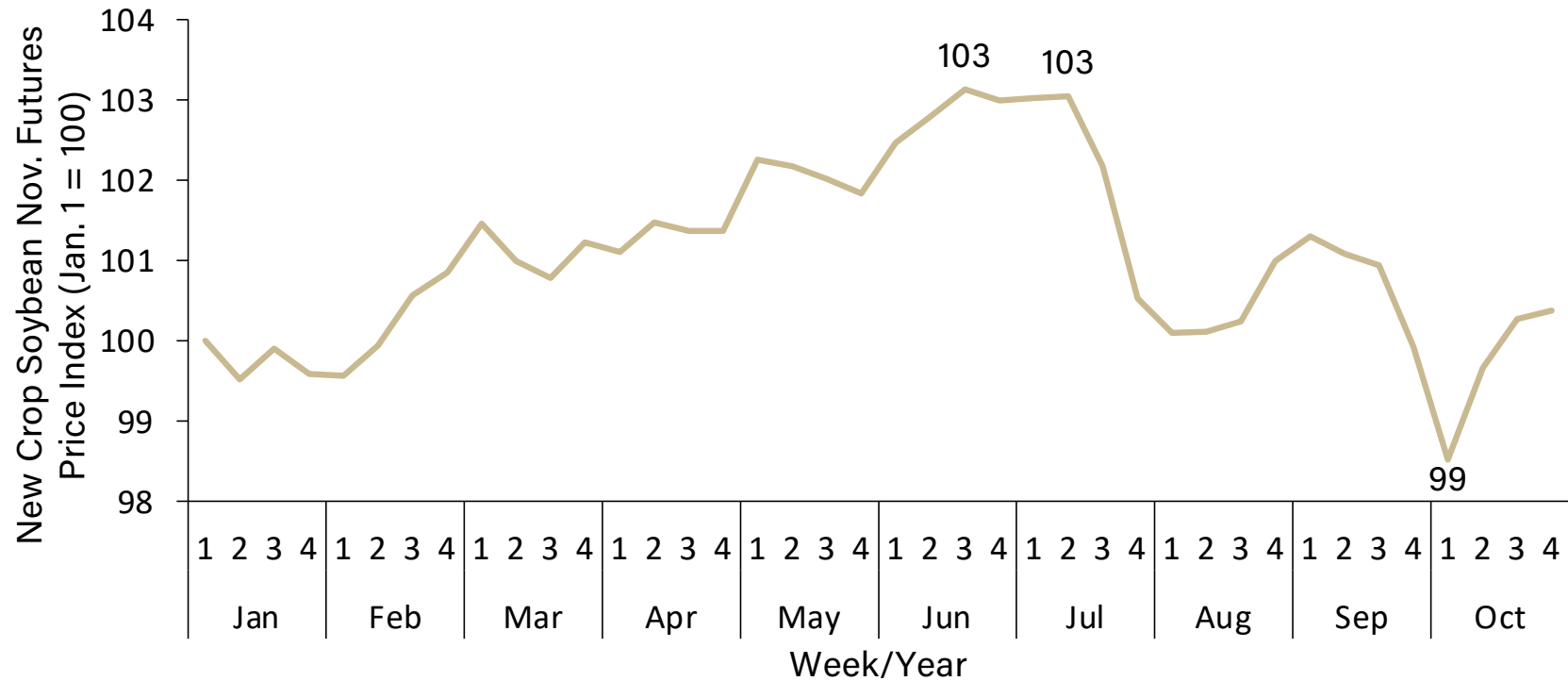
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New crop soybean opportunities?

CBOT Nov. '21 Soybean futures	\$13.85
<u>Expected soybean basis October '21 in Central IN</u>	<u>-\$0.30</u>
Expected harvest cash price	\$13.55/bu.

