

Agricultural Impacts of the Driest Year on Record

How Drought Reshapes Agriculture and Food Systems

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David P. Anderson

Professor and Extension Economist



The 2011 Texas Drought

- Driest Year on Record
 - Dubious record eclipsed the worst of the 1950s and 1917-18
- Hottest Year on Record
 - In terms of 24 hour average temperature
- When it Quit Raining, It Quit!
 - Dry, hot winds

Agricultural Costs of Drought

- Estimated \$7.62 Billion
 - Corn, cotton, wheat, hay \$4.4 billion
 - Livestock \$3.2 billion
 - Another \$669 million in timber
- Increased Costs
- Reduced Yields
- Conservative Estimate
 - Includes major crops, does not include fruits, vegetables, peanuts, and others

Multi-Year Effects

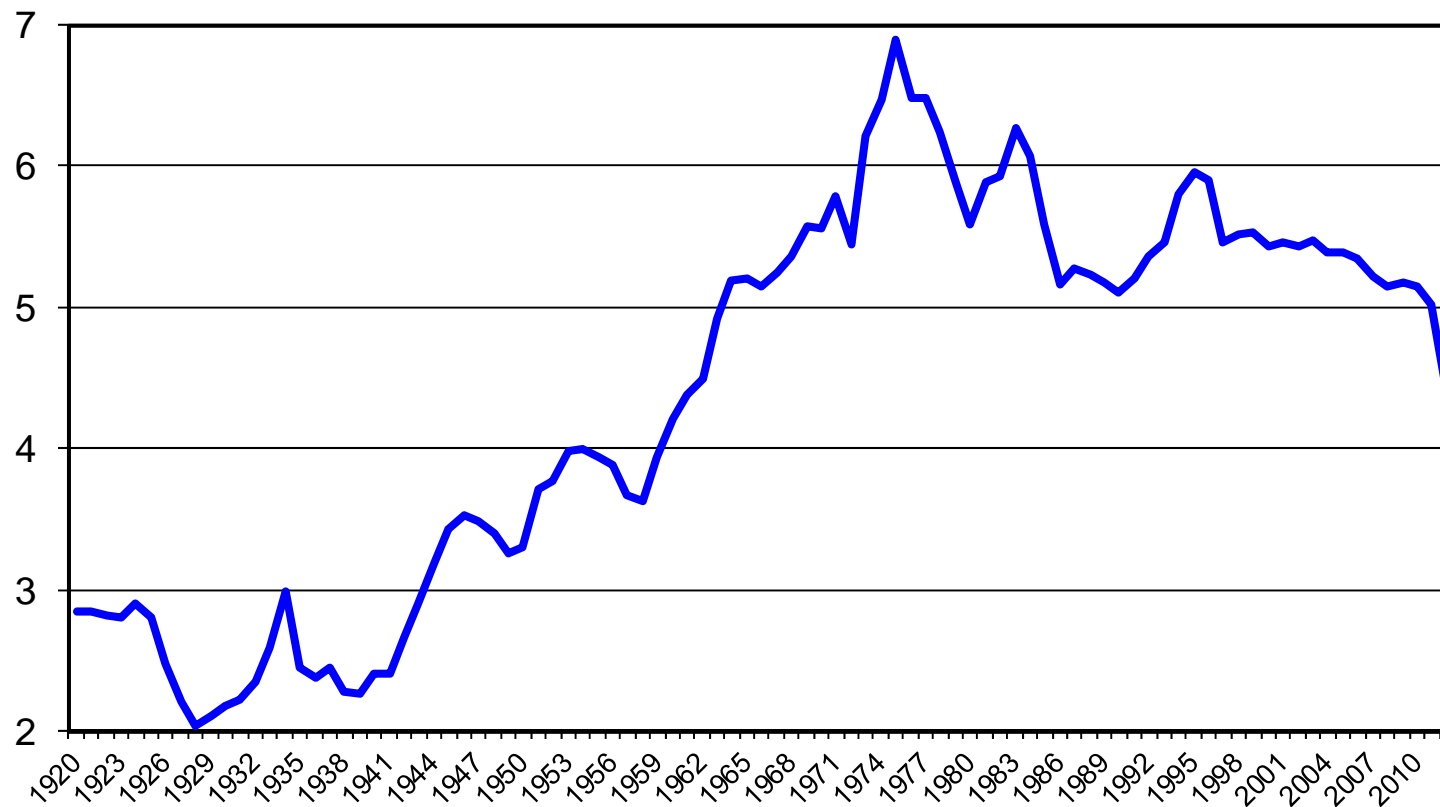
- 2011 Drought Actually Began in 2010
- Livestock
 - Reduced conception rates
 - Fewer calves the next year
- Range and Pasture
 - Years to recover
 - Delays rebuilding herds
- Surface Water Irrigation Systems
 - Texas rice

Adjustment to Drought

- Fewer Livestock
 - Largest beef cow herd reduction in history
 - Lower prices short term, higher prices long term
 - A little shift in where cattle are produced in the U.S.
- Adjustment to Recovery Takes Time
 - Pasture and range recovery
 - Financial: debt, higher priced replacements, lure of high heifer prices
 - Cautious recovery
- Occurred at Time of High Prices

Texas Beef Cow Herd, January 1

Mil. Head



Adjustment to Drought

- Water Harvesting
- More Irrigation Where Possible
- Renovate Tanks and Ponds
- Research on Fertilizer Availability and Uptake
- Conservation? Urban Use
- Adjustment is Longer Term Also
 - Historically, just as droughts occur, they also break

Contact

danderson@tamu.edu

<http://livestock-marketing.tamu.edu>

(979) 845-4351