

## **Executive Summary: Community Security in Beef Production Sustainability**

**Authors/Date:** J.D. Wulforth, (*University of Idaho*), Hana Fancher (*University of Wyoming*), John Ritten (*University of Wyoming*), and Amy Nagler (*University of Wyoming*), subm. 7/1/22

**Background:** Cattle producers face numerous challenges. Sustaining their operations in a secure community context has importance for animal care, resource management, and keeping the business profitable. Social challenges producers face often relate to dynamics changing in the population, ranging from consumer preferences, to land-use change, to immigration policy.

**Objectives:** Collect and analyze national- and regional-scale socio-economic and industry data relevant to community security issues and U.S. beef production sustainability.

**Abbreviated methods:** 63 sociological interviews were conducted with producers and industry experts across all 7 NCBA regions. National-scale inventory, financial, and demographic data were collected and analyzed primarily for national/regional trends and cases of state-level variability.

**Important findings:** Over the last several decades, the US beef industry has continued to consolidate, with greater concentration of the inventory moving northward and to the center of the U.S. (see Figure 1 that contrasts change in inventory at state-levels with NCBA Regions). While feedyards and a relatively small percentage of large operations dominate a majority of the total inventory, a majority of producers across regions operate with <100 head, and the vast majority of those have <50 head. See Figure 2 below characterizing this set of relationships to differentiate the complexity and importance of scale between operation size and number of operations, by NCBA Region (these results also break out categories of 'beef cows' vs 'cattle on feed').

This dichotomy ties directly to community security issues by compounding challenges with ranch succession, large-scale effects in the environment (e.g., drought, disease risk, invasive plants, wildlife conservation, etc), and population dynamics external to production. Based on interview data collected directly with producers, many experience long-term anxiety and worry over operation viability from year-to-year as well as legacy effects related to ranch succession. The majority of producers described greater levels and diversity of threats to their operations having worsened in recent years compounding the 'normal' economic cycle within the beef industry.

### ***Implications / Industry Impact:***

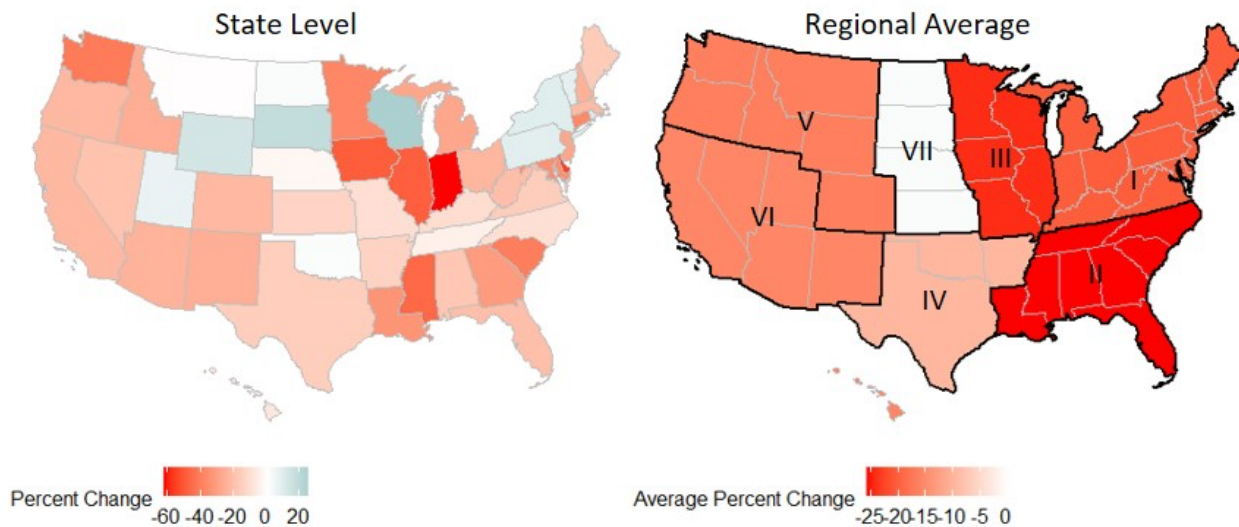
While the industry must value attention to policy and programming that addresses *both* the animals and producers, the inverse dichotomy in these results indicates the need for management about this structural challenge which may grow wider over time. As such, additional strain could occur for the majority of producers tied to rural community landscapes and places they rely on not only for equipment and inputs, but also social connectivity and options for secure ranch succession. Because of the large tracts of land managed by thousands of operators nationwide, cattle producers also contemplate resource stewardship daily and need community-based support to maintain that environmental health. As such, industry programming to sustain security for rural communities has vital implications for the long-term infrastructure and human base needed to

meet the supply/demand balance of providing quality protein to the US population and export markets. These factors relate to risk management and emphasize the value, if not need, to maintain a diversity and range of operation size within production sectors, geographies, and processing/distribution. The synthesized social- and economic-related data for this analysis indicate that gradient of diversity is fundamental to long-term community security and viability for cattle producers.