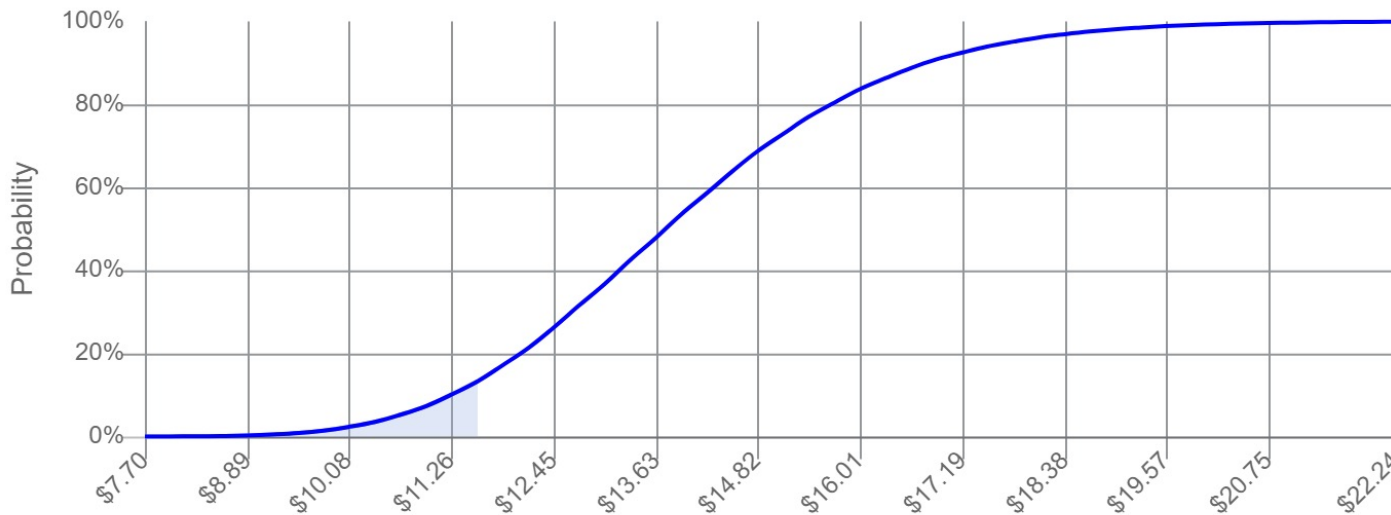
- Think in terms of risk management
- How can you protect favorable price opportunities while leaving open upside potential?

30-Year Average New Crop Nov. Soybean Futures Price Index (Jan. 1 = 100), 1990-2020



farmdoc Price Discovery Tool: Nov. '21 Soybean Futures

Cumulative Probability of Prices at Expiration



Source: <https://fd-tools.ncsa.illinois.edu/pricedistribution>

17% chance that Nov. '21 soybean futures decline more than \$2 between now and expiration.

Price at Expiration	Probability Below
\$12.75	31.49%
\$13.00	36.04%
\$13.25	40.71%
\$13.50	45.43%
\$13.75	50.12%
\$14.00	54.72%
\$14.25	59.18%
\$14.50	63.46%
\$14.75	67.50%

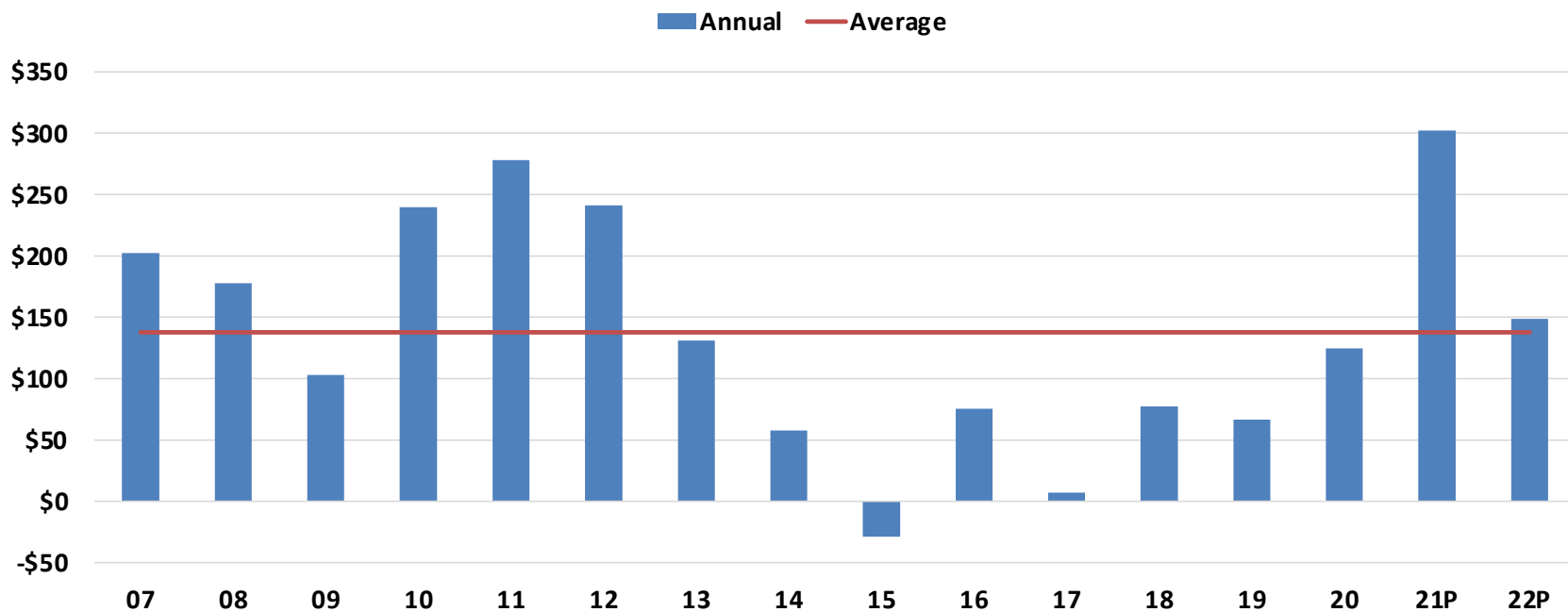
***U.S. Soybean Crop Conditions Not Starting Off As Well As Corn
Good to Excellent Ratings Are Just 25% (ND) & 45% (SD)***

