

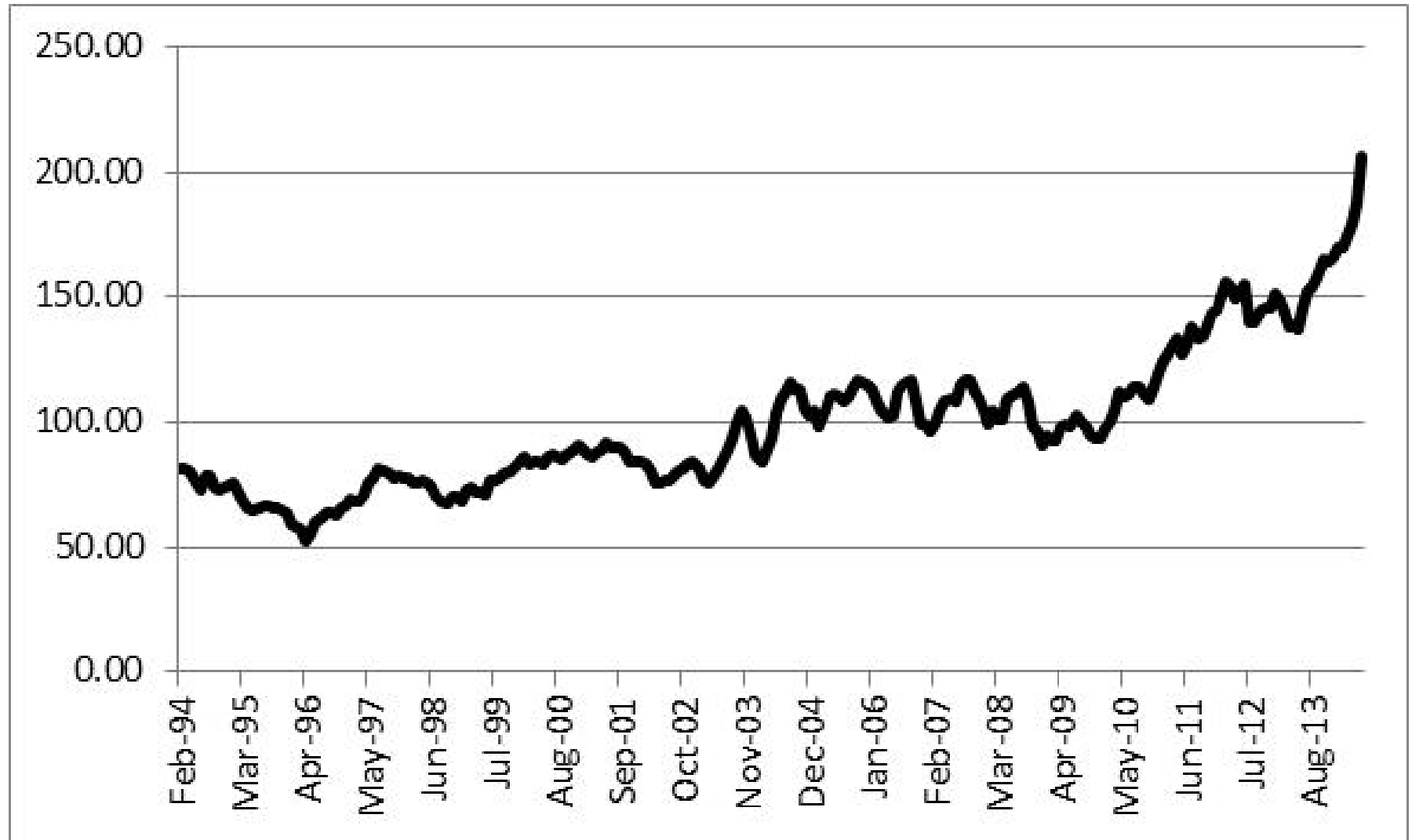
# Cattle Market Update: August 2014

Kenny Burdine  
UK Agricultural Economics

# Market Fundamentals

- Small cow-herd
  - Profit can't make it rain, competition for ground
  - Has expansion begun?
- Domestic demand has improved
  - Exports still very strong
- Calf / feeder markets still adjusting to feed prices - \$2.50, \$3.50, \$7.50, \$5.00, \$3.50
- A lot of uncertainty / volatility

