



## Q4 2023 OUTLOOK

# Large Planted and Harvested Acres for Corn Blunt Effects of Low Yield

By Matthew C. Roberts, Ph.D.

The 2023 corn growing season has no analogue to past years. The fast, dry start produced large plantings. Just when June dryness appeared to finish the crop, most farmers got adequate July rains before the faucet switched back off and the heat arrived in August. Meanwhile, the small cattle herd and modest export demand drained enthusiasm for the marketing year.

As we move through harvest, I expect to see a battle in basis waged as low river levels weaken basis and farmers rely on their liquidity positions to delay sales into 2024. Futures prices for the remainder of the quarter will turn on realized yield and export prospects.

### PRICE SCENARIOS

We have more yield uncertainty than is typical by the start of harvest, owing to the unusual weather patterns this year. Still, the 94.9 million planted acres of corn have served to blunt any price moves higher, which in

most years is what you'd expect with the poor weather we've had since the June 30 release.

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Even with a yield of 168 bu./ac. — and I don't expect final yield to be that low — 2023 would be the fifth-largest harvest on record and ending stocks would struggle to get below 2 billion bushels. This would result in a market-year average price of \$5.10, but again, this is an overly optimistic scenario (see table).

**Table: United States Corn Balance Sheet**

	2022/23 Est USDA	2023/24 Terrain Low Yield	2023/24 USDA	2023/24 Terrain High Yield
	<i>Acres</i>			
Area Planted	88.6	94.9	94.9	94.9
Area Harvested	79.2	86.5	87.1	87.1
	<i>Bushels/Acre</i>			
Yield per Harvested Acre	173.3	168	173.8	175.1
	<i>Million Bushels</i>			
Beginning Stocks	1,377	1,452	1,452	1,452
Production	13,366	13,940	15,054	15,251
Imports	50	25	25	25
Supply, Total	15,147	16,009	16,611	16,728
Feed and Residual	5,425	5,525	5,625	5,675
Food, Seed & Industrial	6,605	6,615	6,715	6,715
Ethanol & By-Products	5,195	5,200	5,300	5,300
Domestic, Total	12,030	12,140	12,340	12,390
Exports	1,665	1,800	2,050	2,050
Use, Total	13,695	13,940	14,390	14,440
Ending Stocks	1,452	2,069	2,221	2,288
Avg Farm Price (\$/bu.)	6.55	5.10	4.90	4.75
	10.6%	14.8%	15.4%	15.8%

Sources: USDA QuickStats and PSD Databases, Terrain



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I further expect that in any monthly USDA World Agricultural Supply and Demand Estimates (WASDE) report in which total production is cut, exports will be cut by similar amounts until they are more reflective of the actual export pace. Therefore, for the remainder of 2023, I don't expect to see much downward movement of ending stocks even if yield estimates fall.

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#### **IMPLICATIONS FOR STORAGE COSTS**

As we are returning to a historically more normal level of stocks, with a stocks/use ratio of 14.8%, compared with the post-2000 average of 12.5%, cash price behavior should also move back toward normal, with storage returns coming from both basis improvements and futures market carries. One difference, however, between now and then is that the price improvement required for storage to be profitable has grown over the past 18 months with higher interest rates.

Using 2.5 cents/bu. per month as the basic cost of on-farm storage (shrinkage, aeration, labor, etc.), the interest charge for storage is somewhere between 2.2 cents/bu. per month for the opportunity cost of cash at 5.25%, and 3.75 cents/bu. per month if the storage is being financed with an operating line at 9% interest. At a minimum, storing corn costs 4.7 cents/bu. per month, and it might be as high as 8.75 cents/bu. per month for commercial storage financed with an operating line.

If river levels stay low through harvest, storage will almost certainly be profitable, but this will probably be because of declines in nearby basis more than increases in deferred basis.

#### **OUTLOOK**

Looking toward 2024, sharply lower fertilizer prices should keep acreage allocations corn-friendly. Current forecasts continue to indicate an early harvest and conditions favorable to fieldwork. However, after a year of 94.9 million planted acres, these will not be enough to prevent a reduction in corn acres. Although very premature, my estimate for 2024 planted acres is 92.5 million for corn.

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