Percentage of Soybeans Ranked Good and Excellent

Week Ending	IN – 5-Year Average	IN - 2021	18 Major States
6/6	72%	74%	67%
6/13	67%		
6/20	66%		
6/27	59%		
7/4	59%		

Net Farm Income per Acre in 2021 is Projected to be Substantially Higher than the Average Since 2007

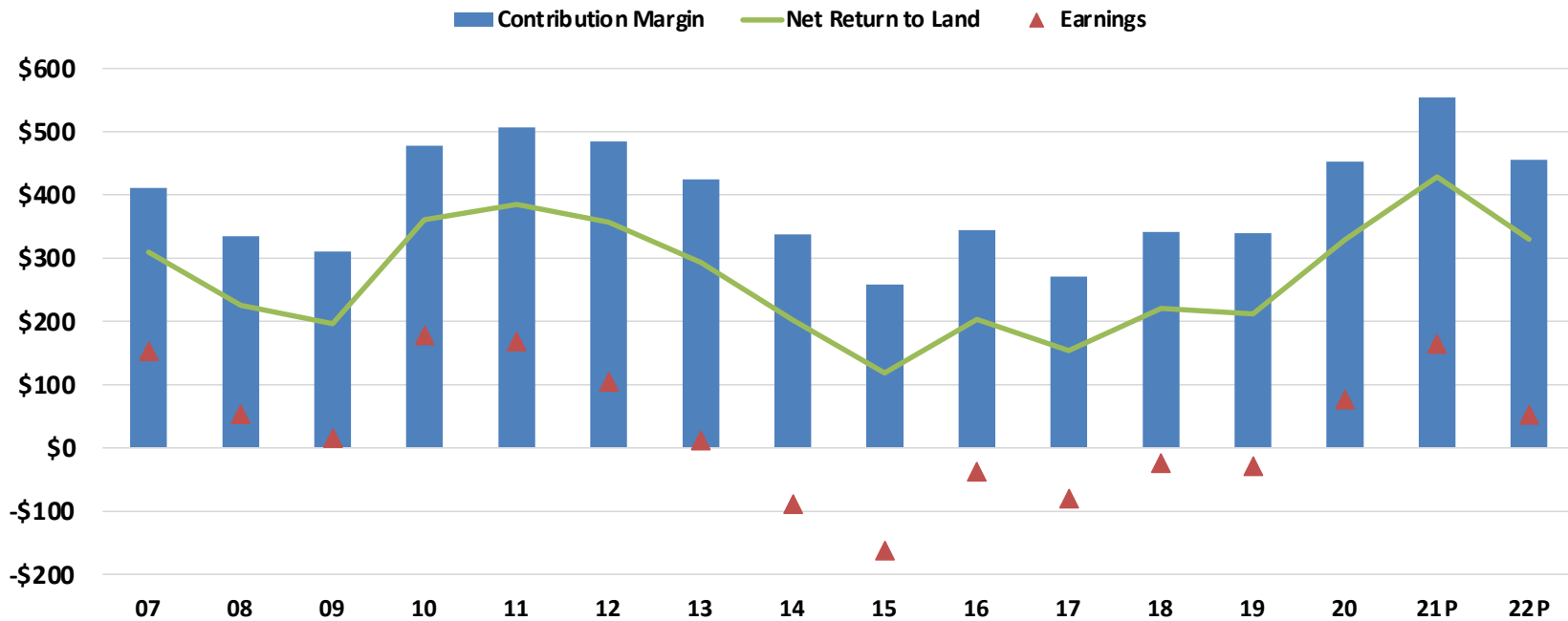
Net Farm Income, Corn/Soybean Rotation (\$ per Acre)
West Central Indiana Case Farm



