# TENNESSEE AGRI-INDUSTRY BRIEF: CATTLE-CALVES FACT SHEET

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# **BACKGROUND**

Cattle are raised in all 95 counties in Tennessee. The Tennessee beef cattle industry is comprised of different enterprises such as commercial cow-calf, stocker cattle, backgrounding, finishing, seedstock, heifer development and stocker cows (Griffith, 2022). County-level inventory for 2023<sup>1</sup> of cattle and calves and beef cattle are shown in Figures 1 and 2, respectively.



<sup>&</sup>lt;sup>1</sup>Figures 1 and 2 timeline data is for January 1, 2023.

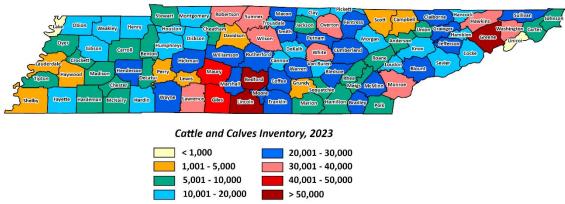


Figure 1 Location of Cattle and Calves in Tennessee, 2023



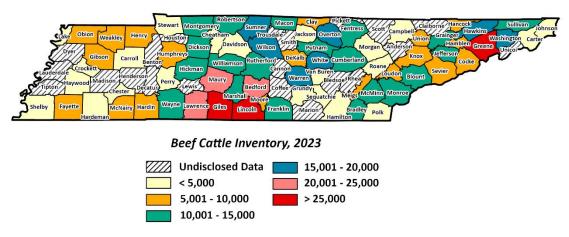


Figure 2 Location of Beef Cattle in Tennessee, 2023

Source: USDA/NASS, 2023a

# **ECONOMICS**

### CASH RECEIPTS

For Tennessee's agricultural producers, 2022 cash receipts for cattle and calves at \$687.0 million ranked third behind soybeans (\$1,094.7 million) and broilers (\$972.6 million). Compared to other states for 2022, Tennessee ranked 24<sup>th</sup> in cash receipts from cattle and calve production (USDA/ERS, 2023).

#### **MULTIPLIER EFFECTS**

Accounting for all beef cattle production for the state, and including multiplier effects, the industry in 2022 contributed an estimated \$1.0 billion in economic activity. This economic activity was comprised of an estimated 17,214 individuals working part- or full-time in industries that support beef cattle farming with a labor income of \$151.9 million. The 2022 economic activity and employment multipliers were 1.46 and 1.08, respectively. If beef cattle production increased total industry output (economic activity) by \$1 million, the state's economy would increase by an estimated \$0.46 million overall, and for each job supported in the same industry, an estimated 0.08 jobs would be supported in other industries. Animals, except poultry, processing and meat processed from carcasses contributed an estimated \$4.3 billion in economic activity and was comprised of over 25,100 employees with a labor income of \$792.0 million<sup>3</sup> (IMPLAN Group, LLC, 2022).

#### INTERNATIONAL TRADE

International trade for Tennessee's beef and beef products in 2022 totaled \$142,000. Mexico was Tennessee's largest trading partner, with some shipments to Cote d'Ivoire and Canada (USDA/FAS, 2023).<sup>4</sup>

# **CATTLE INVENTORY/PRODUCTION**

Tennessee's total inventory of cattle and calves from 2014 to 2024<sup>5</sup> is displayed in Figure 3. The average total inventory was 1,764,545 head for that time frame. Inventory for cows/heifers, beef cows and milk cows that have calved from 2014 and 2024 are displayed in Figure 4. The average for cows/heifers was 921,818 head, with the average for beef cows and

<sup>&</sup>lt;sup>2</sup>Calculations based on IMPLAN's 2022 direct value of production of \$687.0 million, which includes on-farm consumption and is net of inventory changes. IMPLAN's beef cattle farming corresponds to NAICS code 112111—establishments primarily engaged in raising cattle (including cattle for dairy herd replacements) (US Census Bureau, 2023).

<sup>&</sup>lt;sup>3</sup>Includes other meat products beside beef.

<sup>&</sup>lt;sup>4</sup>USDA/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; thus, resulting in understating exports from agricultural states and overstating exports for others); and 2) consolidated shipments will reflect the state of origin where consolidated (USDA/FAS, 2023).