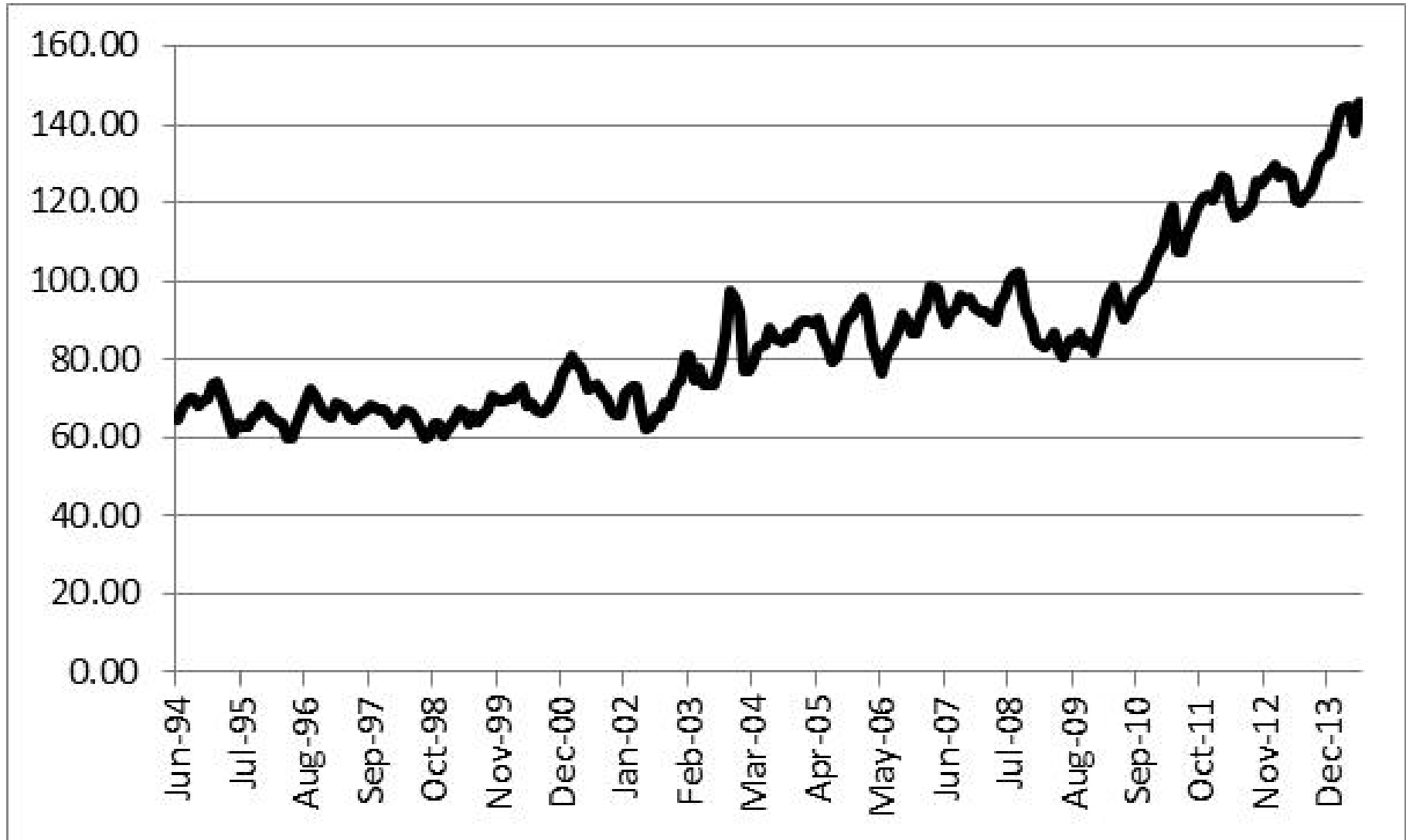
# Nearby CME Feeder Cattle Futures (June 1994 - June 2014)



Source: CME© and LMIC

# Nearby CME Live Cattle Futures

(June 1994 - June 2014)



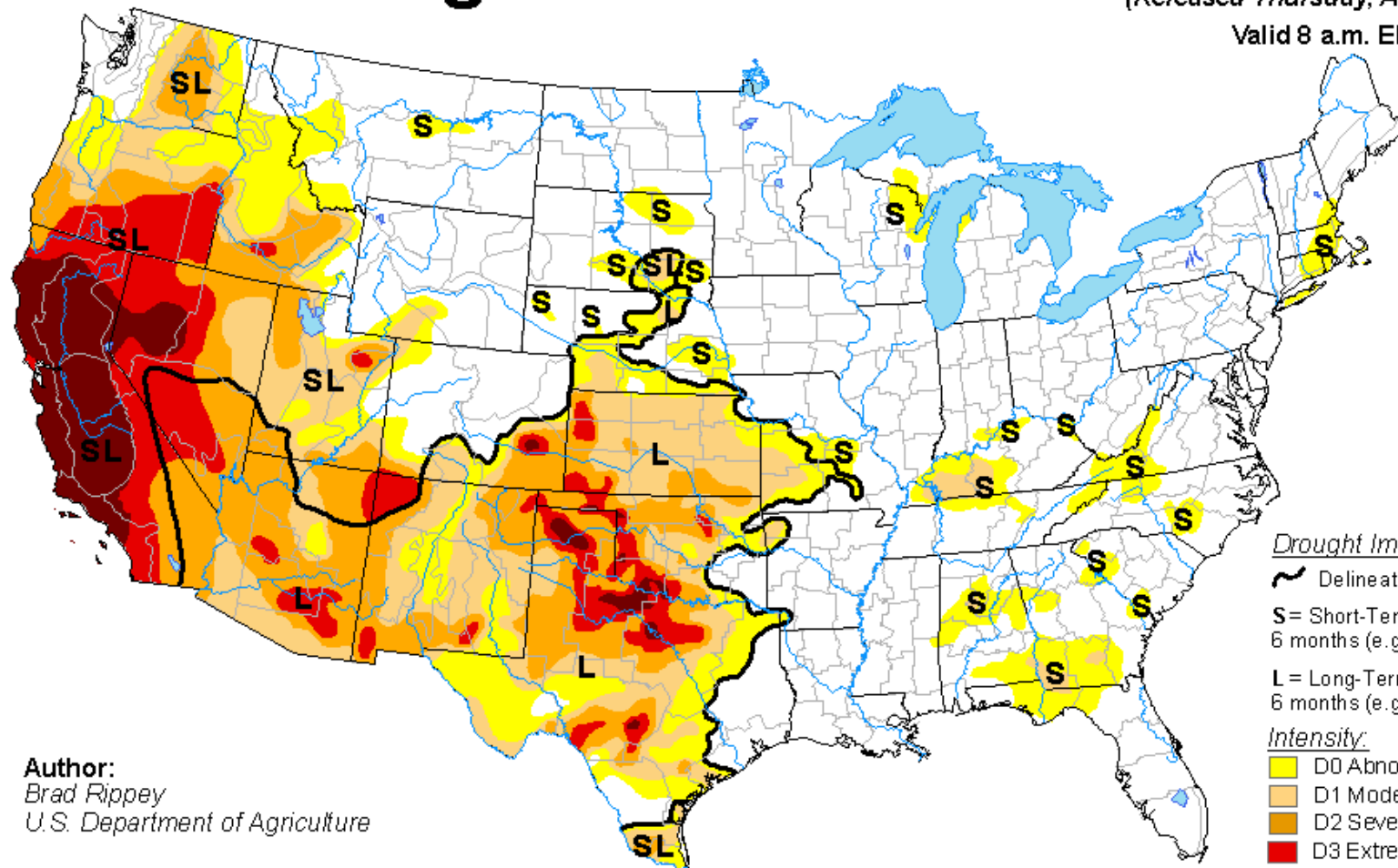
Source: CME© and LMIC

# U.S. Drought Monitor

August 5, 2014

(Released Thursday, Aug. 7, 2014)

