Drought has occurred with greater intensity and frequency in many areas of the United States in recent years. Despite the growing concern surrounding the impacts of drought on the agricultural sector, few studies have quantified the impact of drought on the cattle industry. In this paper, we estimate the impacts of drought on cattle herd management, hay production, hay prices, and farm income in the United States from 2000 to 2022. Our results indicate that drought negatively impacts hay production and results in higher hay prices. Drought also contributes to herd liquidation and is correlated with lower farm incomes. As drought intensity increases, we find some evidence of reduced average herd sizes (liquidation). As herd size declines, revenues temporarily increase, which could be due to selling larger quantities of market and breeding stock. Overall, drought has a temporary positive effect on rancher revenues, but a negative effect on earnings.

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Article Citations

Authors

David Rodziewicz
Regional Research Senior Economics Specialist

David Rodziewicz is a senior economics specialist at the Denver Branch of the Federal Reserve Bank of Kansas City. His research focuses on energy economics, natural resource economics, climate change, and regional economics. His outreach efforts focus on the Rocky Mountain West region (Colorado, Wyoming, and northern New Mexico). Rodziewicz is also responsible for briefing the Kansas City Fed’s president – a member of the Federal Open Market Committee – on regional economic conditions as well as energy related issues. Prior to joining the Economic Research Department at the Bank in 2017, Rodziewicz was an officer in the National Oceanic and Atmospheric Administration's Commissioned Officer Corps, where he served as a deck watch officer in Alaska and database manager in Boulder. Earlier in his career, he worked in the financial services industry as a stock analyst, covering real estate investment trusts (REITs). Rodziewicz holds a master’s degree in Mineral and Energy Economics from Colorado School of Mines and a bachelor’s degree in Finance and Economics from University of Illinois.

Cortney Cowley
Senior Economist

Cortney Cowley is a senior economist in the Regional Affairs Department of the Federal Reserve Bank of Kansas City. She also serves as a special advisor on the agricultural economy to Federal Reserve Governor Miki Bowman. Cortney's current research focuses on agricultural finance, commodity markets, farm management, and natural resource economics and policy. Her responsibilities also include writing for the Tenth District Survey of Agricultural Credit Conditions and Agricultural Finance Updates. Cortney joined the Bank in 2015 after completing her Ph.D. in Agricultural Economics at Oklahoma State University. She holds a B.S. degree in Biosystems Engineering from Oklahoma State and a M.S. degree in Civil Engineering from Colorado State University.