<sup>&</sup>lt;sup>5</sup>Timeline data referenced in Figures 3 and 4 is for January 31, 2024.

milk cows at 886,091 and 35,727 head, respectively (USDA/NASS, 2024). The average value of production for cattle and calves from 2012 through 2022<sup>6</sup> was 574.6 million pounds (Figure 5). Cash receipts averaged \$619.1 million for that same time frame (Figure 6) (USDA/NASS, 2023b).

At the beginning of 2024, Texas had 1) the largest inventory of cattle and calves at 12.0 million head (Tennessee ranked 16<sup>th</sup>); 2) the highest number of all cows and heifers that have calved at 4.75 million head (Tennessee ranked 15<sup>th</sup>); and 3) the most beef cows that have calved at 4.1 million head (Tennessee ranked 12<sup>th</sup>). For milk cows that have calved, California had the largest at 1.7 million head (Tennessee ranked 32<sup>nd</sup>) (USDA/NASS, 2024). In 2022, Texas also had the largest production of cattle and calves at 6.6 billion pounds (Tennessee ranked 17<sup>th</sup>), with Nebraska taking top place for cash receipts at \$13.7 billion (Tennessee ranked 24<sup>th</sup>) (USDA/NASS, 2023c).

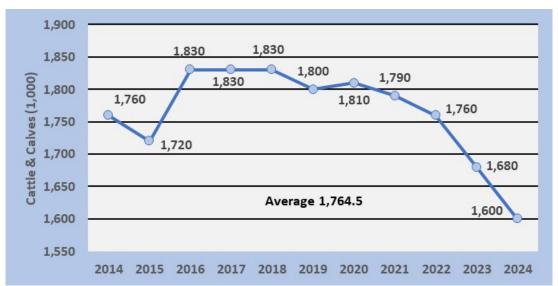


Figure 3. Tennessee Cattle and Calves Inventory, 2014-2024 (Source: USDA/NASS, 2024)

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<sup>&</sup>lt;sup>6</sup>Most recent data for this fact sheet update.

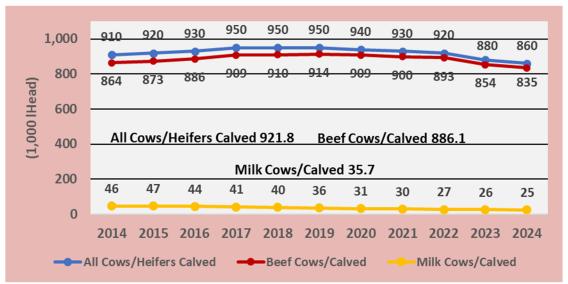


Figure 4. Tennessee Cows/Heifers, Beef Cows and Milk Cows that Calved, 2014-2024 (Source: USDA/NASS, 2024)

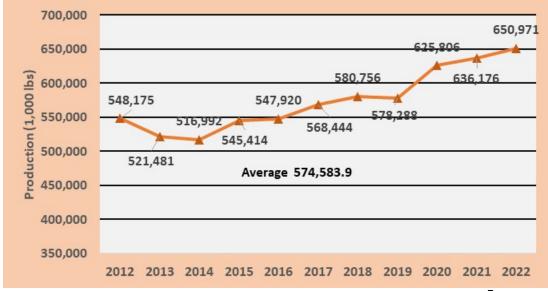


Figure 5. Tennessee Cattle and Calves Production, 2012-2022<sup>7</sup> (Source: USDA/NASS, 2023b)

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<sup>&</sup>lt;sup>7</sup>Adjusted for changes in inventory and for in-shipments.

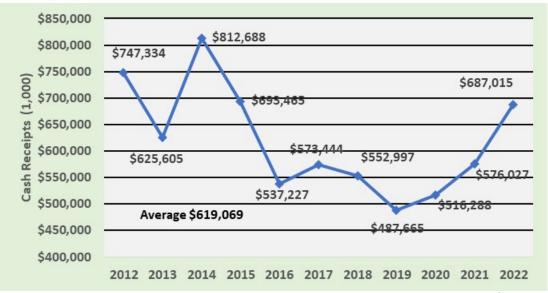


Figure 6. Tennessee Cattle and Calves Cash Receipts, 2012-2022<sup>8</sup> (Source: USDA/NASS, 2023b)

### CATTLE/CALVES SUGGESTED READING

### TENNESSEE CATTLE ENTERPRISES:

 Griffith, A. 2022. "Cattle Businesses: Which One is Right for Me?" University of Tennessee Extension, Department of Agricultural and Resource Economics. W1062. Available at extension.tennessee.edu/publications/Documents/W1062.pdf.

