Kansas State
UNIVERSITY

Department of Agricultural Economics

Perspectives from the US beef sector

Kevin C. Dhuyvetter, PhD
kcd@k-state.edu

Department of Agricultural Economics
Kansas State University
Manhattan, Kansas, USA

agri benchmark

EBLEX
THE BEEF & LAMB SECTOR COMPANY

Schedule Beef & Sheep Conference, June 13-20, 2013
York, England, United Kingdom

Global Forum — The Royal York Hotel

The latest global and local beef and sheep market trends and developments

AG MANAGER.INFO
Kansas State Research & Extension
www.agmanager.info

Outline of Presentation

- **Beef industry structure and general trends**
- **General/random industry issues**

Production "sectors" in the U.S. beef industry (historically)

1) Cow-calf

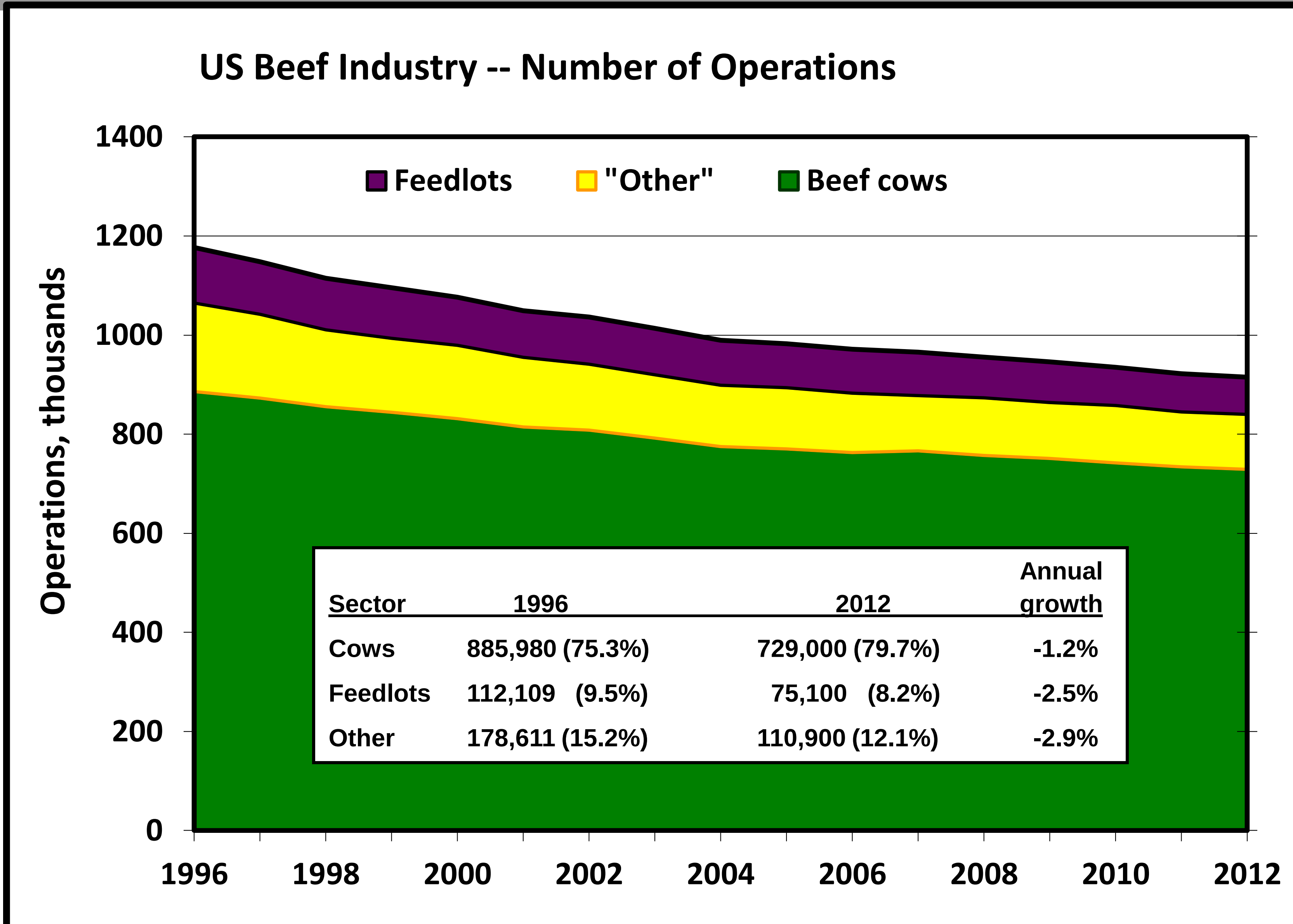
2) Stocker/backgrounder

3) Feedlot

Ownership is generally separate across the three sectors

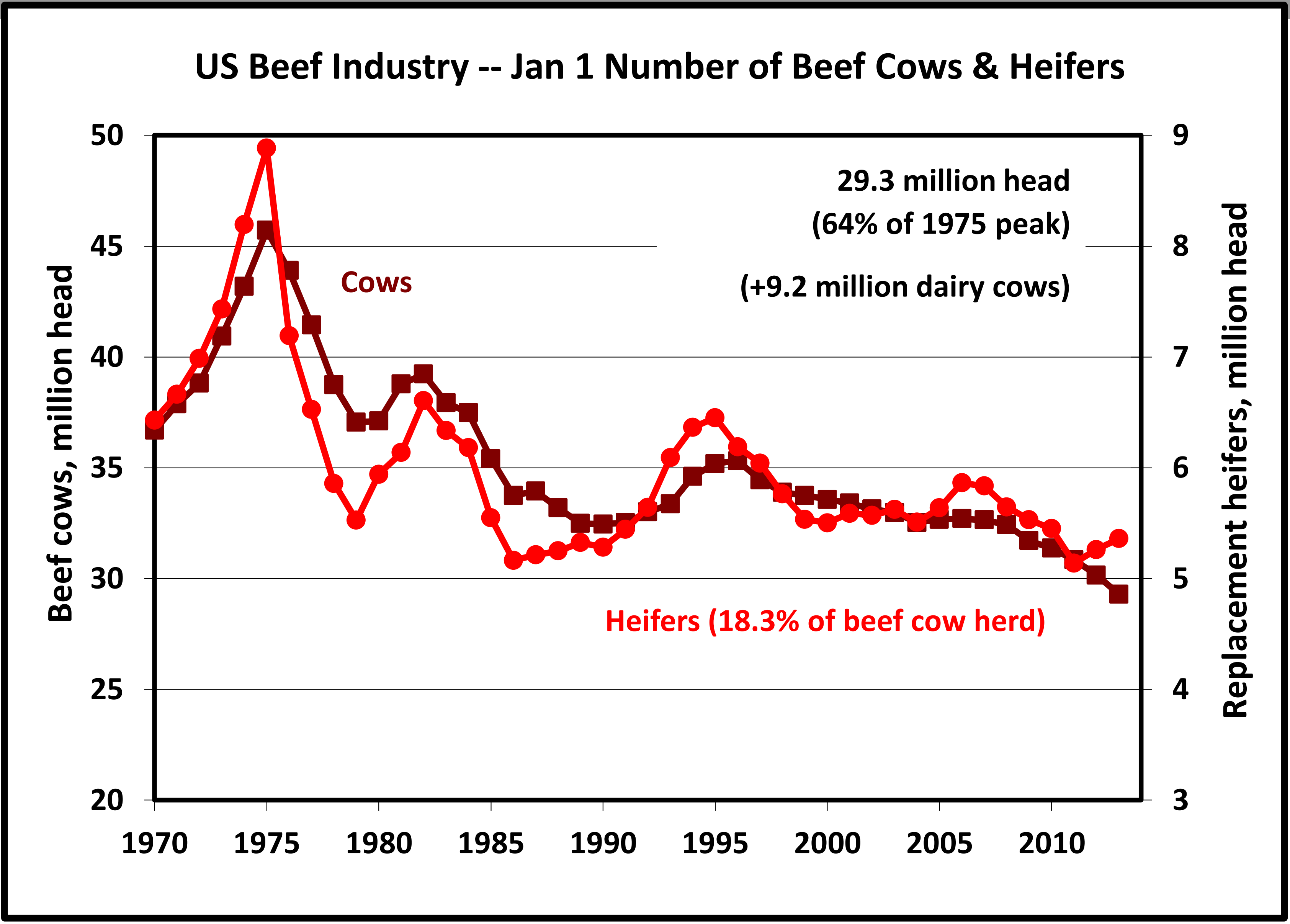
Implications – **competition, industry polarization, and slow response to changing markets.**

Fewer operations in all sectors of the beef industry…



Sector	1996	2012	Annual growth
Cows	885,980 (75.3%)	729,000 (79.7%)	-1.2%
Feedlots	112,109 (9.5%)	75,100 (8.2%)	-2.5%
Other	178,611 (15.2%)	110,900 (12.1%)	-2.9%