Valid 8 a.m. EDT



Author:  
Brad Rippey  
U.S. Department of Agriculture

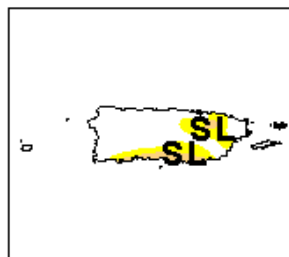
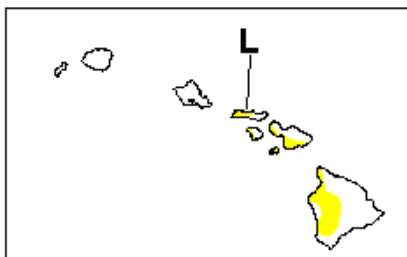
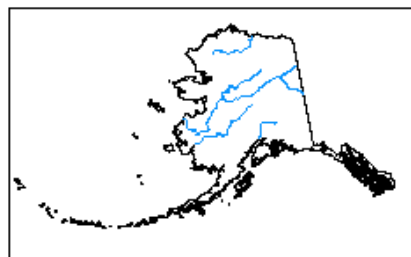
## Drought Impact Types:

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

## Intensity:

- Yellow D0 Abnormally Dry
- Orange D1 Moderate Drought
- Dark Orange D2 Severe Drought
- Red D3 Extreme Drought
- Dark Red D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

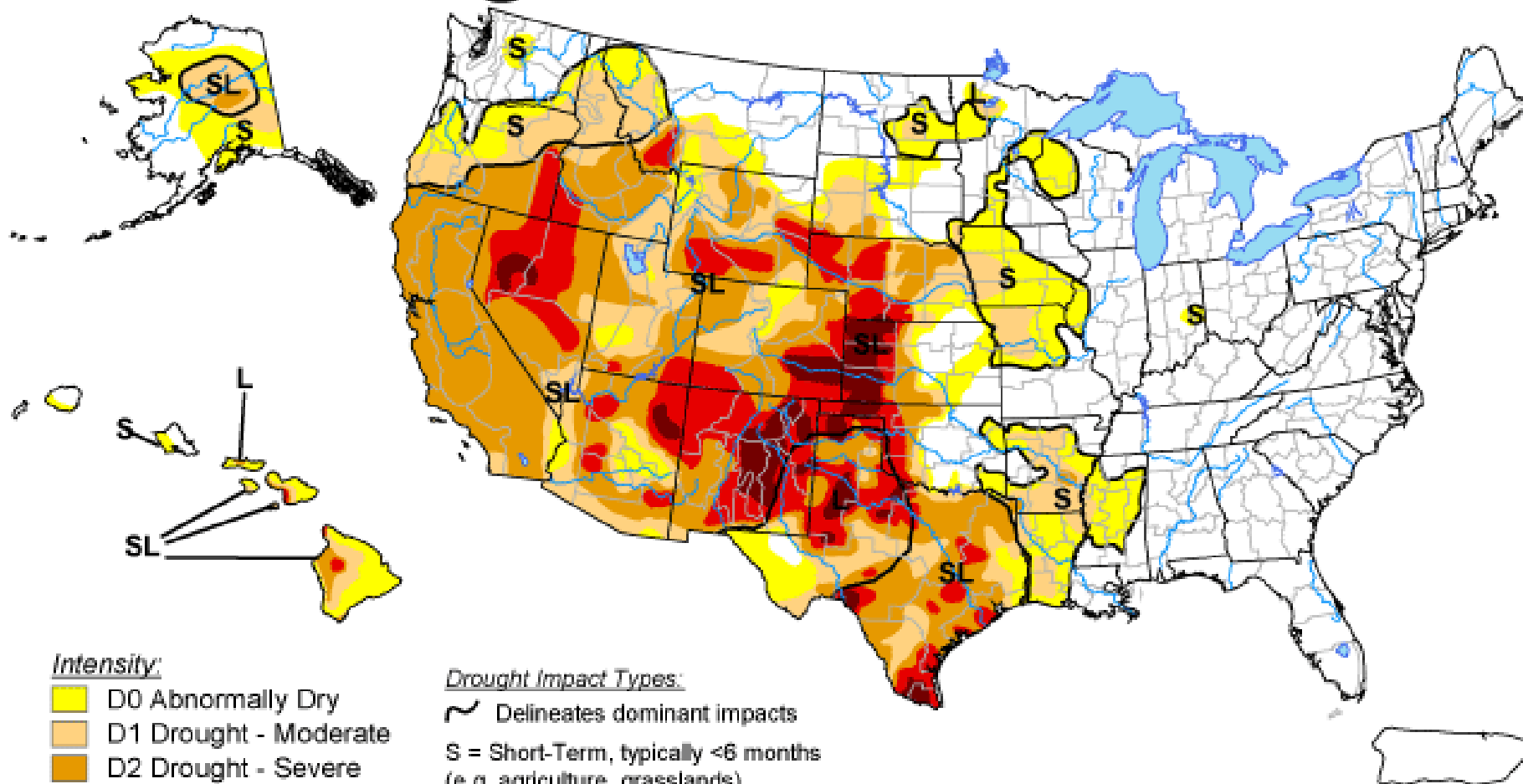


<http://droughtmonitor.unl.edu/>

# U.S. Drought Monitor

August 6, 2013

Valid 7 a.m. EDT



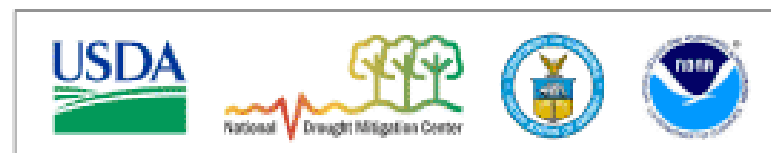
## Intensity:

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

## Drought Impact Types:

- Delineates dominant impacts
- S = Short-Term, typically <6 months  
(e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months  
(e.g. hydrology, ecology)

*The Drought Monitor focuses on broad-scale conditions.  
Local conditions may vary. See accompanying text summary  
for forecast statements.*



**Released Thursday, August 8, 2013**

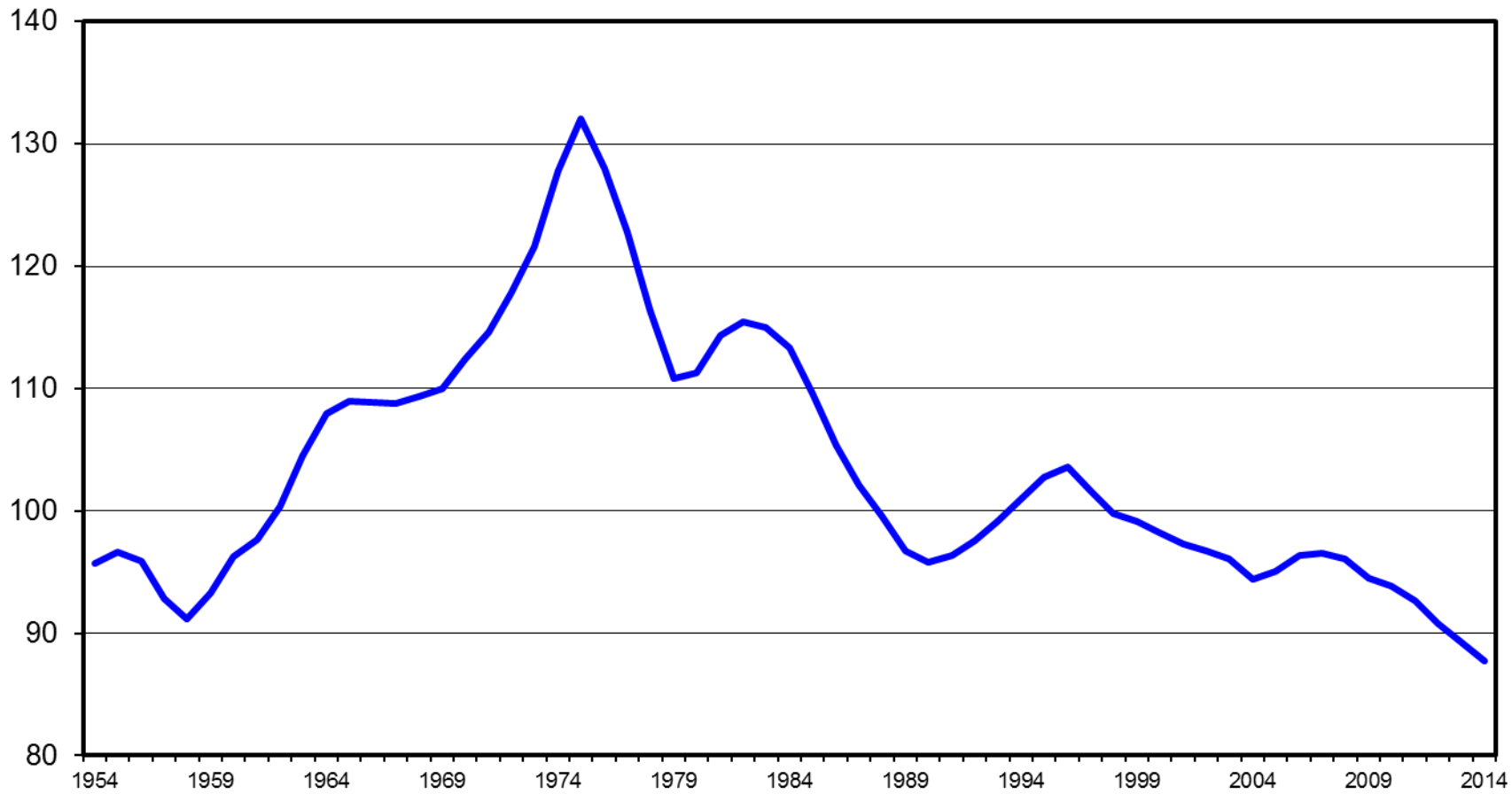
**Author: Brian Fuchs, National Drought Mitigation Center**

