USDA’s *Acreage* report revised planted acreage to 92 million acres down from 97 million acres on March report.

Although lower than pre-release expectations, 2020 acreage is up 2.3 million acres compared to last year.
USDA Balance Sheet Relying on Trend Yield of 178.5 Bu/acre
Actual Yield Still Weather Dependent

U.S. Corn Yield

Source: USDA WASDE

Purdue Center for Commercial Agriculture
Corn Crop Positioned for Trend or Above Trend Yield in 2020
Weather the Remainder of July?
Trend Yield in 2020 Would Push U.S. Corn Production Back Up to 15 Billion Bushels
But That’s 1 Billion Less Than Expected When Planting Intentions Released

Above trend yield would set a new production record

Total U.S. Corn Production

Source: USDA-WASDE
Purdue Center for Commercial Agriculture
USDA Reduced 2019 Ethanol Usage
But Remains Optimistic About Ethanol Demand Recovery During 2020 Marketing Year

![Graph showing U.S. Corn Used for Ethanol from 2005 to 2020]

Source: USDA

Purdue Center for Commercial Agriculture
Gasoline & Ethanol Prices Improved Through June

Monthly Average Unleaded Gasoline & Ethanol Rack Prices
Omaha, NE, January 2019-June 2020

Source: Taheripour & Mintert, 2020; Nebraska Energy Statistics
Purdue Center for Commercial Agriculture
And Ethanol Margins Are Much Improved Since Late March But Appear to Have Stalled at Less than $0.30/gallon

---

**Estimated Daily Ethanol Plant Margins**

*Return Over Operating Costs, $/Gallon of Ethanol*

*September 3, 2019-July 2, 2020*

- **Source:** CARD, Iowa State University
- **Source:** Purdue Center for Commercial Agriculture
Improvement in Ethanol Demand Appears to Have Slowed Down

Source: U.S. Energy Information Agency

Purdue Center for Commercial Agriculture
USDA Forecasts 20% Increase in Corn Exports During 2020 Marketing Year

![Bar chart showing U.S. Corn Exports from 2005 to 2020. The chart indicates a forecasted 20% increase in corn exports for the 2020 marketing year.](chart.png)
Along With a 5% Increase In Feed Usage
But a Surprisingly Large Corn Stocks Estimate Suggests 2019 Feed Usage Was Disappointing

Source: USDA WASDE
U.S. Corn Ending Stock Rising in 2020
But Less Than Expected When Planting Intentions Announced

Corn Price vs. U.S. Ending Stocks
Ending Stocks as % of Total Usage

corn Ending Stocks
Corn Avg Farm Price

Source: USDA WASDE
Ethanol Production Increases Have Supported Seasonal Recovery in Corn Basis

But Recovery To The Strong Basis Levels of Last Fall & Winter Not Expected
Looking Ahead to the 2020 Corn Crop

Dec. 2020 Corn Futures @ $3.37/bu.
Late Sept. Central IN Basis Forecast =$-0.25/bu.

$3.37 + ($-0.25) = $3.12/bu. Expected Sale Price, if hedged

*History suggests opportunity to roll this hedge forward at harvest time to take advantage of increase in futures market carry*

*Hedging directly into deferred futures makes it possible to capture expected basis improvement, but locks in weak futures market carry*

May 2021 Corn Futures @ $3.54/bu.
Late April Central IN Basis Forecast =$-0.10/bu.

$3.54 + ($-0.10) = $3.44 Expected Sale Price, if hedged
Today’s Corn Futures Price Structure

Storage hedgers choose which futures contract to place hedges in based upon expected changes in the height of the stair steps.

If you expect the stair height to increase, place hedge in nearby and roll hedge forward when stair height increases.

- Dec $3.37
- March $3.47
- May $3.54
- July $3.59
Just A Small Rise in Soybean Acreage vs. Intentions Despite Corn Acreage Being Smaller Than Expected

U.S. Soybean Planted Acreage

<table>
<thead>
<tr>
<th>Harvest Year</th>
<th>Million Acres</th>
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<tbody>
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<td>07</td>
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</tr>
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</table>

Source: USDA

Purdue Center for Commercial Agriculture
If Soybean Yields Reach Trend
It Would Be 3rd Highest Yield on Record

U.S. Soybean Yields

Source: USDA

Purdue Center for Commercial Agriculture
Soybeans Are Off To A Good Start
But August Usually Determines Soybean Yields
Planting Intentions & Trend Yield Would Push 2020 Soybean Production Up 16% From 2019