**Photos**

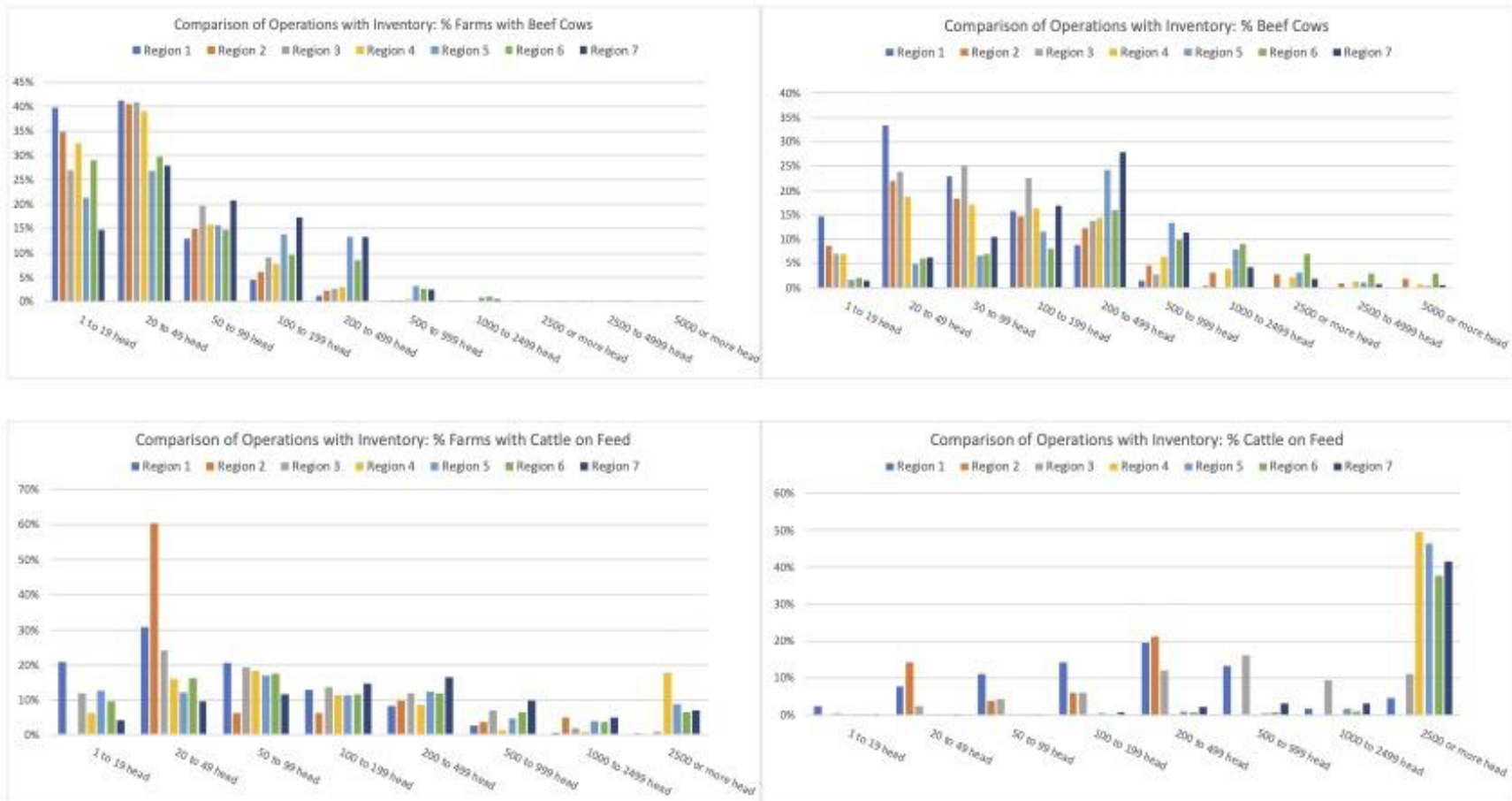


**Graphs / Tables:**



Sources: National Agricultural Statistics Service, Beef Cattle Inventory; NCBA regions

**Figure 1. Change in US Beef Cow Inventory, State-level percent change and NCBA region average percent change, 1980-2021.** (Sources: National Agricultural Statistics Service, Beef Cattle Inventory; NCBA 2022a)



**Figure 2. Comparison of Operations with Inventory, by NCBA Region, 2017.**

(Source: USDA Agricultural Census 2017: Table 12. Cattle and Calves - Inventory: 2017 and 2012)