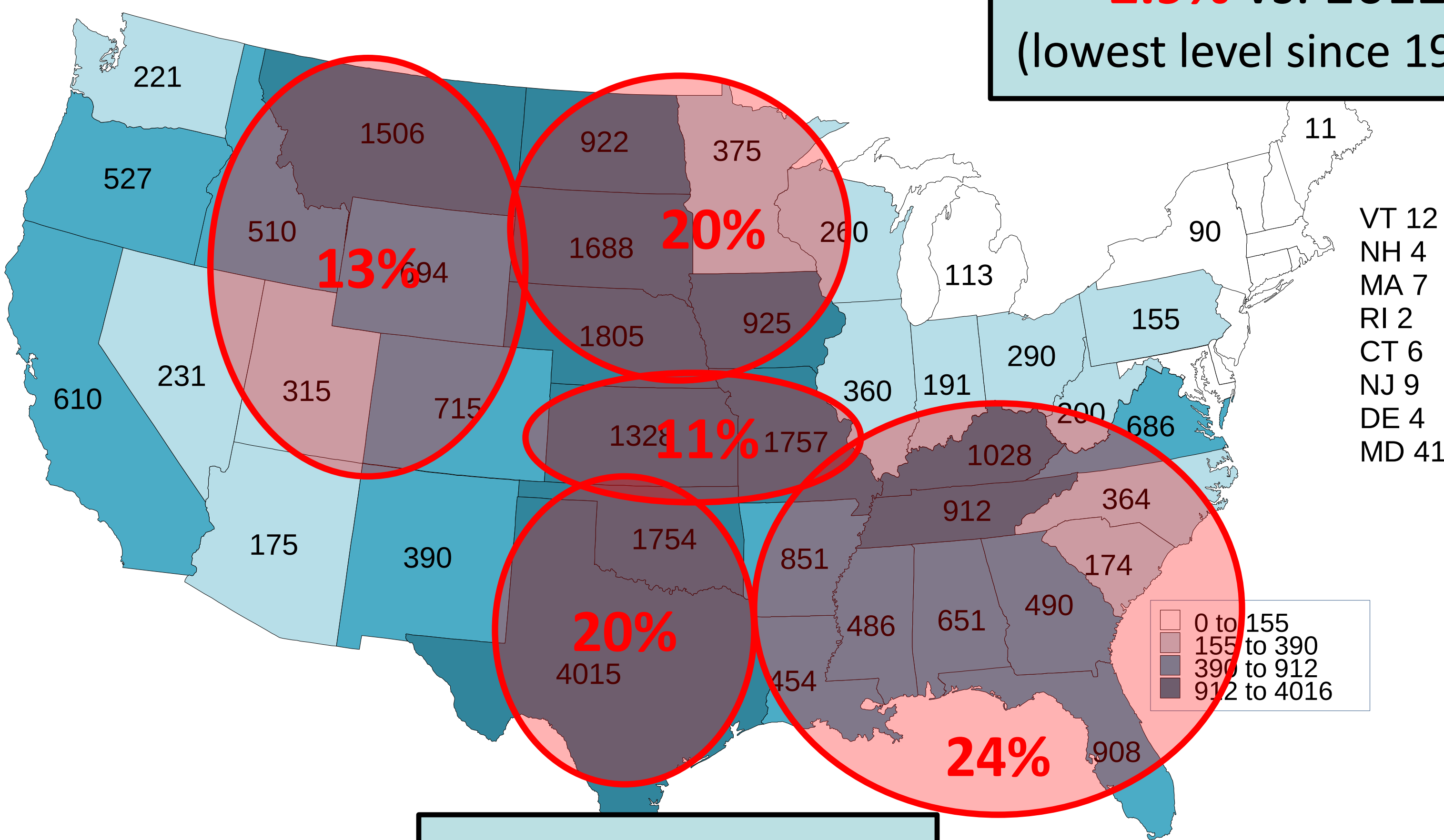
U.S. beef cow inventory is at lowest level in 50+ years



Beef cows are generally located throughout the country…

BEEF COWS THAT CALVED JANUARY 1, 2013
(1000 Head) – U.S. Total = 29,295

National Cow Herd:
-2.9% vs. 2012
(lowest level since 1962)

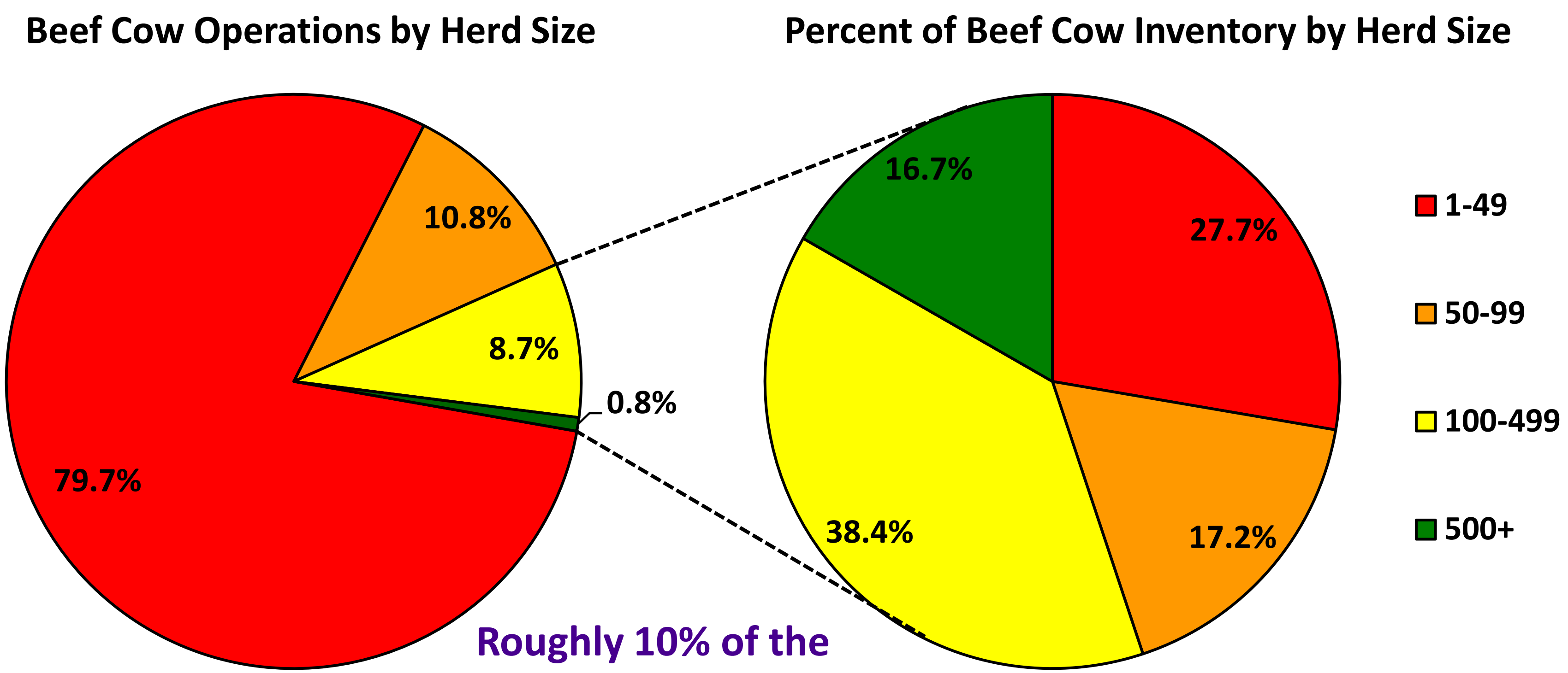


TX/OK
(smallest % since 1972)

Livestock Marketing Information Center
Data Source: USDA-NASS

Average herd size and distribution

Average beef cow herd size was 41.4 in 2012, but averages can be somewhat deceiving…

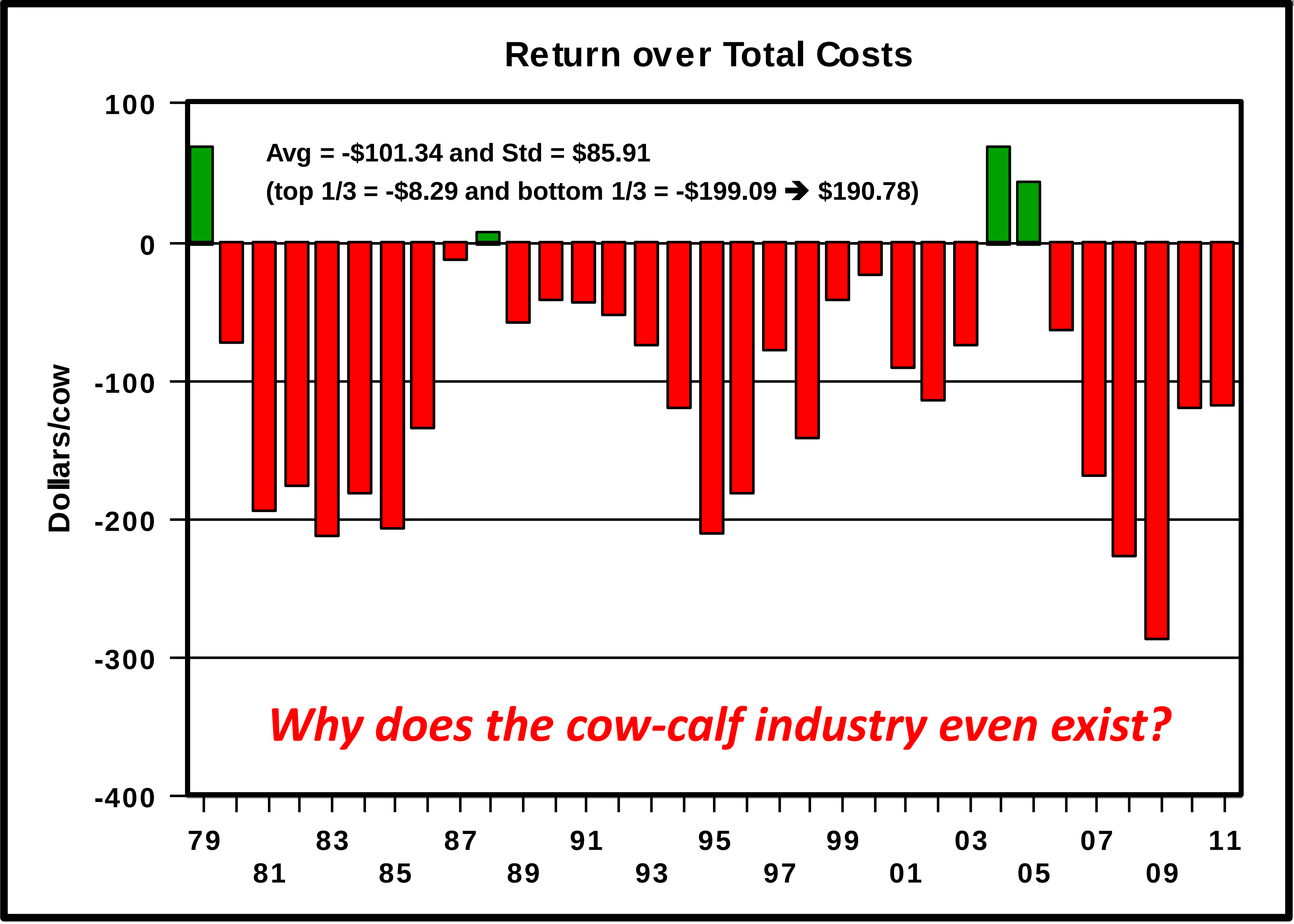


Total (2012)
729,000

Roughly 10% of the operations control over 55% of the cows (diverse cow-calf sector)

