TENNESSEE AGRI-INDUSTRY BRIEF: CORN PRODUCTION FACT SHEET

Jamey Menard, Research Leader Agri-Industry Modeling & Analysis Group (AIM-AG) Department of Agricultural and Resource Economics



BACKGROUND

Corn is widely grown in Tennessee. County-level harvested corn acreage, production and yields for 2023 are shown in Figures 1, 2 and 3, respectively. Preliminary U.S. state-level marketing year average corn grain prices are indicated in Figure 4. For Tennessee in 2023, the state-level marketing year average price was \$4.80/bushel (USDA/NASS, 2024a).



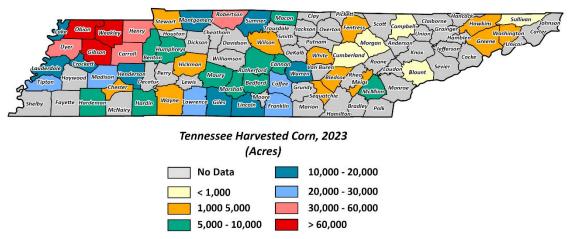


Figure 1. County-Level Corn Harvested Acres in Tennessee, 2023 Source: USDA/NASS, 2024a

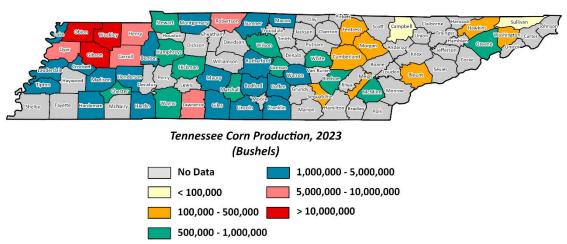


Figure 2. County-Level Corn Production in Tennessee, 2023 Source: USDA/NASS, 2024a

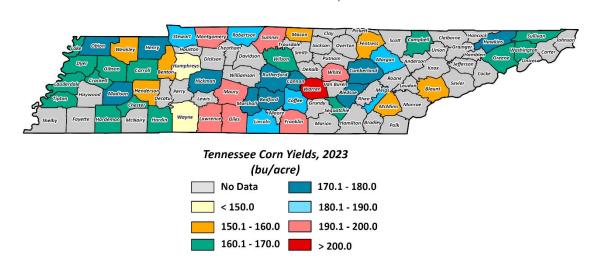


Figure 3. County-Level Corn Yields in Tennessee, 2023 Source: USDA/NASS, 2024a

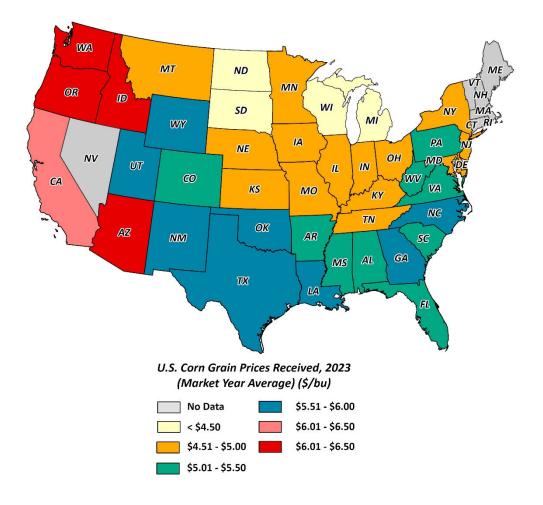


Figure 4. U.S. State-Level Corn Grain Prices Received, 2023 Source: USDA/NASS, 2024a

ECONOMICS

CASH RECEIPTS

For Tennessee's agricultural producers in 2022, corn cash receipts at \$678.3 million ranked fourth behind soybeans (\$1,094.7 million), broilers (\$972.6 million), and cattle and calves (\$687.0 million). Compared to other states for 2022, Tennessee ranked 19th in cash receipts from corn (USDA/ERS, 2023).

MULTIPLIER EFFECTS

Accounting for all corn farming for the state, and including multiplier effects, the industry in 2022 contributed an estimated \$1.3 billion in economic activity. This economic activity was

comprised of an estimated 10,920 individuals working part- or full-time in industries that support corn farming, with a labor income of \$272.5 million. The 2022 economic activity and employment multipliers were 1.94 and 1.58, respectively. If corn farming increased total industry output (economic activity) by \$1 million, the state's economy would increase by an estimated \$0.94 million overall, and for each job supported in the same industry, an estimated 0.58 jobs would be supported in other industries. Flour and wet corn milling in 2022 contributed an estimated \$2.3 billion in economic activity and was comprised of 6,647 employees with a labor income of \$357.1 million (IMPLAN Group, LLC, 2022).

TRADE

Bulk agricultural trade for Tennessee's corn production in 2022 totaled \$31,000. Hong Kong was Tennessee's largest trading partners for corn grain (USDA/FAS, 2023).²

CORN PRODUCTION

Tennessee's planted and harvested corn acreages from 2013 to 2023 are displayed in Figure 5. The average total planted and harvested acreages were 868,182 and 813,636 acres, respectively. Tennessee corn production for that same time frame is displayed in Figure 6. Average production was 132.9 million bushels. From 2013 to 2023, Tennessee corn yields averaged 163.1 bushels per acre (Figure 7), with the marketing year average price at \$4.48 per bushel (Figure 8). Compared to other states for 2023, Tennessee ranked 17th for harvested acreages. The state ranked 15th in corn production and 20th in yields for that time frame (USDA/NASS, 2024a & 2024b).

exports for others); and 2) consolidated shipments will reflect the state of origin where consolidated (USDA/FAS, 2023).