<http://droughtmonitor.unl.edu/>

# JANUARY 1 TOTAL CATTLE INVENTORY

## U.S., Annual

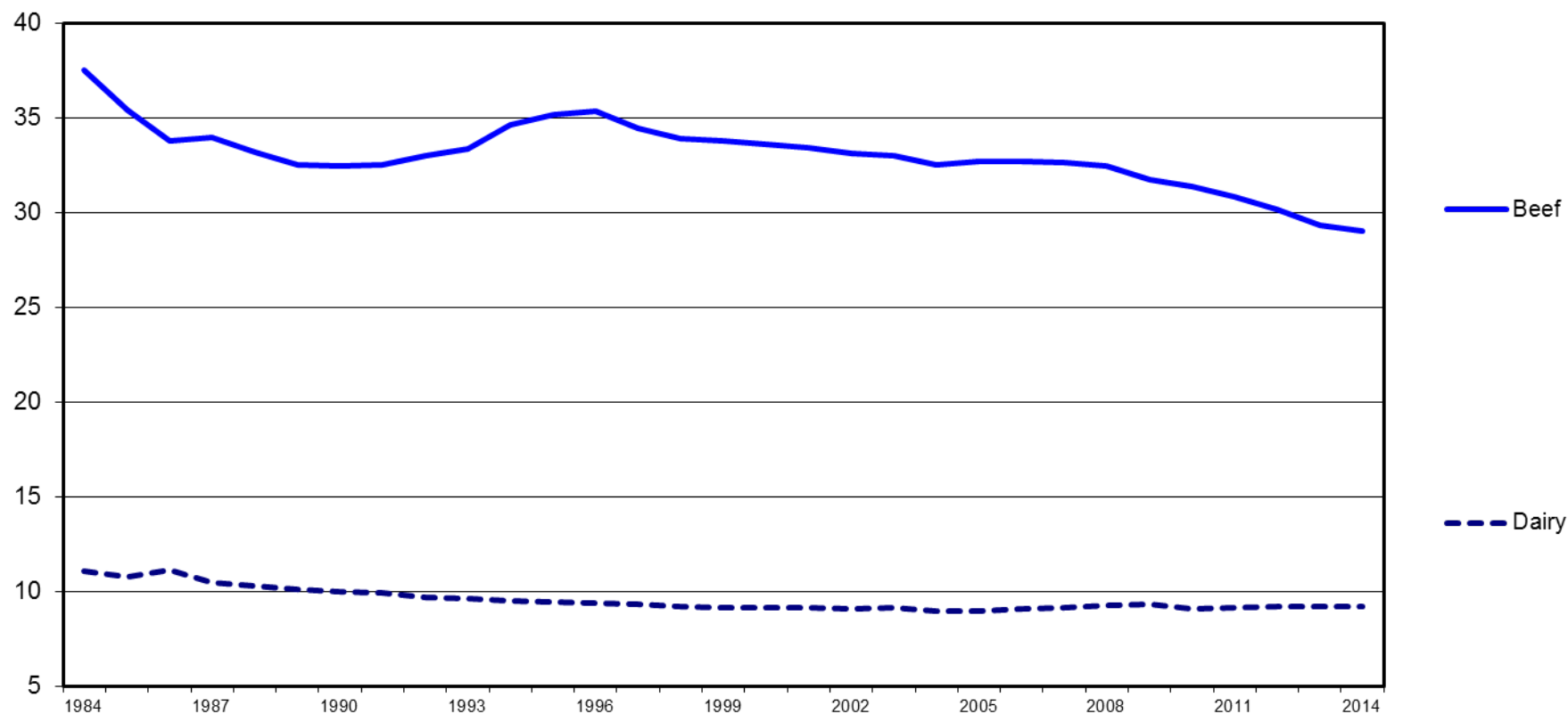
Mil. Head



# JANUARY 1 COW INVENTORY

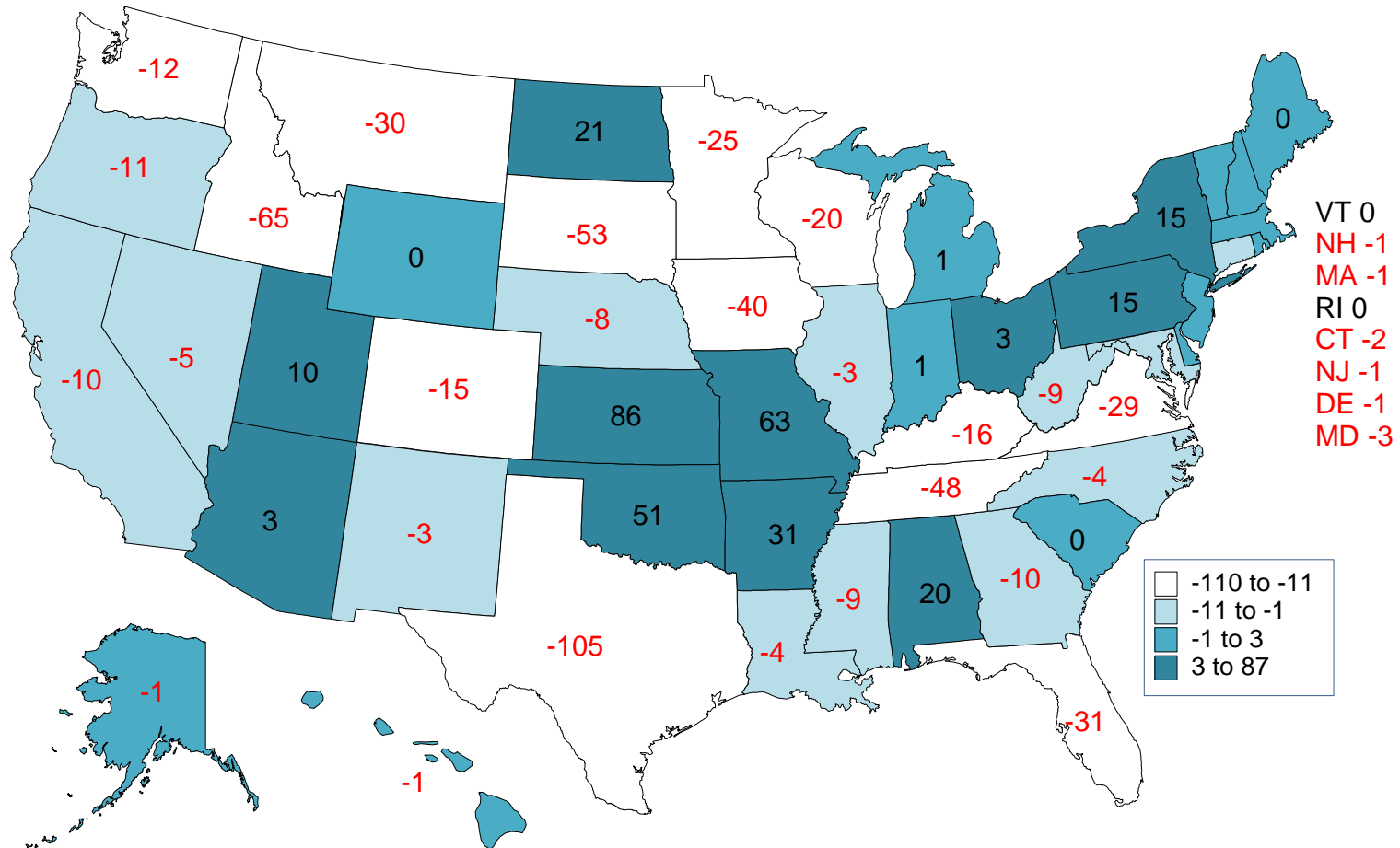