Total (2012)
30,157,900

Average returns are ***highly variable over time***…



Source: Kansas Farm Management Association (KFMA) Annual Enterprise Analysis Reports

Returns are ***more variable across producers***…

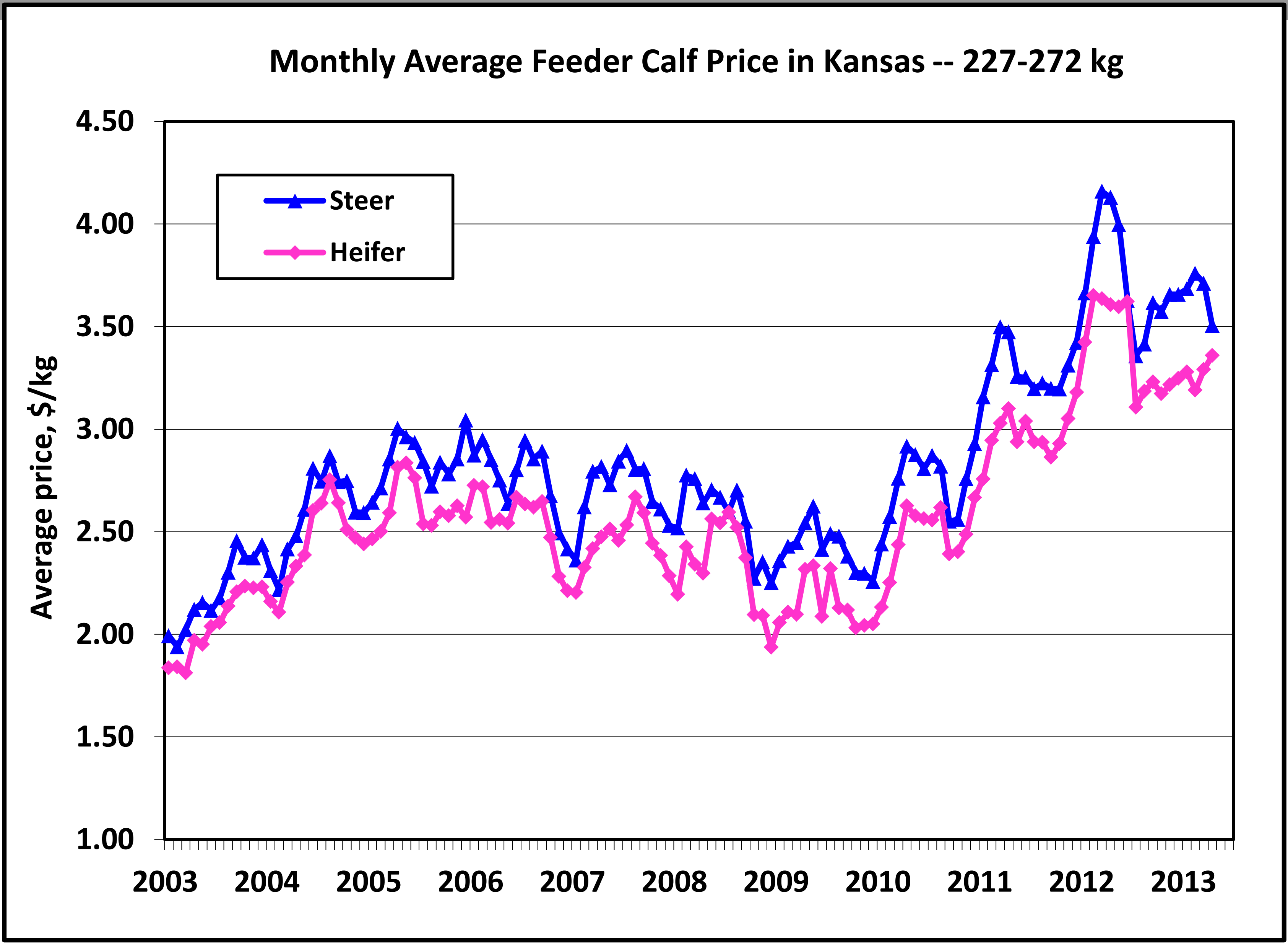
Beef Cow-calf Enterprise, 2007-2011 (min of 3 years)*

		Profit Category			
	All Farms	High 1/3 Head / $	Low 1/3 Head / $	High - Low Difference	
Labor allocated to livestock, %	37.1	47.3	32.2		
Number of Cows in Herd	145	191	92	98	
Weight of Calves Sold	582	592	573	19	
Calf Sales Price / Cwt	$110.82	$112.11	$111.17	$0.94	
Gross Income	**$585.86**	**$628.17**	**$535.15**	**$93.02**	**26.0%**
Feed	$383.62	$344.13	$423.96	-$79.82	
Other	$73.04	$58.19	$86.23	-$28.03	
Machinery	$79.70	$58.47	$98.25	-$39.77	
Labor	$120.90	$102.83	$160.74	-$57.91	
Dep and int	$162.70	$132.89	$192.03	-$59.14	
Total Cost	**$819.96**	**$696.52**	**$961.20**	**-$264.68**	**74.0%**
Net Return to Management	**-$234.10**	**-$68.35**	**-$426.05**	**$357.70**	

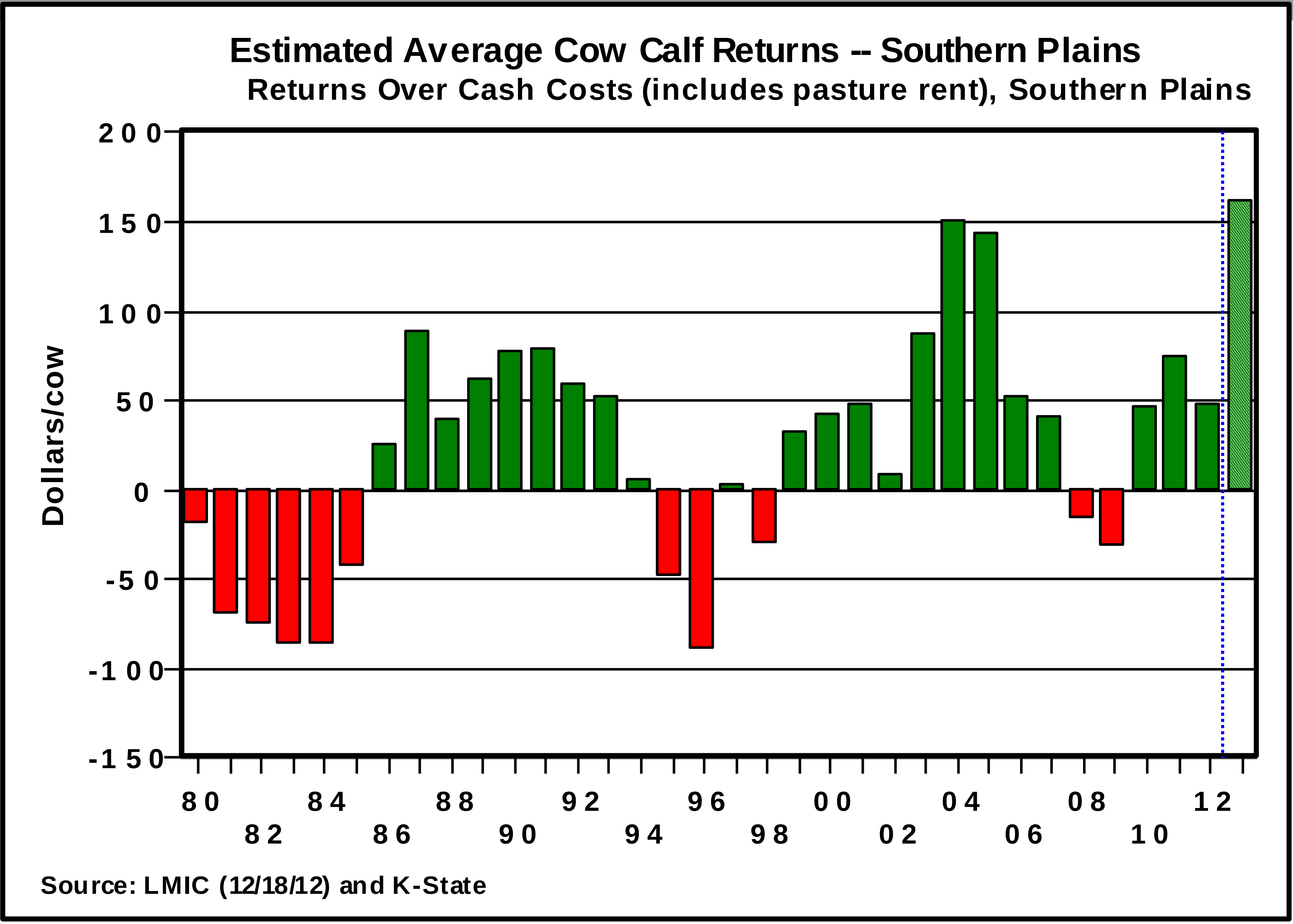
* Sorted by Net Return to Management (Returns over Total Costs) per Cow

Compared to $191 between top and bottom third years.

