Estimates of Corn Production and Yields Based on 8/18/25 Crop Conditions

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Abstract¹

This reports estimates corn yields for the 18 leading corn states and then calculates total corn production and average national corn yield using the August NASS crop acre estimates. Based on the 8/18/25 crop condition report, total corn production is estimated to be 16.8 billion bushels with a range from 16.5 billion to 17.2 billion bushels. The national corn yield is estimated to be 188.7 bu/ac with a range from 184.7 to 192.8 bu/ac. This is a 0.5 bu/ac increase from last week

Introduction

This estimate is based on the USDA estimate of crop conditions for 8/18/25 (week #33). For a full description of this procedure and model, readers are encouraged to read <u>"Estimates of Corn Production and Yields Based on 6/30/24 Crop Conditions"</u>.

USDA/NASS released the <u>August Crop Production Report</u> this past week. USDA revised corn acres upward by 2% and these new acre estimates are incorporated here. For comparison, USDA/NASS is currently estimating a 188.8 bu/ac national corn yield.

Results

Figure 1 is a Likert graph of the corn crop conditions for the last 20 years in the U.S. The Likert graph is centered on the fair category to make comparisons among years easier. The number along the left-hand-side of the figure is the total of the very poor and poor categories while the number along the right-hand-side is the total of the good and excellent categories.

Figures 2, 3, and 4 show the estimated yield per harvested acre, the estimated harvested acres, and the total production for each of the 18 leading corn states. The harvested acre estimate comes directly from the USDA-NASS estimate from the August 12, 2025 Acreage Report.

Because the yield per acre from the individual states can't be summed together, the national yield per acre is calculated from the total production divided by the total harvested acres. Total U.S. corn production is calculated by adjusting the production from the 18 leading corn states upward based on the historic relationship between U.S. production and the production from the 18 leading corn states. As calculated, total U.S. corn production is estimated to be 16.83 billion bushels with a range from 16.47 billion to 17.19 billion bushels. The national corn yield is estimated to be 188.7 bu/ac with a range from 184.7 to 192.8 bu/ac.

References

Ibendahl, G. "Estimates of Corn Production and Yields Based on 6/30/2024 Crop Conditions." farmdoc daily (14):125, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 8, 2024.

https://farmdocdaily.illinois.edu/2024/07/estimates-of-corn-production-and-yields-based-on-6-30-2024-crop-conditions.html

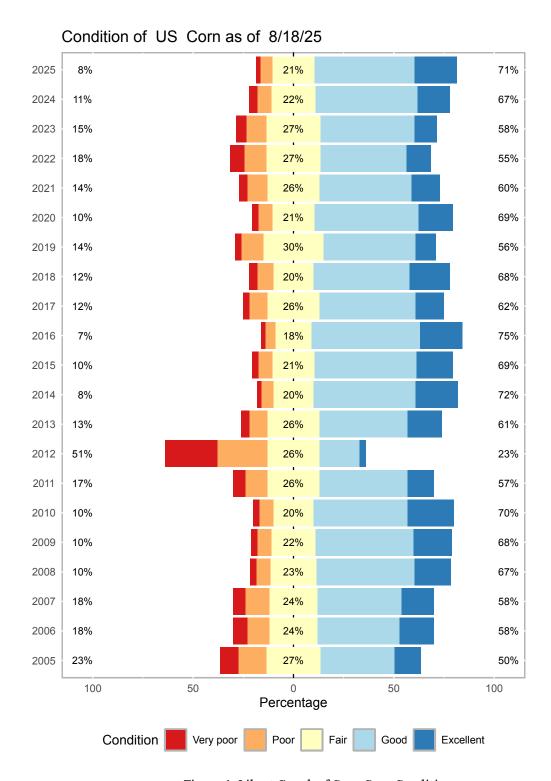


Figure 1. Likert Graph of Corn Crop Condition

Corn Yields per Acre by State - 8/18/25								
Bushels per harvested acre								
		2025 prediction						
State	Last year	Lower CI	Predicted	Upper CI	R squared			
Colorado	116.0	121.4	126.0	130.5	-0.02			
Illinois	217.0	212.0	216.1	220.2	0.63			
Indiana	198.0	197.7	201.3	204.9	0.68			
lowa	211.0	217.4	222.7	228.1	0.55			
Kansas	129.0	131.0	134.2	137.5	0.69			
Kentucky	178.0	177.0	179.8	182.7	0.86			
Michigan	181.0	171.6	174.0	176.5	0.56			
Minnesota	174.0	194.5	198.7	202.9	0.27			
Missouri	183.0	184.7	190.1	195.5	0.79			
Nebraska	188.0	198.8	201.8	204.9	0.68			
North_Carolina	87.0	145.6	150.1	154.5	0.83			
North_Dakota	149.0	139.3	143.6	148.0	0.29			
Ohio	177.0	186.8	189.6	192.4	0.78			
Pennsylvania	138.0	168.2	172.3	176.4	0.74			
South_Dakota	164.0	166.0	170.8	175.7	0.50			
Tennessee	152.0	165.5	169.0	172.5	0.81			
Texas	112.0	128.4	132.8	137.2	0.57			
Wisconsin	174.0	184.3	187.8	191.4	0.47			

Figure 2. Estimated Yields per Acre for 18 Leading Corn States

	Corn Harvested Acres by State - 8/18/25 1,000 acres								
	State	Last year	Planted acres	2025 harvest estimate NASS est					
	Colorado	1,180	1,490	1,210					
	Illinois	10,650	11,000	10,800					
	Indiana	5,050	5,300	5,150					
	lowa	12,450	13,500	12,950					
	Kansas	5,800	6,750	6,200					
	Kentucky	1,280	1,530	1,420					
	Michigan	1,910	2,350	1,990					
	Minnesota	7,730	8,700	8,190					
	Missouri	3,300	3,700	3,530					
	Nebraska	9,590	10,500	10,060					
	North_Carolina	815	950	885					
	North_Dakota	3,640	4,600	4,270					
	Ohio	3,200	3,400	3,180					
	Pennsylvania	660	1,000	640					
	South_Dakota	5,390	6,700	5,980					
	Tennessee	660	930	870					
	Texas	1,860	2,450	2,050					
	Wisconsin	2,960	4,100	3,130					
sum	_	78,125	88,950	82,505					

Figure 3. Estimated NASS Harvested Acres for 18 Leading Corn States

Total Corn Production by State - 8/18/25
1,000,000 bushels

			2025 prediction		
	State	Last year	Lower CI	Predicted	Upper Cl
	Colorado	137	147	152	158
	Illinois	2,311	2,290	2,334	2,378
	Indiana	1,000	1,018	1,037	1,055
	Iowa	2,627	2,816	2,885	2,953
	Kansas	748	812	832	852
	Kentucky	228	251	255	259
	Michigan	346	341	346	351
	Minnesota	1,345	1,593	1,627	1,662
	Missouri	604	652	671	690
	Nebraska	1,803	1,999	2,030	2,061
	North_Carolina	71	129	133	137
	North_Dakota	542	595	613	632
	Ohio	566	594	603	612
	Pennsylvania	91	108	110	113
	South_Dakota	884	993	1,022	1,050
	Tennessee	100	144	147	150
	Texas	208	263	272	281
	Wisconsin	515	577	588	599
sum	_	14,127	15,322	15,659	15,995

Figure 4. Estimated Corn Production for 18 Leading Corn States

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