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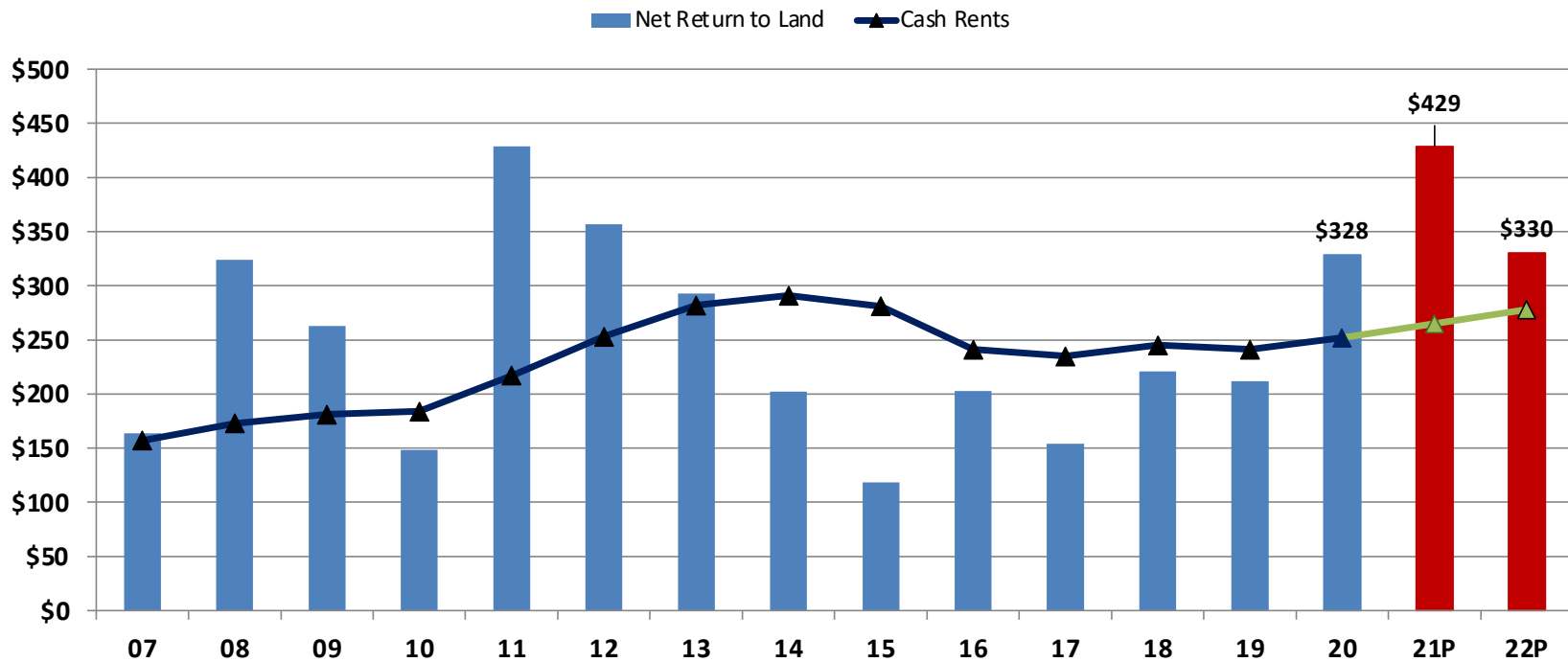
Economic Profit (Earnings) > 0; 2007 to 2013 and 2020
Projected Economic Profit > 0 in 2021 and 2022