U.S. Soybean Production

Source: USDA-WASDE

Purdue Center for Commercial Agriculture
USDA Still Expects Soybean Exports to Rebound in 2020 to Over 2 Billion Bushels
24% Increase From 2019 Crop Year’s Forecast

Source: USDA

Purdue Center for Commercial Agriculture
$8.50 MYA Projection Nearly The Same As In 2019

Source: USDA-WASDE, Purdue Center for Commercial Agriculture
Soybean Basis Still Above 2-Year Average
But Trending Back Down Towards The Average

Purdue Center for Commercial Agriculture Crop Basis Tool
Soybeans: IN WC Region, Nearby Basis, Weekly
Avg. of Selected Historical Crop Years [2017–2018,2018–2019]
vs. Current Crop Year

Historical Nearby Basis, Avg of Selected Crop Years
2019–2020 Regional Nearby Basis
https://www.purdue.edu/commercialag
World Stocks of Corn & Beans Tightening

But Recovery in Consumer Incomes Around The World Will Be Needed

World Stocks-to-Use Ratios
Corn & Soybeans, by Harvest Year

Source: USDA-FAS

Purdue Center for Commercial Agriculture
Looking Ahead to the 2020 Soybean Crop

Nov. 2020 Soybean Futures @ $8.76/bu.

Late Sept. Central IN Basis Forecast =$-0.50/bu.

$8.76 + ($-0.50) = $8.26/bu. Expected Sale Price, if hedged

*History suggests opportunity to roll this hedge forward at harvest time to take advantage of increase in futures market carry*
ARC-CO and PLC Overview

1. ARC-CO (Soybeans):
   - Payments occur when actual crop revenue is below ARC-CO guarantee
   - Data: county yields and marketing year average U.S. prices

2. PLC (Corn):
   - Payments occur if the higher of U.S. average market price for the crop for the crop year less than the crop’s reference price ($3.70 for corn; $8.40 for soybeans; $5.50 for wheat)
   - Data: PLC program yields and marketing year average U.S. prices
ARC-CO and PLC Estimated Payments for Corn
White County, Indiana

2019 Corn Price = $3.60

2020 Corn Prices

- 19 - ARC-CO
- 19 - PLC
- 20 - ARC-CO
- 20 - PLC
ARC-CO and PLC Estimated Payments for Soybeans
White County, Indiana

2019 Soybean Price = $8.55
Government Payments per Acre
Case Farm, West Central Indiana (Corn/Soybean Rotation)

1. 2018:
   - ARC-CO and PLC = $0
   - MFP = $52

2. 2019, Projected:
   - ARC-CO and PLC = $19
   - MFP = $62

3. 2020, Projected:
   - ARC-CO and PLC = $23
   - CFAP = $21
Net Return Projections

Definitions

• Net Farm Income
  – Gross revenue minus cash expenses and depreciation; excludes operator and family labor, and opportunity costs

• Net Return to Land
  – Gross revenue minus cash expenses (except rent), depreciation, and opportunity costs (except opportunity cost on owned land)

• Earnings
  – Gross revenue minus cash expenses, depreciation, and opportunity costs
Net Farm Income Sources, Corn/Soybean Rotation ($ per Acre)
West Central Indiana Case Farm

- Government Payments
- Crop Insurance
- Crop Net Returns
- Net Farm Income

07 08 09 10 11 12 13 14 15 16 17 18 19P 20P

Purdue University
Center for Commercial Agriculture

Ag Outlook Webinar, July 13, 2020
As of today, do you expect your farm's financial performance to be better than, worse than, or about the same as last year?

<table>
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<tr>
<th>Month &amp; Year</th>
<th>Better</th>
<th>About the Same</th>
<th>Worse</th>
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Source: Purdue Center for Commercial Agriculture, Producer Survey, June 2020
Difference in Earnings per Acre
West Central Indiana (Corn Minus Soybeans)
Cash Rent and Net Return to Land, West Central Indiana

Net Return to Land

Cash Rents
Farmland Price Expectations, 5 Years From Now

% of respondents

- Lower Farmland Prices
- Higher Farmland Prices

Source: Purdue Center for Commercial Agriculture, Producer Survey, June 2020
Factors Impacting Land Values

Positive Influences:

- Thin market, low supply of land for sale
- Low interest rates
- Land is a good hedge against inflation
- Investment potential for non-ag buyers

Negative Influences:

- Relatively low net returns to land for operators
- Working capital is depressed
August Crop Report Panel
following August Crop Report’s Release
August 12, 2020

More info & register at
purdue.ag/webinar

July 13, 2020