#### CATTLE BUDGETS:

- Griffith, A., and B. Bowling. 2023. "2023 Cow-Calf Budget." University of Tennessee Extension, Department of Agricultural and Resource Economics. D31. Available at arec.tennessee.edu/extension/budgets.
- Cui, X.I., and A. Griffith. 2018. "2018 Bred Heifer Development Budget." University of Tennessee Extension, Department of Agricultural and Resource Economics. D38. Available at <a href="mailto:arec.tennessee.edu/extension/budgets">arec.tennessee.edu/extension/budgets</a>.
- Griffith, A., and B. Bowling. 2023. "2023 Stocker/Backgrounding Budget." University of Tennessee Extension, Department of Agricultural and Resource Economics. D32. Available at arec.tennessee.edu/extension/budgets.

<sup>&</sup>lt;sup>5</sup>Receipts from marketing and sale of farm slaughter.

#### LIVESTOCK ECONOMICS:

- Jones, S., H. Ferguson, B. Mayfield, C. Boyer, and C. Martinez. 2023. "Price Determinants of Graded Feeder Cattle Sale." *Applied Animal Science*, 39(3):156-160. Available at sciencedirect.com/science/article/pii/S2590286523000289.
- Key, C., C. Boyer, C. Martinez, and K. Mason. 2023. "Optimal Stocker Production Strategies for Spring and Fall Calving Cow Herd." Journal of Agricultural and Applied Economics, 55(1):57-71. Available at <a href="mailto:cambridge.org/core/journals/journal-of-agricultural-and-applied-economics/article/optimal-stocker-production-strategies-for-spring-and-fall-calving-cow-herd/CFC44FAFE868BFC9D2A2B29E4E9BB3FC."</li>
- Martinez, C., C. Boyer, and K. Burdine. 2021. "Price Determinants for Feeder Cattle in Tennessee." Journal of Agricultural and Applied Economics, 53:552-562. Available at cambridge.org/core/journals/journal-of-agricultural-and-applied-economics/article/pricedeterminants-for-feeder-cattle-in-tennessee/68CE18266A8CFE557DB2FAAB94840B19.
- Current (Daily, Weekly, Monthly and Annual) Market Information. Available at arec.tennessee.edu/extension/livestock-economics.

#### REFERENCES

- Griffith, A. 2022. "Cattle Businesses: Which One is Right for Me?" University of Tennessee Extension, Department of Agricultural and Resource Economics. W1062. Available at extension.tennessee.edu/publications/Documents/W1062.pdf.
- 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, North American Industry Classification System. 2023. Available at <a href="mailto:census.gov/naics">census.gov/naics</a>.
- 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, US and States, 2008-2023F." Available at <a href="mailto:ers.usda.gov/data-products/farm-income-and-wealth-statistics/data-files-u-s-and-state-level-farm-income-and-wealth-statistics">ers.usda.gov/data-products/farm-income-and-wealth-statistics</a>.
- U.S. Department of Agriculture, Foreign Agricultural Service. 2023. Global Agricultural Trade System. Available at <a href="mailto:apps.fas.usda.gov/gats/ExpressQuery1.aspx">apps.fas.usda.gov/gats/ExpressQuery1.aspx</a>.
- U.S. Department of Agriculture, National Agricultural Statistical Service (NASS). 2023a. "Quick Stats Tools." Available at nass.usda.gov/Quick Stats.

- U.S. Department of Agriculture, National Agricultural Statistical Service (NASS). 2023b. Meat Animals Production, Disposition, and Income Annual Summary. Available at <a href="https://www.usda.library.cornell.edu/concern/publications/02870v85d">usda.library.cornell.edu/concern/publications/02870v85d</a>.
- U.S. Department of Agriculture, National Agricultural Statistical Service (NASS). 2024. Cattle. Available at usda.library.cornell.edu/concern/publications/h702q636h.



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