2012 was looking good, until corn crop burned up…



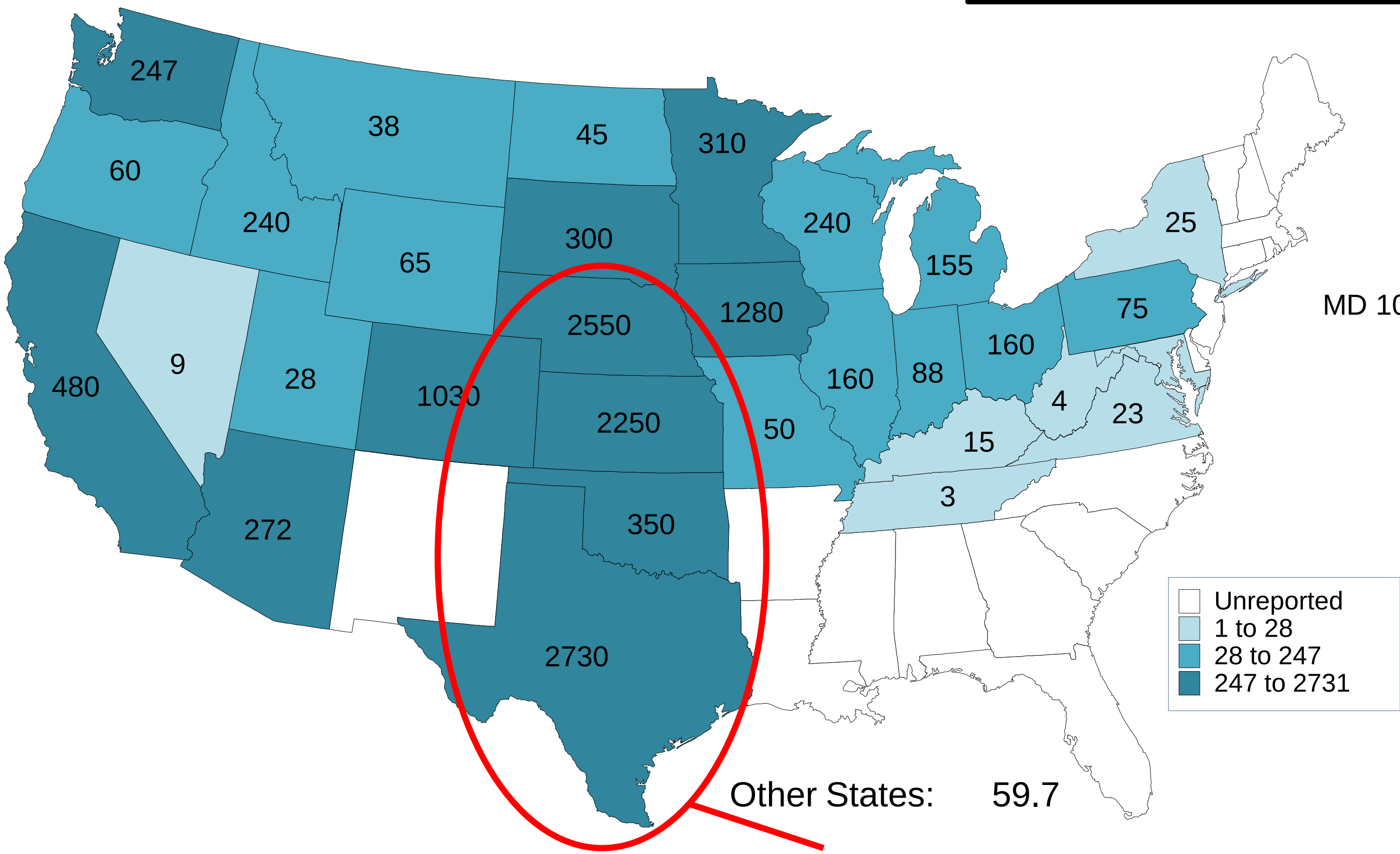
Some good years on the horizon for cow-calf producers?



Cattle feeding occurs in the High Plains (not Corn Belt)…

CATTLE ON FEED JANUARY 1, 2013
(1000 Head) – U.S. Total = 13,352

Cattle on Feed:
-5.4% vs. 2012



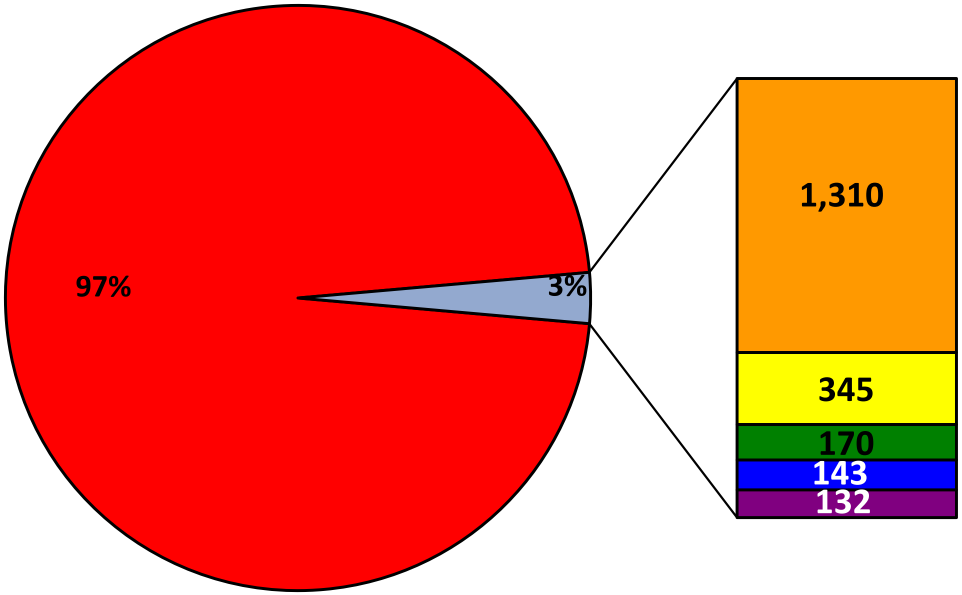
~56% of the nation's cattle on feed are in NE, KS, and TX.

Livestock Marketing Information Center
Data Source: USDA-NASS

Feedlot sector – considerable diversity in size…

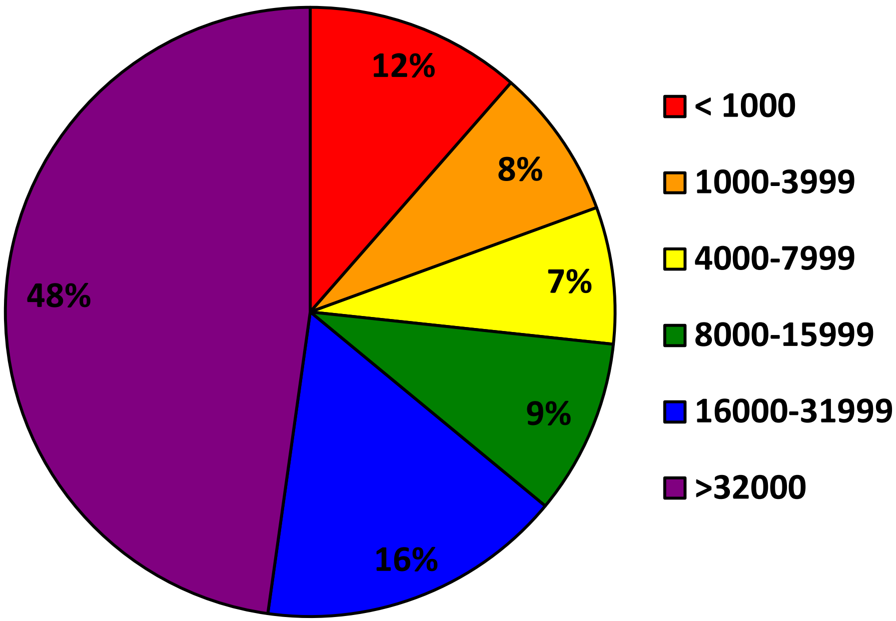
Majority of feedlots are small (farmer-feeders), but they account for a relatively small share of total marketings.