¹Calculations based on IMPLAN's 2022 direct value of production of \$690.1 million, which includes on-farm consumption and is net of inventory changes. IMPLAN's grain farming corresponds to NAICS codes 111130, 111140, 111150, 111191 and 111199— establishments primarily engaged in raising small grains (wheat), corn and sorghum (US Census Bureau, 2023). ²USDA/FAS state export data limitations for agricultural shipments: 1) origin of movement is not necessarily the transportation origin (inland state intermediaries shipping agricultural commodities down the Mississippi River to the port in New Orleans may report Louisiana as the state of origin of movement, resulting in understating exports from agricultural states and overstating

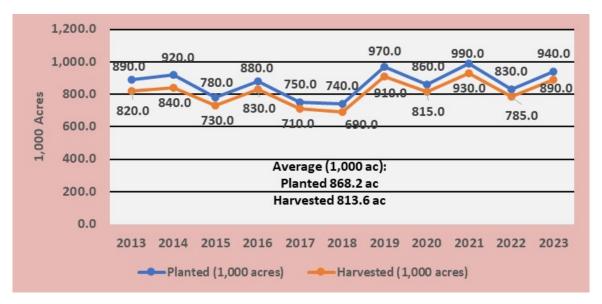


Figure 5. Tennessee Planted/Harvested Corn Acres, 2013-2023 (Source: USDA/NASS, 2024b)

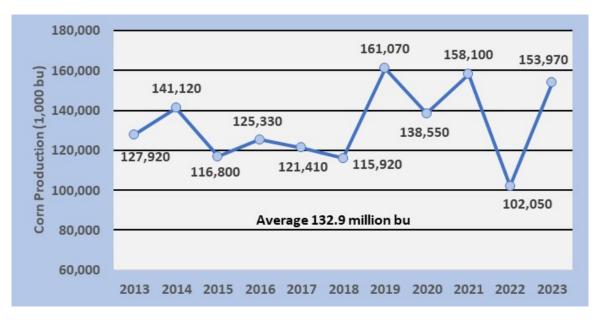


Figure 6. Tennessee Corn Production, 2013-2023 (Source: USDA/NASS, 2024b)

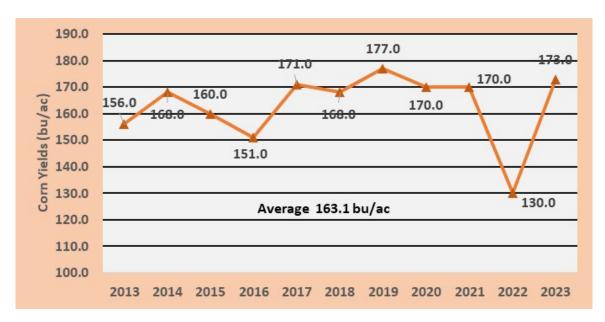


Figure 7. Tennessee Corn Yields, 2013-2023 (Source: USDA/NASS, 2024b)



Figure 8. Tennessee Marketing Year Average Corn Prices Received, 2013-2023 (Source: USDA/NASS, 2024a)

CORN PRODUCTION SUGGESTED READING

FIELD CROP BUDGETS:

- Smith, A., and B. Bowling. 2023. "Field Crop Budgets for 2023." University of Tennessee Extension, Department of Agricultural and Resource Economics. D 33. Available at extension.tennessee.edu/publications/Documents/D33.pdf.
- Current Weekly Crop Comments and Market Highlights Information. Available at arec.tennessee.edu/extension/crop-economics.

CROP ECONOMICS:

- Bowling, B., and A. Smith. 2023. "2022 Planted Acreage for Corn, Cotton, Grain Sorghum, Soybeans and Wheat in Tennessee by County." University of Tennessee Extension, Department of Agricultural and Resource Economics. W 442. Available at extension.tennessee.edu/publications/Documents/W442.pdf.
- Smith, A., and B. Bowling. 2023. "Tennessee Cropland, Irrigated Cropland and Pastureland Cash Rental Rates for 2023." University of Tennessee Extension, Department of Agricultural and Resource Economics. W 377. Available at extension.tennessee.edu/publications/Documents/W377.pdf.
- Duncan, H., B. Bowling, and A. Smith. 2023. "Regional Tennessee Corn and Soybean Basis." W 1091. Available at https://extension.tennessee.edu/publications/Documents/W1091.pdf.
- Duncan, H., A. Smith, C. Narayanan, and C. Martinez. 2022. "Estimating Costs for Grain Storage: Bags and Bins." W1060. Available at extension.tennessee.edu/ publications/Documents/W1060.pdf.

REFERENCES

- IMPLAN Group LLC, IMPLAN System (2022 data and Cloud Platform V. 7.0 software), 16905 Northcross Dr., Suite 120, Huntersville, NC 28078. Available at implan.com.
- U.S. Census Bureau. 2023. North American Industry Classification System. Available at census.gov/naics.
- U.S. Department of Agriculture, Economic Research Service (ERS). 2023. Data Files: U.S. and State-Level Farm Income and Wealth Statistics. "Annual Cash Receipts by Commodity, U.S. and States, 2008-2023F." Available at ers.usda.gov/data-products/farm-income-and-wealth-statistics.
- U.S. Department of Agriculture, Foreign Agricultural Service. 2023. Global Agricultural Trade System. Available at apps.fas.usda.gov/gats/default.aspx.

- U.S. Department of Agriculture, National Agricultural Statistics Service (NASS). 2024a. "Quick Stats Tools." Available at nass.usda.gov/Quick Stats.
- U.S. Department of Agriculture, National Agricultural Statistical Service (NASS). 2024b. Crop Production Annual Summary. Available at <u>usda.library.cornell.edu/concern/publications/k3569432s?locale=en.</u>



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