**Historical and Projected Net Crop Returns per Acre
 Corn/Soybean Rotation, West Central Indiana Case Farm**



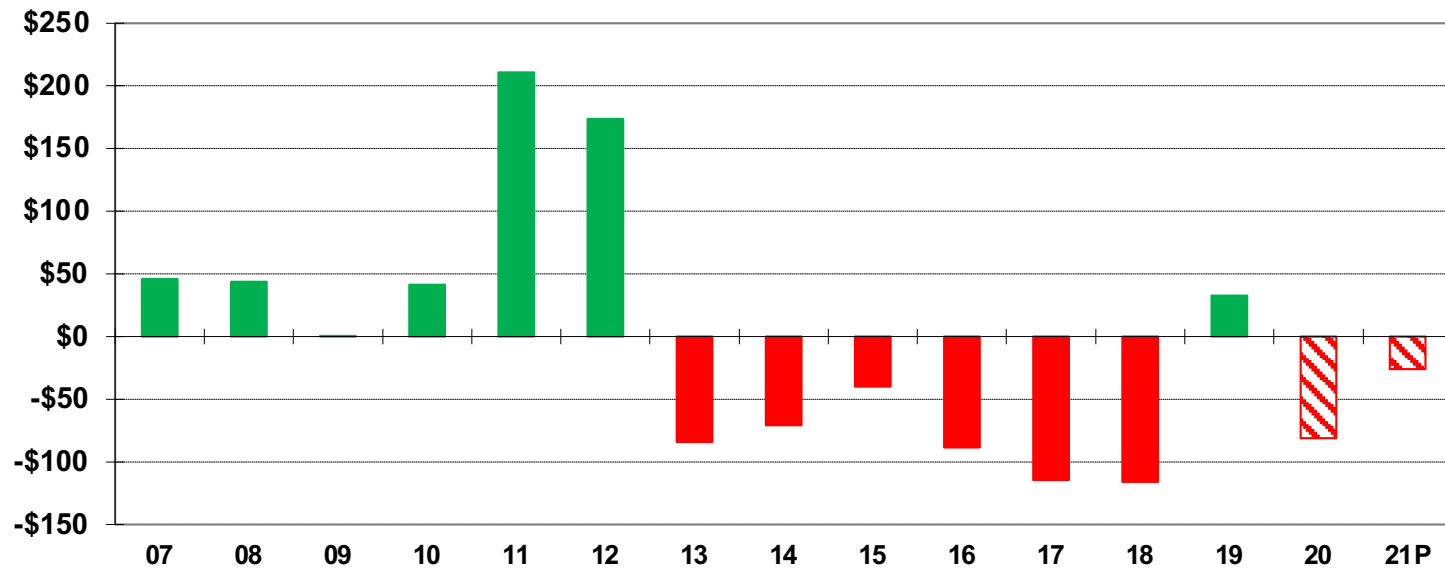
Strong Upward Pressure on Cash Rents

Cash Rent and Net Return to Land, West Central Indiana



Net Return Prospects for Corn and Soybeans for 2021 Were Similar
April 2021 Projections

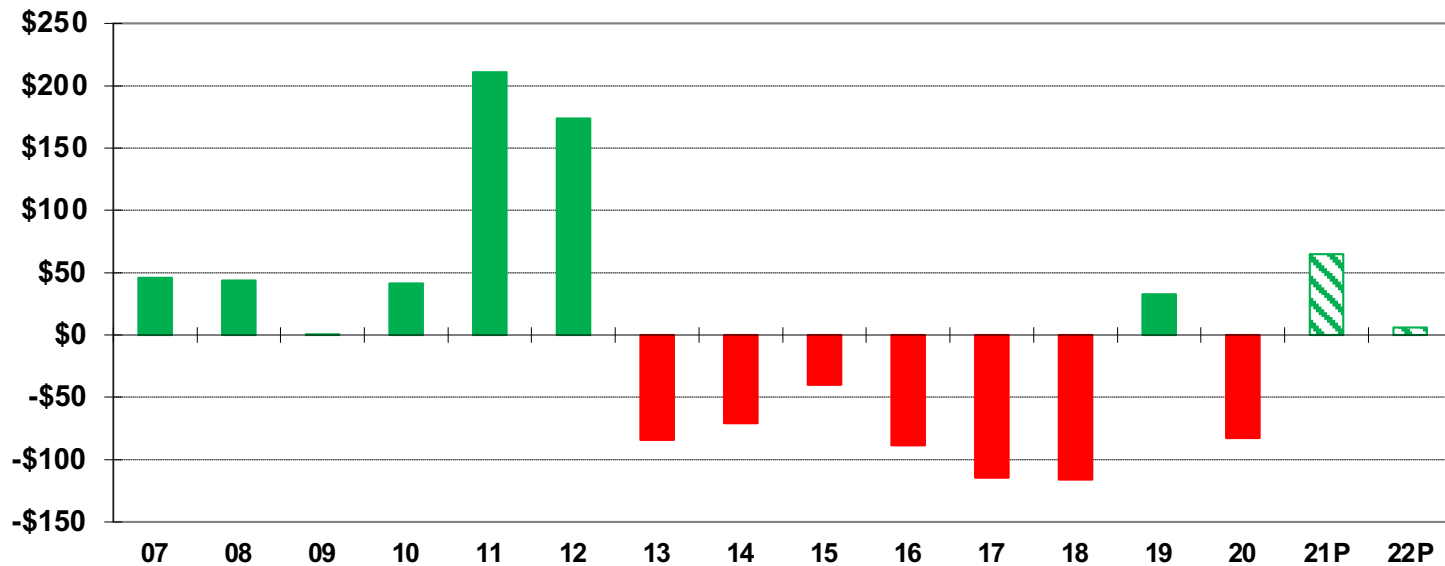
**Difference in Earnings per Acre
West Central Indiana (Corn Minus Soybeans)**