Number of Feedlots by Capacity



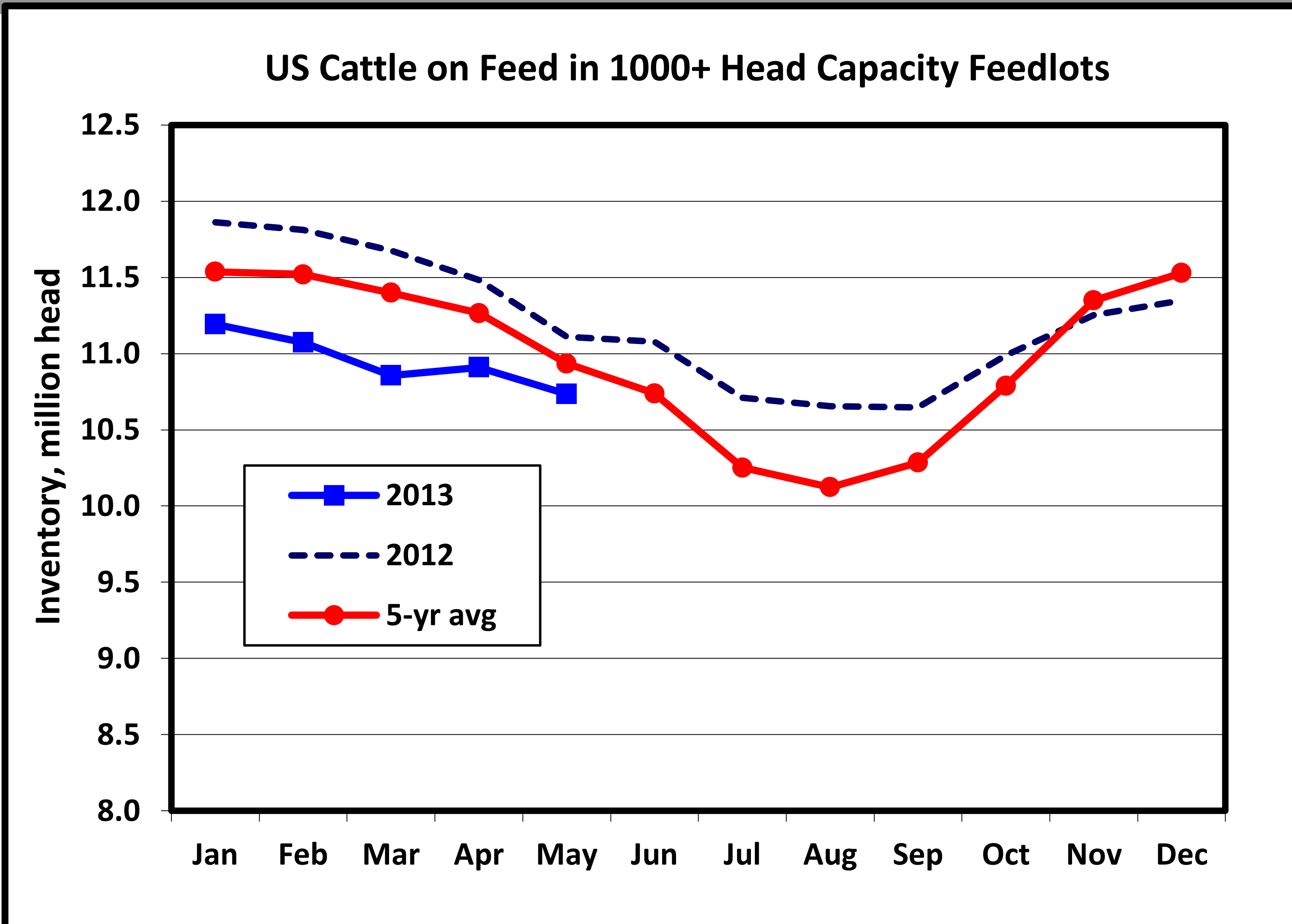
Total (2012) = 75,100 feedlots

Fed Cattle Marketings by Feedlot Capacity



Total (2012) = 24,949,000 head

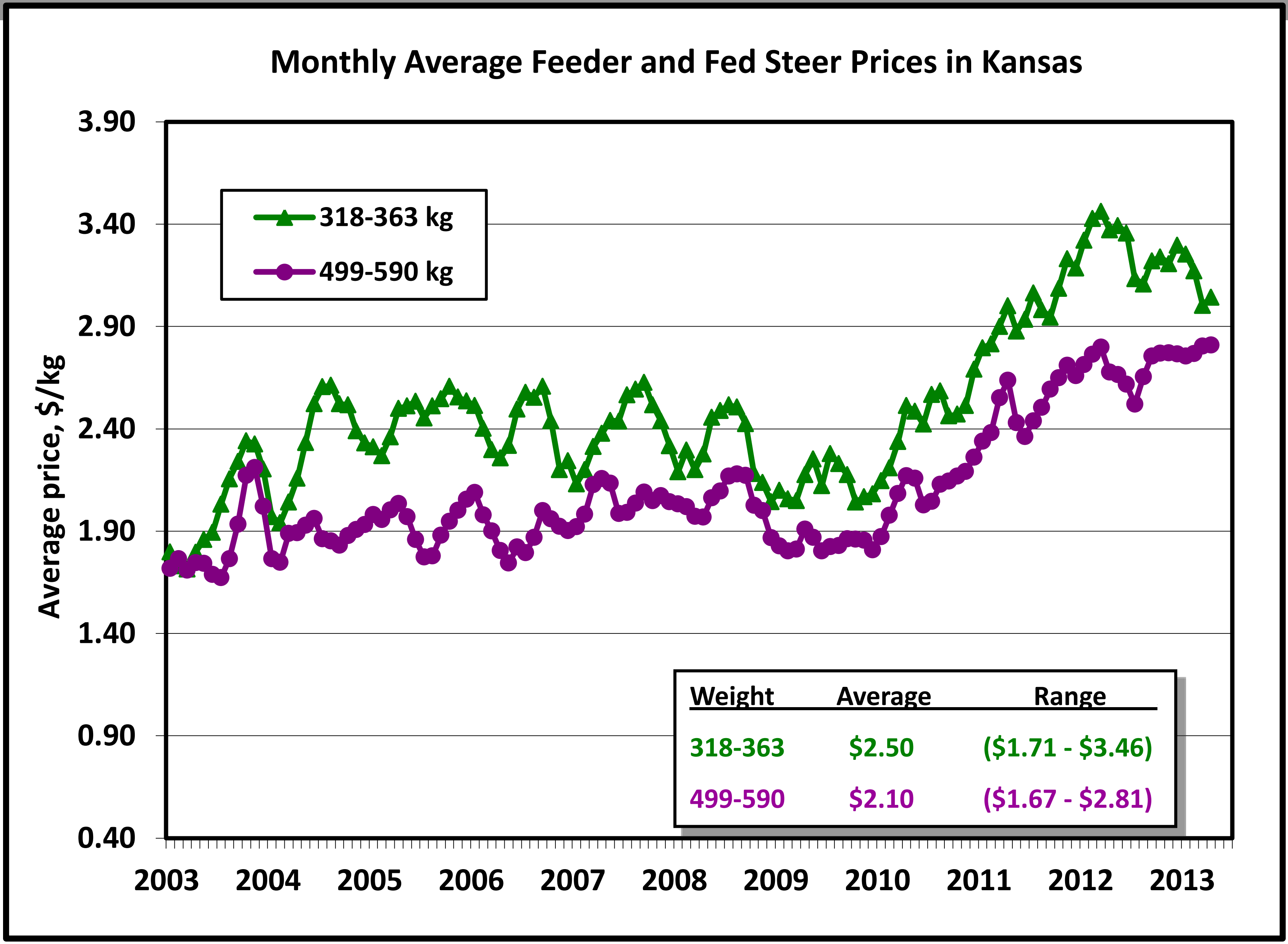
Cattle on feed numbers in 2013 are down…



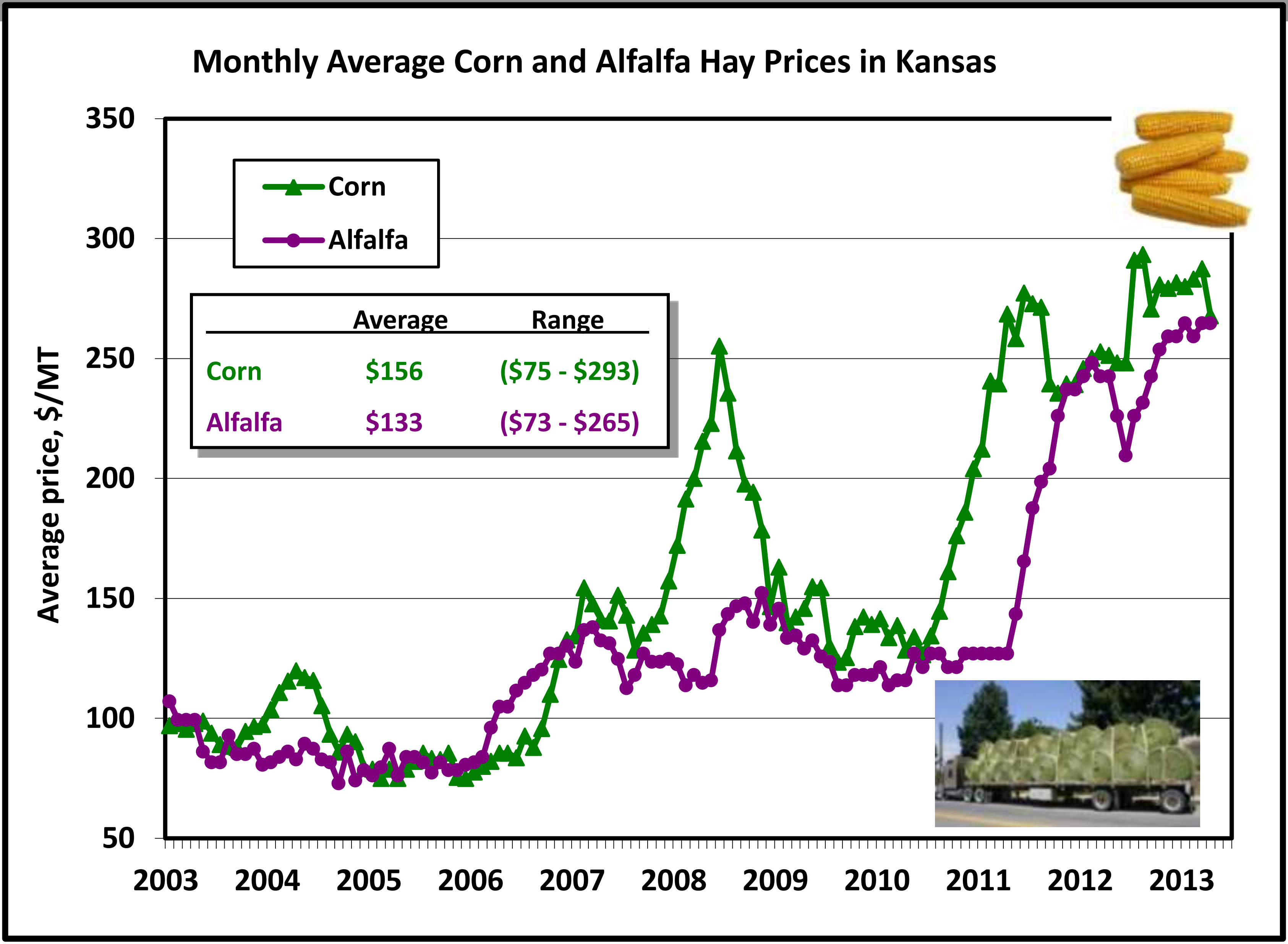
Cattle feeding sector (feedlots)

- **As the industry increases the production of beef per cow, fewer cows are needed to produce the same amount of beef → excess feedlot capacity (unless the market grows).**