## U.S., Annual

Mil. Head





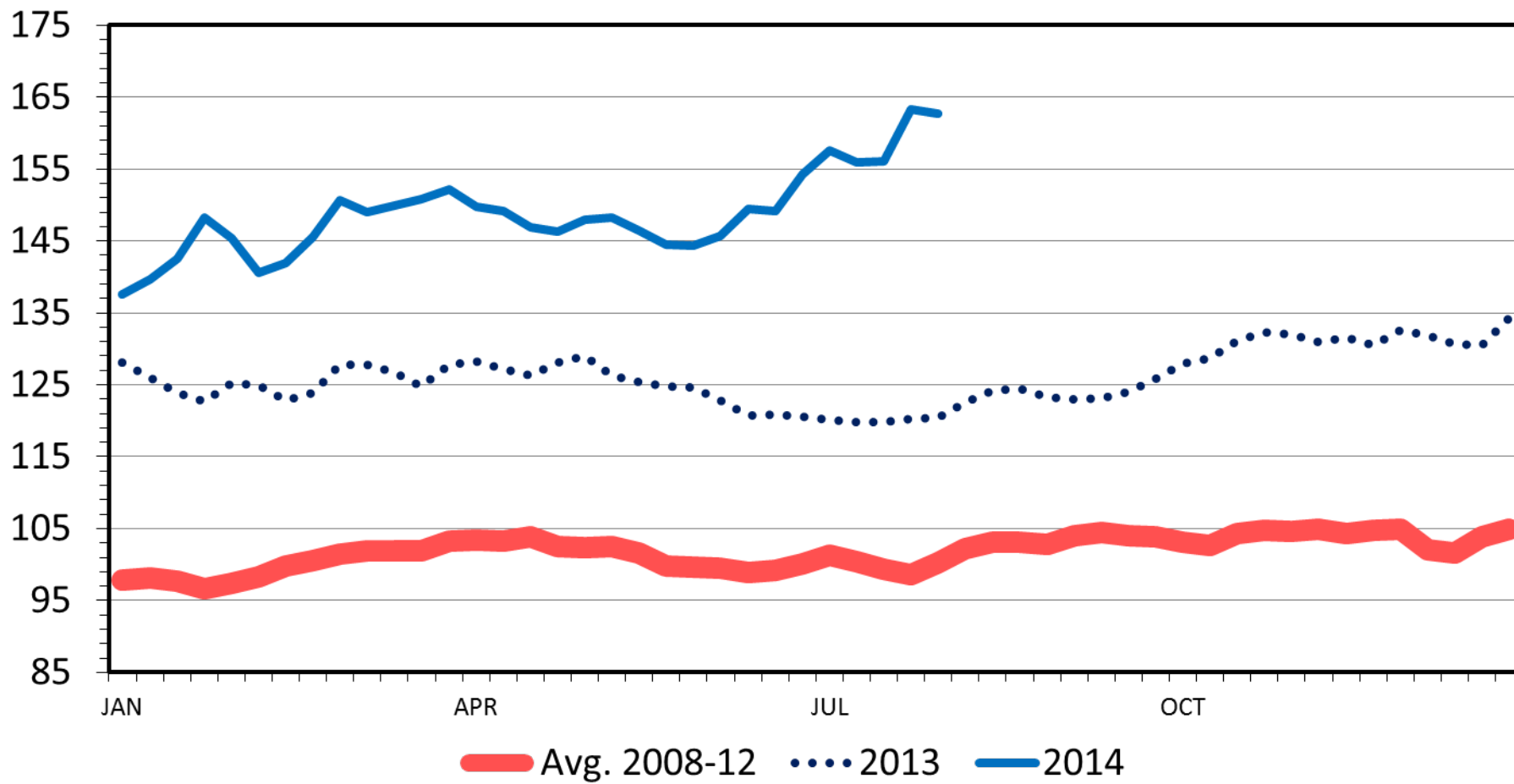
# CHANGE IN BEEF COWS NUMBERS JANUARY 1, 2013 TO JANUARY 2014 (1000 Head)



# SLAUGHTER STEER PRICES

## 5 Market Weighted Average, Weekly

\$ Per Cwt.



