

Farmers Planted More Corn and Fewer Soybean Acres than Last Year

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The U.S. Department of Agriculture (USDA) updated the projected 2023 planted corn and soybean area in the June 30 *Acreage* report. Farmers surveyed in March for the *Prospective Plantings* report indicated they intended to plant 92 million corn acres and 87. 5 million soybean acres. Before the report's release, analysts surveyed expected 91.81 million acres of corn and 87.66 million acres of soybeans (Table 1).

USDA continued its reputation for surprising the market. The *Acreage* survey projects cornplanted area at 94.1 million acres, a 6% increase from last year. Corn-planted area, if realized, would be the most corn planted since 2013 and the third largest corn acreage since 1944. Cornplanted area was 2.3 million above the average analysts' expectations and the range of expected planted area.

Table 1. 2023 Corn and Soybean Planted Area with Comparison to Industry Expectations, March Prospective Plantings, and 2022 Planted Area.

| | Acreage Report | Industry Average Expectation | Industry Range of Expectations | Prospective Plantings | 2022 Planted Area |
|----------|-------------------|------------------------------------|--------------------------------------|--------------------------|----------------------|
| | | N | Iillion Acres | | |
| Corn | 94.1 | 91.81 | 91 - 92.5 | 92 | 88.58 |
| Soybeans | 83.5 | 87.66 | 87.2 - 88.5 | 87.51 | 87.45 |

USDA projects the largest increase in corn plantings in North Dakota, with a 950,000-acre increase from 2022 (Table 2). South Dakota farmers reported increasing corn plantings by 450,000 acres from 2022. The combined increase of 1.4 million acres accounts for 25% of the total increase in corn plantings. The second and third largest increase in corn area occurred in Illinois (+700,000 acres) and Iowa (+500,000 acres) from 2022. Indiana farmers also increased corn plantings by 250,000 acres from last year. Nebraska is the only top-five corn-producing state to reduce planted area from last year, with a projected 100,000-acre decrease.

Corn-harvested area is projected to increase by 9% from last year to 86.3 million acres. With 70% of the corn crop experiencing drought, USDA may reduce the acreage harvested for grain due to increased silage harvest or abandonment if this drought intensifies.

Table 2. 2023 Projected Planted and Harvested Corn Acres and Change from 2022 for the United States and Selected Midwest States.

| | Planted | Change from | Percent Change | Harvested | Change from | | | |
|--------------|----------------|-------------|----------------|-----------|-------------|--|--|--|
| | 2023 | 2022 | in Planting | 2023 | 2022 | | | |
| | Thousand Acres | | | | | | | |
| US | 94,096 | +5,517 | +6% | 86,322 | +9% | | | |
| Iowa | 13,400 | +500 | +4% | 12,900 | +4% | | | |
| Illinois | 11,500 | +700 | +6% | 11,300 | +7% | | | |
| Nebraska | 9,500 | -100 | -1% | 9,160 | +4% | | | |
| Minnesota | 8,400 | +400 | +5% | 8,000 | +7% | | | |
| Indiana | 5,500 | +250 | +5% | 5,380 | +5% | | | |
| South Dakota | 6,200 | +450 | +8% | 5,500 | +10% | | | |
| North Dakota | 3,900 | +950 | +32% | 3,600 | +35% | | | |

USDA pegs the soybean-planted area at 83.5 million acres, a 3.9 million-acre decrease from 2022. Analysts expected planted areas similar to the *Prospective Plantings* report, so the 5% reduction in acreage from 2022 is a bullish surprise for the soybean market.

The largest decrease in soybean plantings occurred in Illinois, with farmers projecting to plant 800,000 fewer acres this year. Kansas and Missouri reduced the soybean area by 800,000 and 500,000 acres, respectively. For the other top-five soybean-producing states, Iowa, Nebraska and Indiana reduced soybean plantings by 400,000, 250,000 and 350,000 acres from 2022. Minnesota and South Dakota farmers indicated planting 50,000 and 250,000 acres more than last year.

Table 3. 2023 Projected Planted and Harvested Soybean Acres and Change from 2022 for the United States and Selected Midwest States.

| | Planted | Change from | Percent Change | Harvested | Change from | | | | |
|--------------|----------------|-------------|----------------|-----------|-------------|--|--|--|--|
| | 2023 | 2022 | in Planting | 2023 | 2022 | | | | |
| | Thousand Acres | | | | | | | | |
| US | 83,505 | -3,945 | -5% | 82,696 | -3,640 | | | | |
| Iowa | 9,700 | -400 | -4% | 9,620 | -410 | | | | |
| Illinois | 10,000 | -800 | -7% | 9,950 | -800 | | | | |
| Nebraska | 5,500 | -250 | -4% | 5,450 | -230 | | | | |
| Minnesota | 7,500 | +50 | +1% | 7,430 | +40 | | | | |
| Indiana | 5,500 | -350 | -6% | 5,480 | -350 | | | | |
| South Dakota | 5,300 | +200 | +4% | 5,250 | +180 | | | | |
| North Dakota | 5,650 | -50 | -1% | 5,600 | -70 | | | | |

USDA's survey of planted areas tends to be more accurate in years where Mother Nature cooperates with farmers, and the crops are mostly planted before June 1. USDA's weekly *Crop Progress* report indicates that 96% of the corn crops and 91% of the soybean crops were planted by June 4. The planting estimates are sometimes revised in the August *WASDE* in years where planting is delayed significantly beyond the survey window. Given the percentage planted by June 4, revisions are not likely this year.

Implications for 2023 Corn and Soybean Price Potential

The July WASDE will adopt the planted and harvested acreage estimates from the Acreage report. The July WASDE typically assumes the trend yield in the May and June reports. The World Agricultural Outlook Board tends to prefer to adjust yields in the August report as farmers are surveyed for their yield projections.

However, the statistical model used to forecast yield can be adjusted based on temperature and precipitation in key states during June. An argument could be made for changing the yield based on the expanding drought affecting 70% of the U.S. corn crop and 63% of the soybean crop.

Based on estimates in the June *WASDE*, which assumes a national yield of 181.5 bushels per acre, ending stocks would increase to 2.6 billion bushels. As a reminder, the June report pegged 2023 stocks at 2.2 billion bushels. However, if the national yield was reduced by 5% to 172 bushels per acre, ending stocks would fall to 1.9 billion bushels. The point is that planted area is just one piece of the puzzle when determining price, and a drought-reduced yield would dampen the impact of the increased planted area.

The five percent reduction of planted acreage for soybeans implies soybean stocks will be much tighter than projected in the June WASDE. Assuming a national yield of 52 bushels per acre with

no changes in demand, a soybean-planted area of 83.5 million acres would result in soybean ending stocks declining to 139 million bushels or a 3.2% stocks-to-use ratio. The *Acreage* report suggests that USDA will have to adjust the projected use and national yield because the current projects have carry-out at minimum pipeline levels.

The corn and soybean futures market priced in a weather premium from about June 15 to June 22 due to declining crop conditions and intensifying drought. That weather premium for corn has been removed. As corn and soybeans enter silking and bloom, any weather-related risk may provide pricing opportunities for those who know their break-even prices and have a marketing plan.