Feeder cattle market has been softening…



Feed prices (corn and alfalfa) – variable and high…

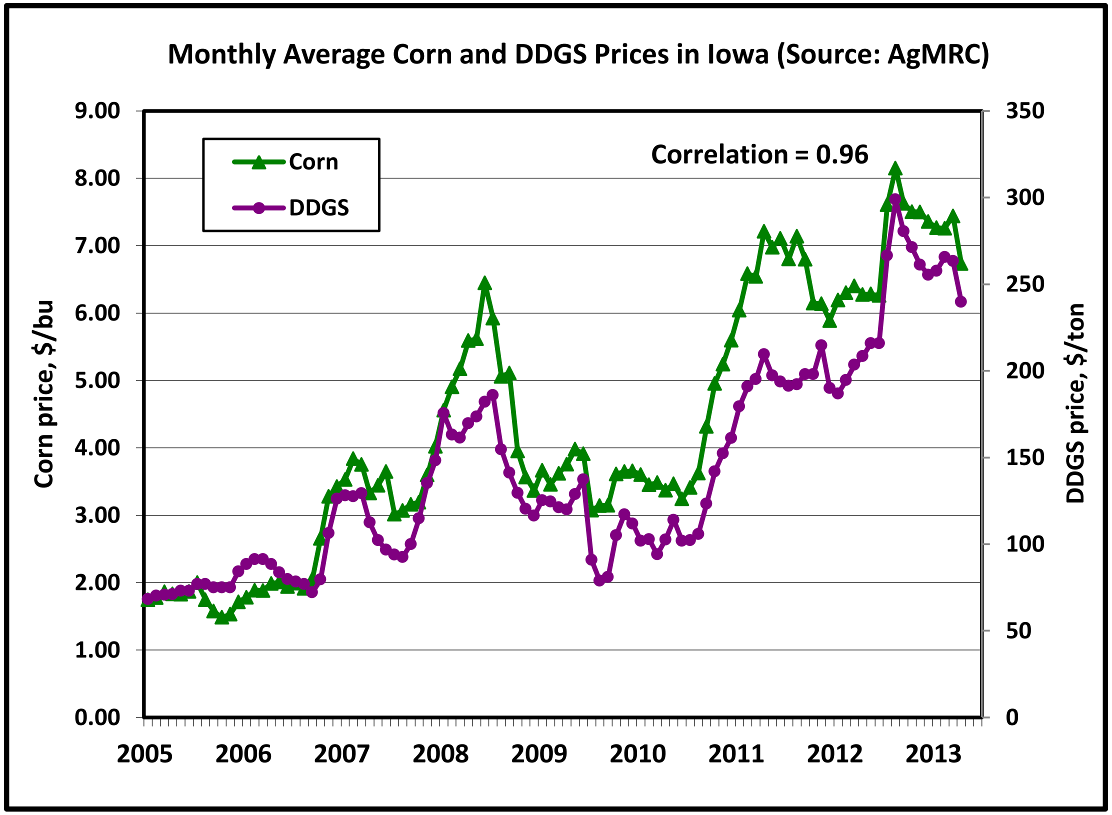


Distillers have become a common feedstuff…

Nutrition Management Practice: Fed Distillers Grains as Part of the Ration*

	Feedlot Capacity, head			
	1-499	500-999	1,000 to 7,999	8,000 or more
Percent of feedlots	23.0	80.6	90.8	89.9
Percent of cattle and calves	45.0	77.0	90.4	87.2

* Source: USDA APHIS NAHMS, *Feedlot 2011*, Part I and II.

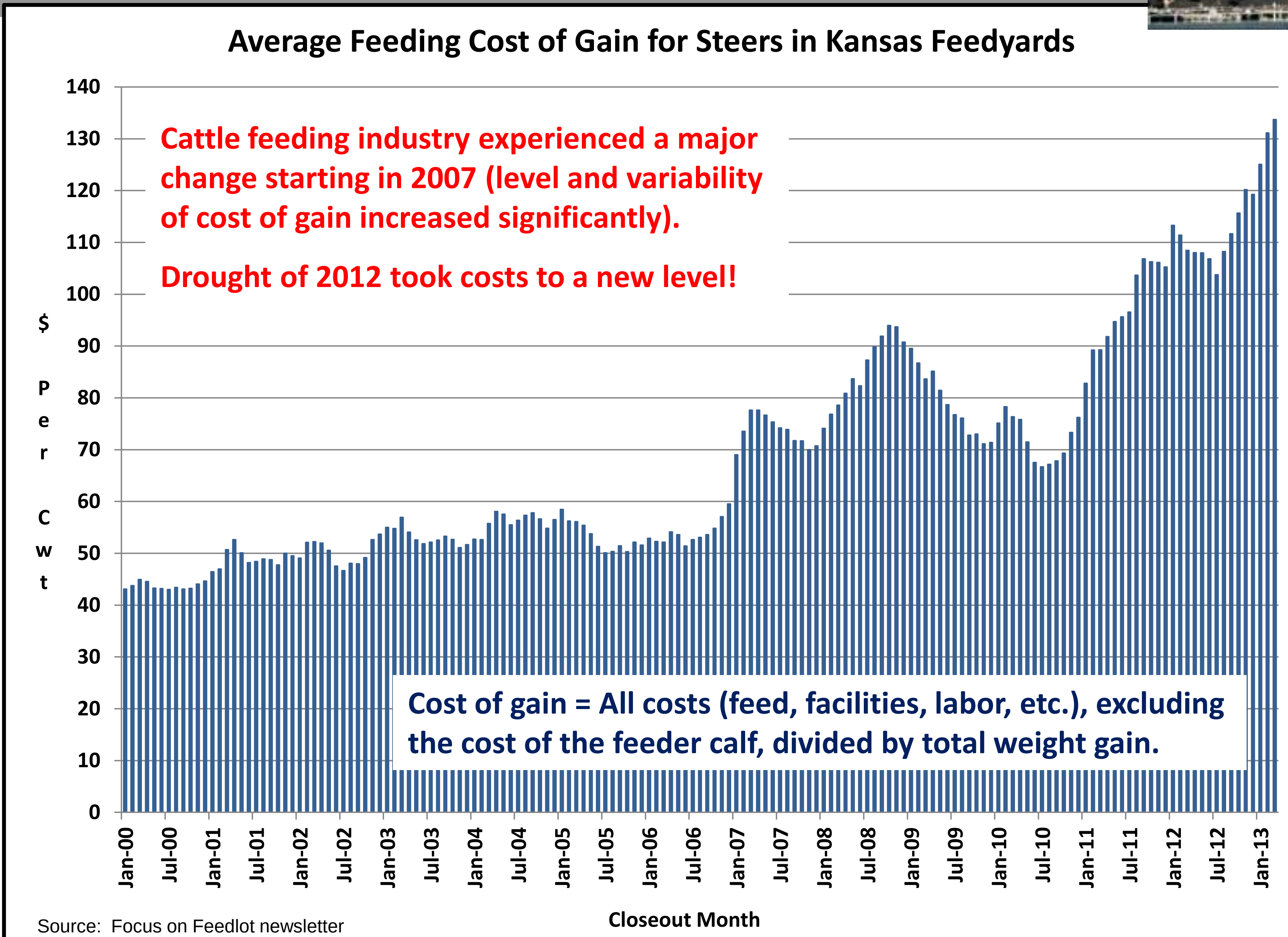


Most feedlots (at least those larger than 500 head) feed distillers grains as part of their rations.

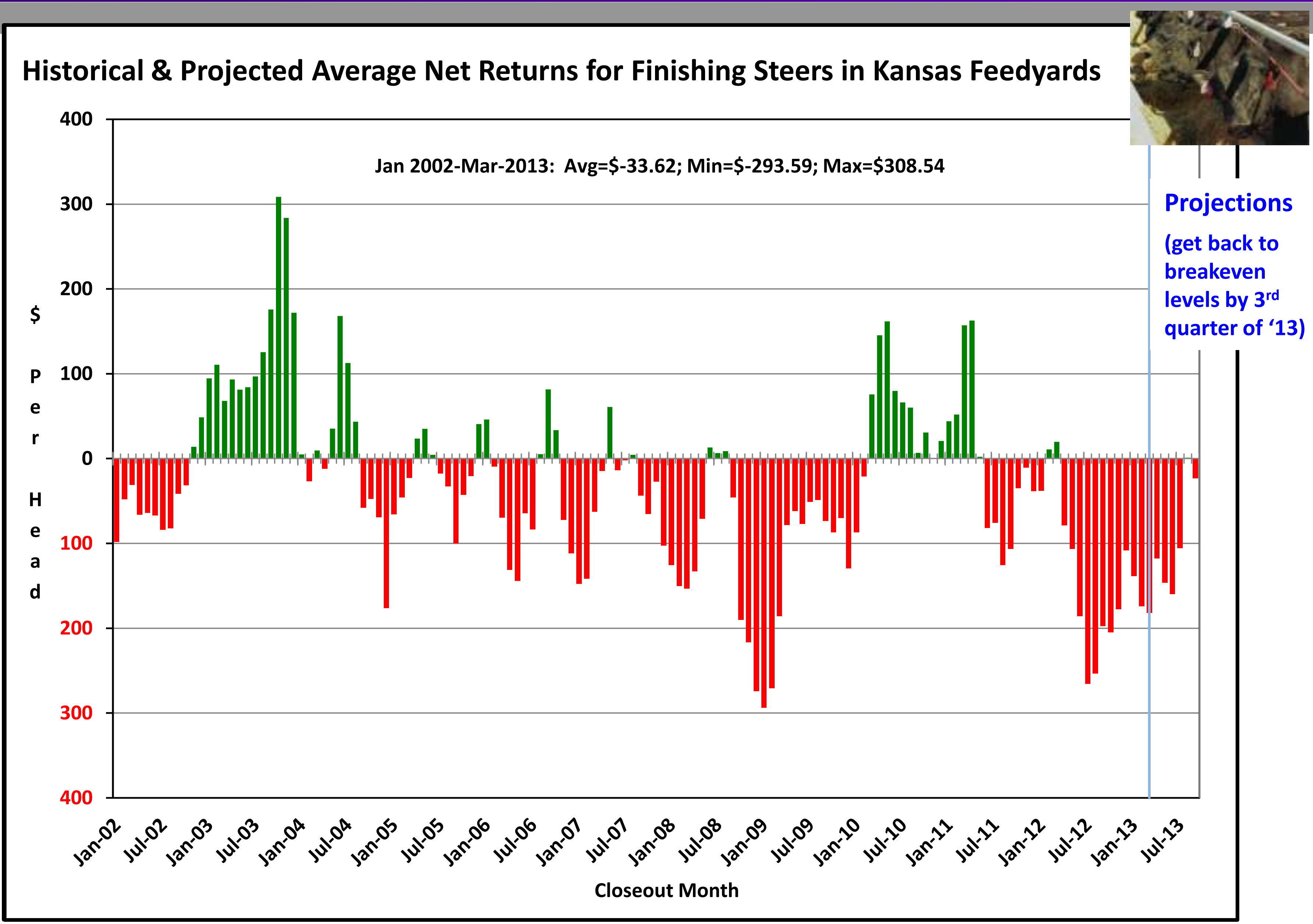
Unfortunately, that doesn't help alleviate the high price of corn all that much given competition in the market place.

The use of DDGS does provide an advantage to Corn Belt feeders over feedlots in the High Plains.