Net Return Prospects for Corn and Soybeans for 2022 Are Similar

June 2021 Projections

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

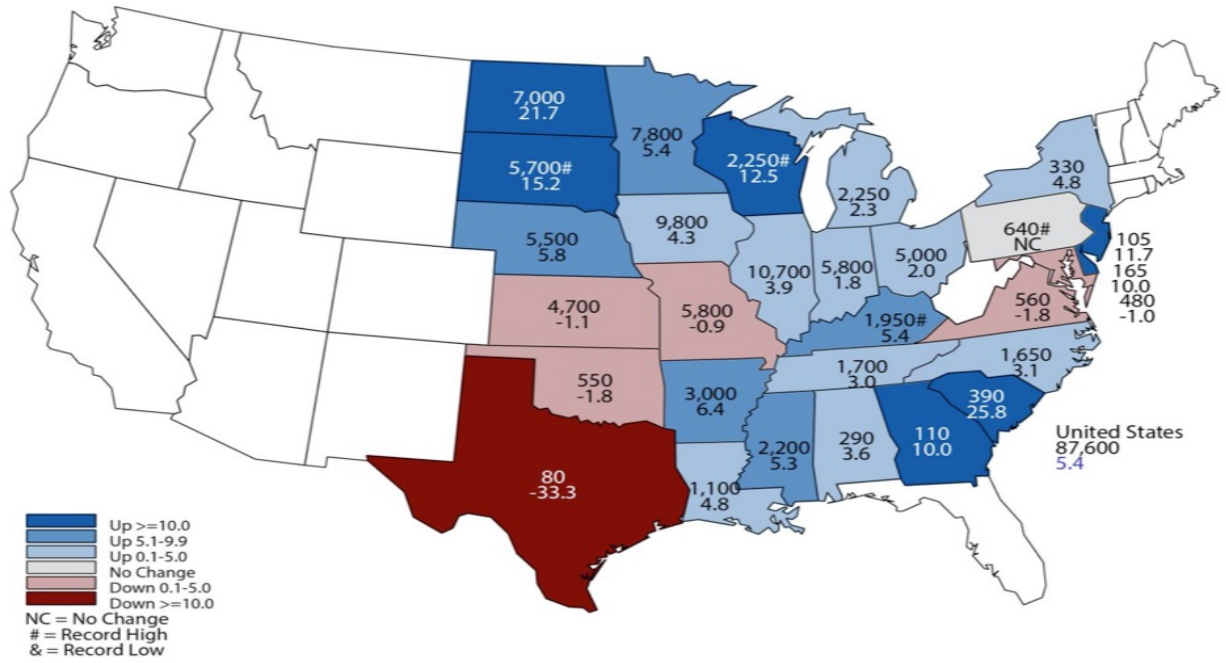


2021 Prospective Soybean Planted Acreage...How Much Will This Change on the June 30th Acreage Report?

14.5% of
2021
intended
soybean
acreage is
in the
Dakota's



2021 Soybean Planted Acreage
Thousand Acres and Percent Change from Previous Year



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6/14/21



MONTHLY OUTLOOK

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NEXT WEBINAR:

Wednesday, July 14, 2021

Purdue Commercial AgCast podcast
following release of USDA's ***Acreage***
report on June 30th

Details Will Be Available at
[purdue.edu/commercialag](https://www.purdue.edu/commercialag)



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