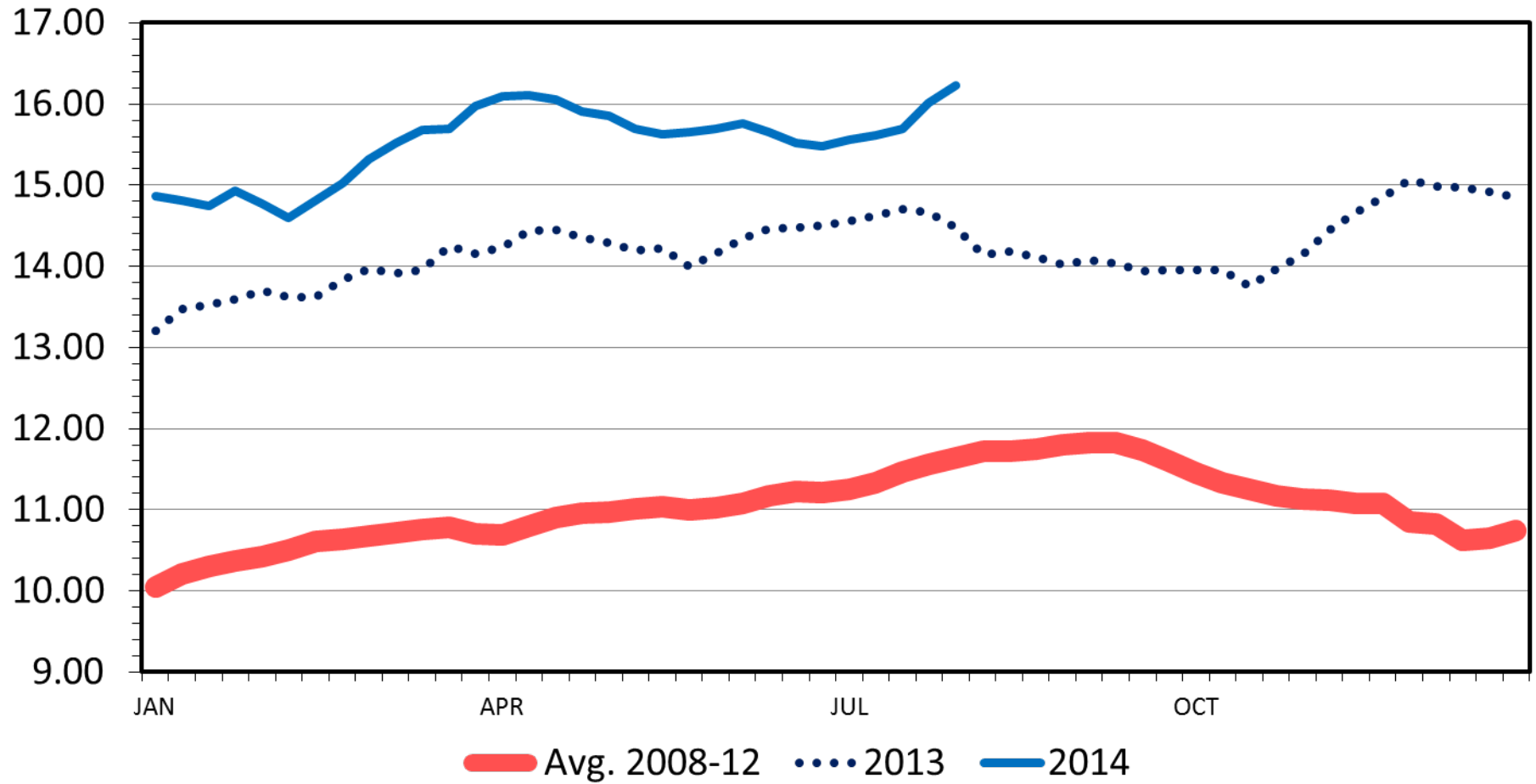
Data Source: USDA-AMS

Livestock Marketing Information Center

# STEER HIDE AND OFFAL VALUE

Live Animal Basis, Weekly

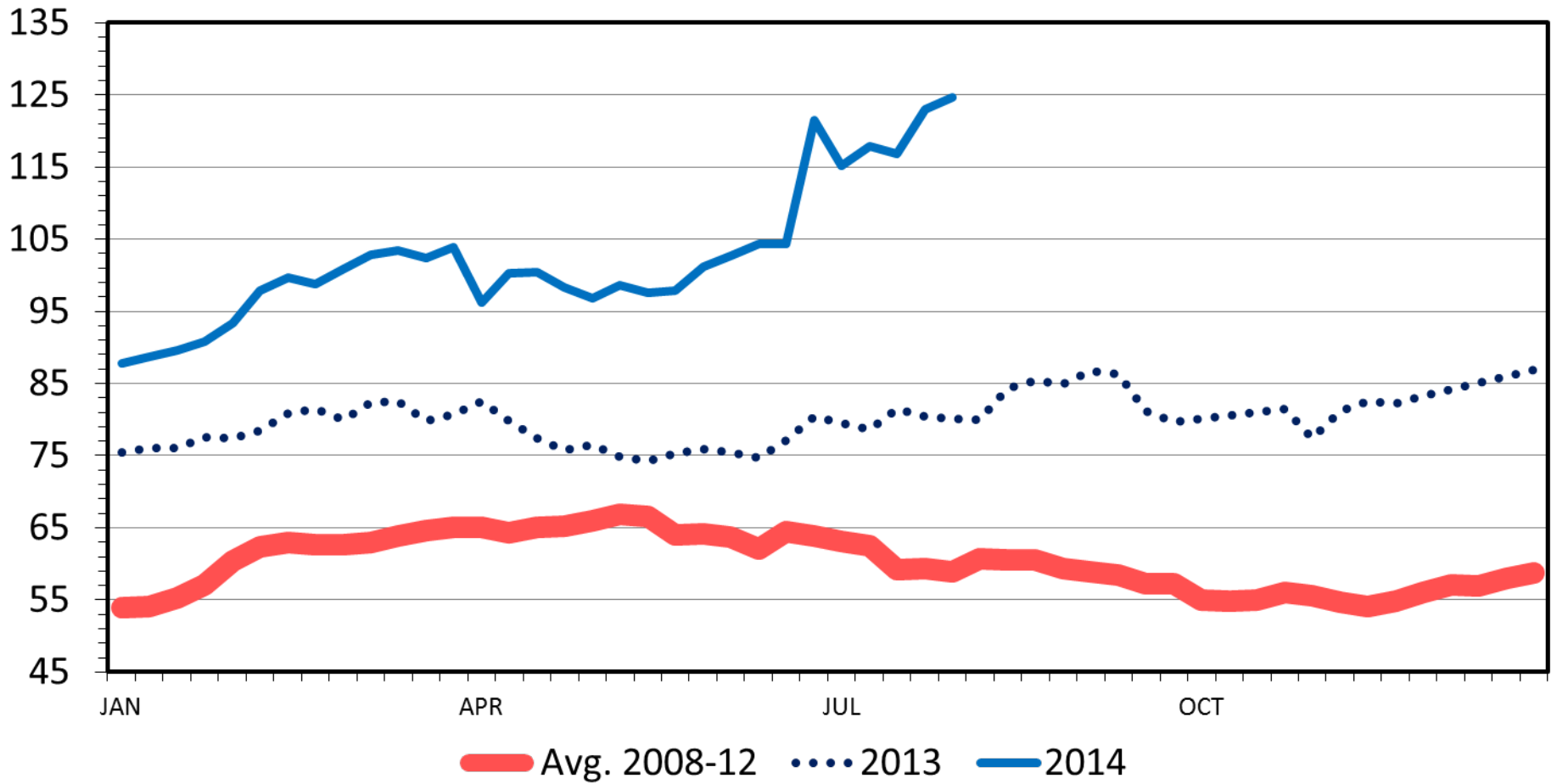
\$ Per Cwt.