Feeding cost of gain for steers

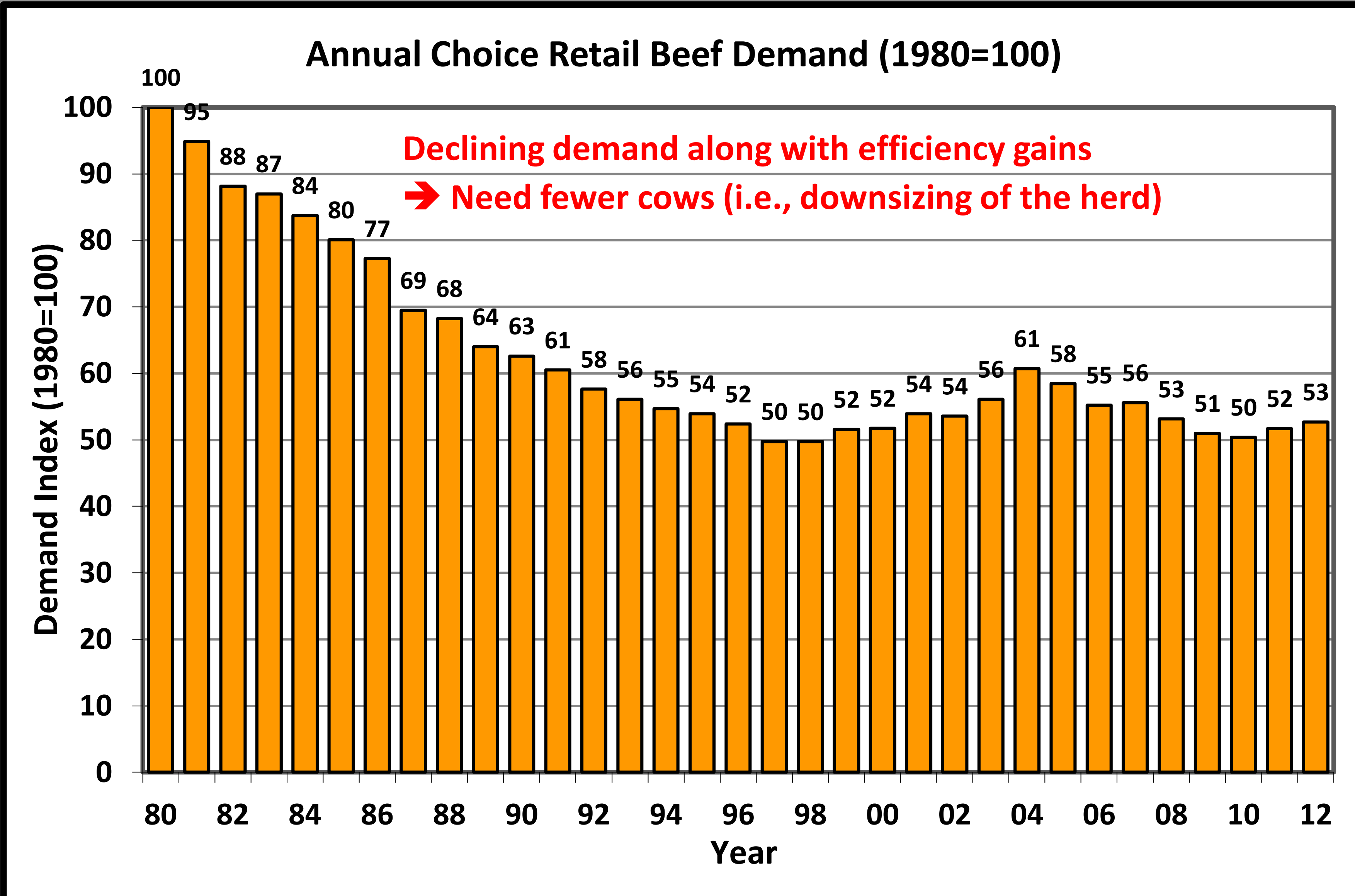


Economic returns – a sign of over capacity in industry?



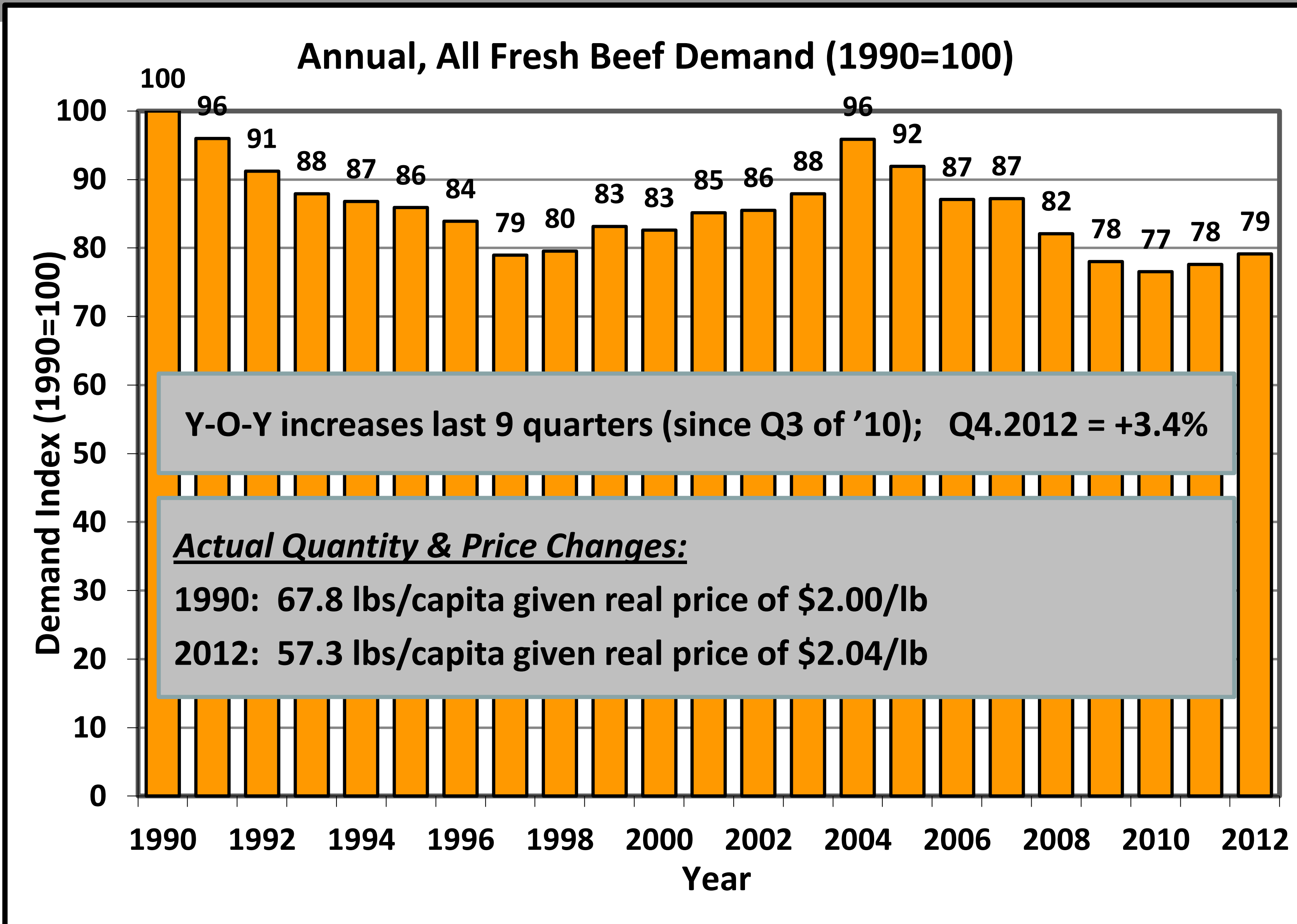
General Issues

After long-term downward trend, US beef demand has stabilized…



Source: Tonsor, Kansas State University, www.agmanager.info

Are things possibly turning around?



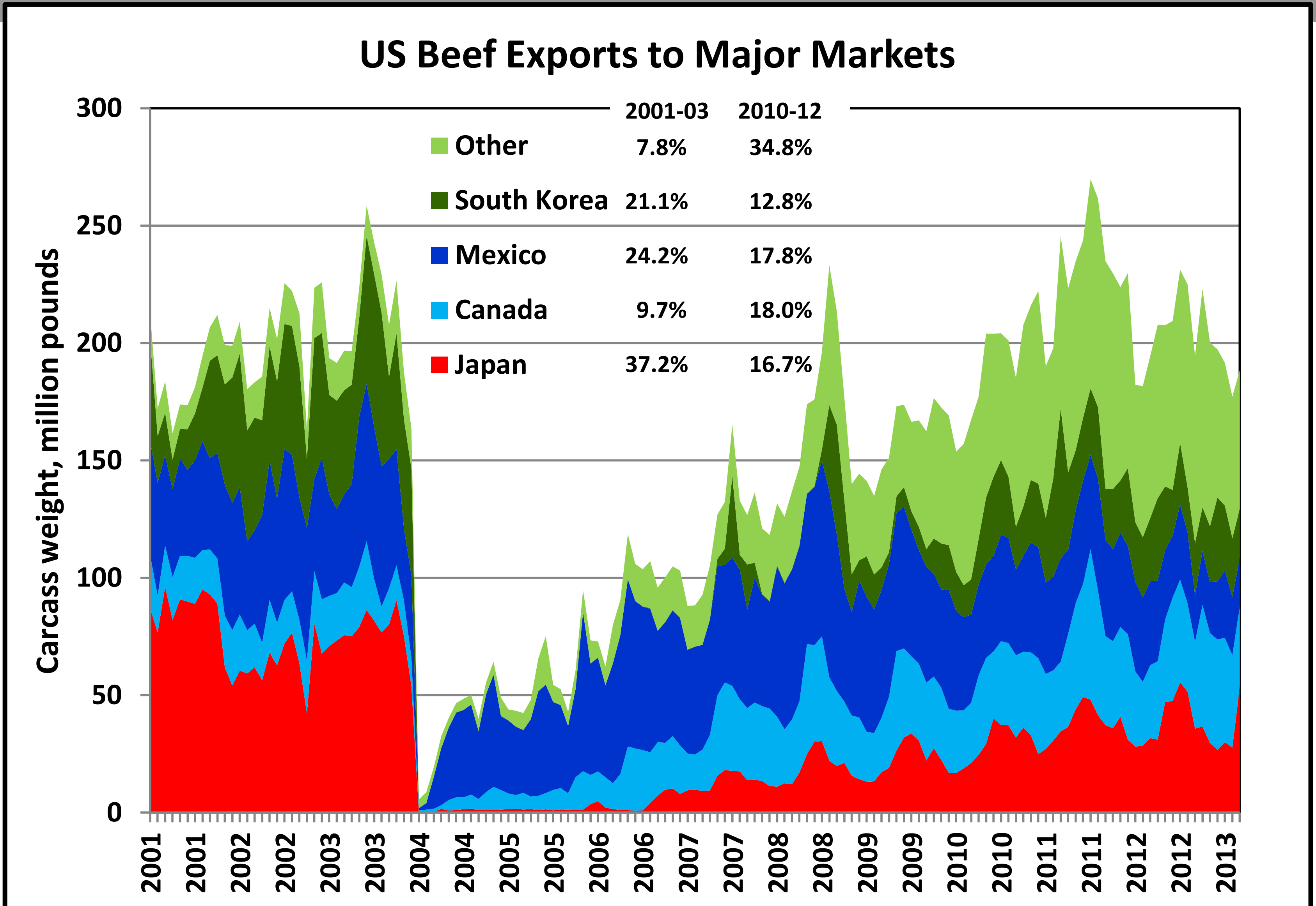
Source: Tonsor, Kansas State University, www.agmanager.info

Demand – domestic (stable) and global (growing) issues…

- **MCOOL -- (example of industry polarization in the US)**
- **How is beef produced (i.e., non-price factors)?**
  - **Antibiotic/hormone/beta-agonist issues**
  - **Natural, organic, local**
  - **Animal welfare issues**
  - **Food safety issues**
- **Animal ID/traceability -- U.S. lags many competing countries**
- **EU-US FTA – likely would be positive for US beef industry, but magnitude of benefit likely quite small…**
- **Many issues are emotional with decisions often based on perception rather than reality… …but, does it matter?**

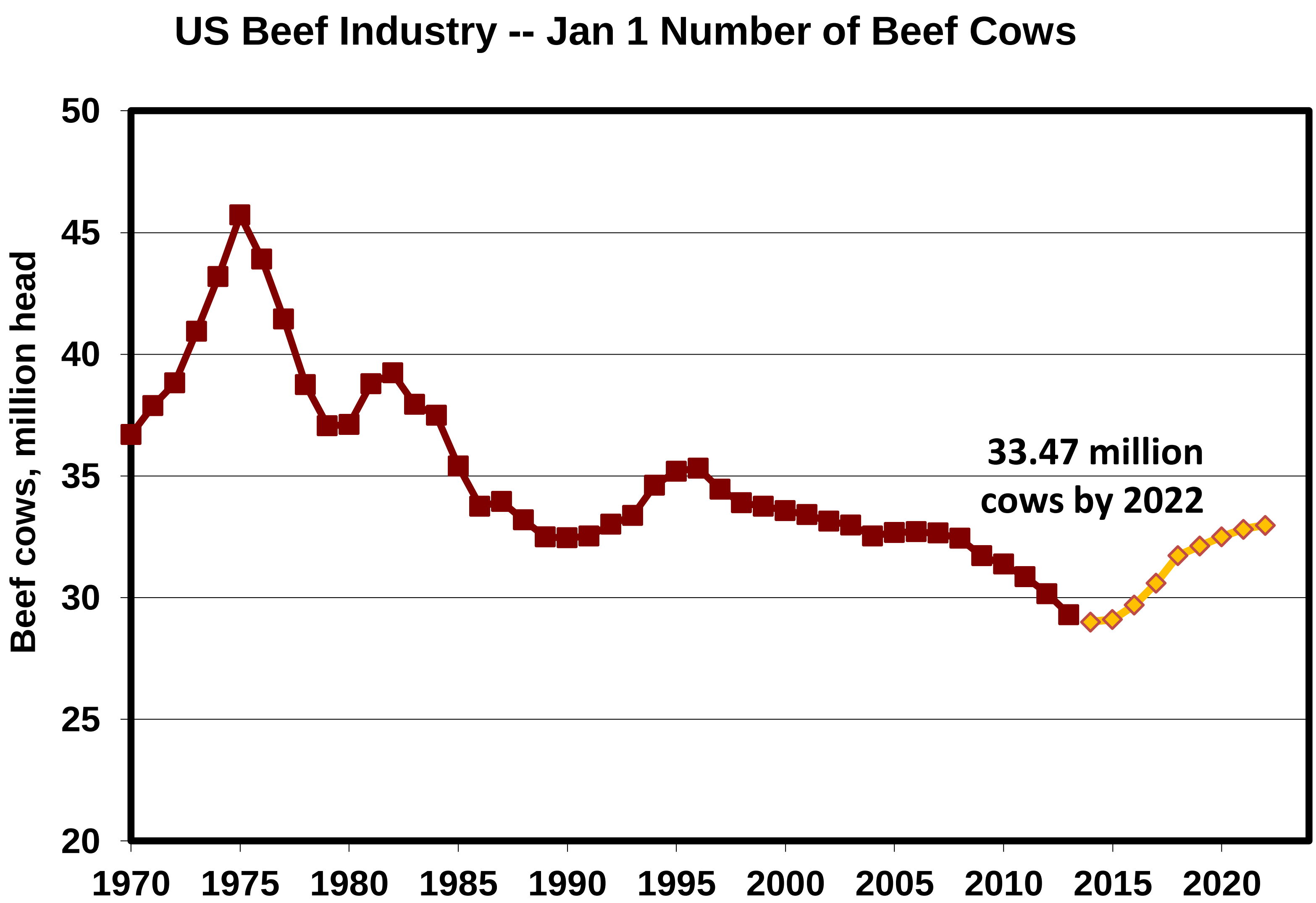
Exports have built back to pre-BSE…

Industry's portfolio is expanding and becoming more diversified



Source: USDA-ERS & USDA-FAS

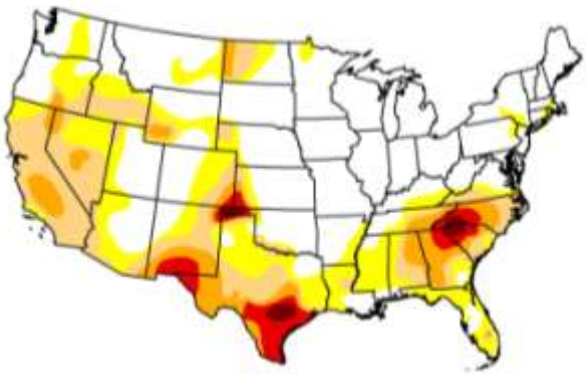
Not much growth projected in short run…



http://www.ers.usda.gov/data-products/agricultural-baseline-database.aspx

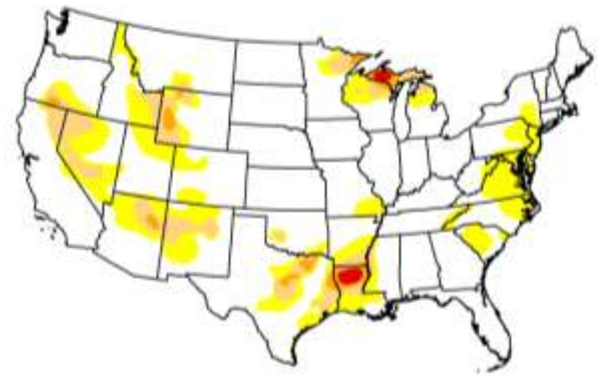
Weather the last three years has been challenging…

7/1/2008



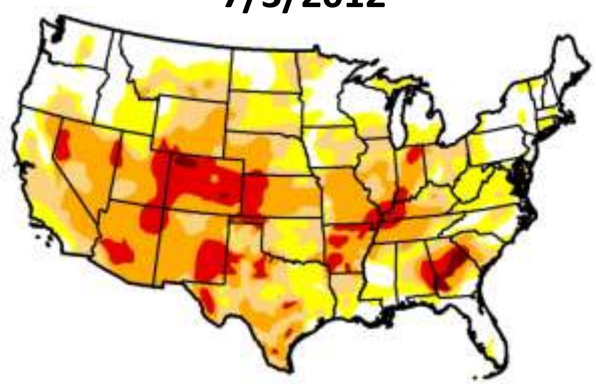
6/30/2009

6/29/2010

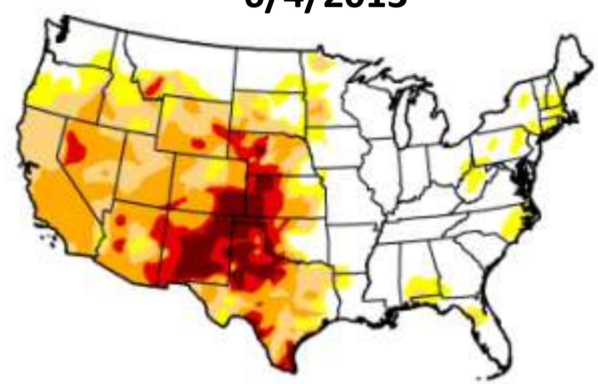


7/5/2011

7/3/2012



6/4/2013



Drought Severity

- D0–Abnormally Dry
- D1–Drought - Moderate
- D2–Drought - Severe
- D3–Drought - Extreme
- D4–Drought - Exceptional

Summary

- **Expansion in cow herd**
  - **Slowed by continued drought in key areas**
  - **Less need due to increased productivity & domestic demand**
  - **More need due to global demand growth?**
- **Fewer cows → fewer feeder cattle → less feedlot and packer capacity needed (we are seeing some closings)**
- **High corn prices → add weight prior to the feedlot (i.e., shift to more grazing and backgrounding programs)**
- **Price variability has increased significantly leading to more emphasis on risk management and alliances**

Summary

- **Exports back to “pre-BSE” levels – less reliance on top four customers**
- **Difficult to have national programs/certifications due to industry diversity, but “segments” very capable of producing and delivering what is demanded**
- **Vertical coordination becoming more important to respond to market signals (local and global markets)**

For more information and decision tools related to farm management, marketing, and risk management go to www.AgManager.info

Kevin C. Dhuyvetter, Professor

kcd@ksu.edu

Department of Agricultural Economics --- Kansas State University