# SLAUGHTER COW PRICES

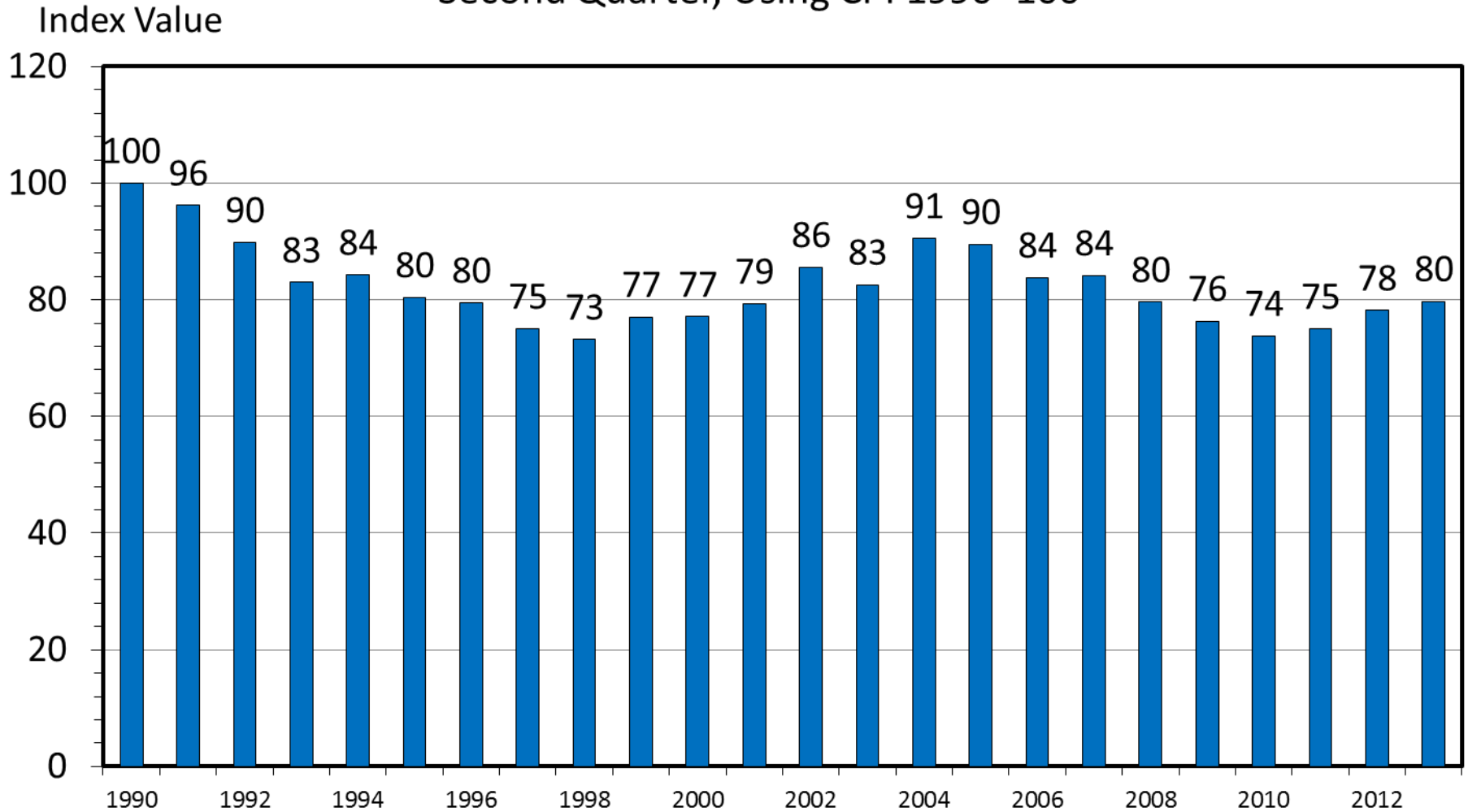
Southern Plains, 85-90% Lean, Weekly

\$ Per Cwt.



# RETAIL ALL FRESH BEEF DEMAND INDEX

Second Quarter, Using CPI 1990=100

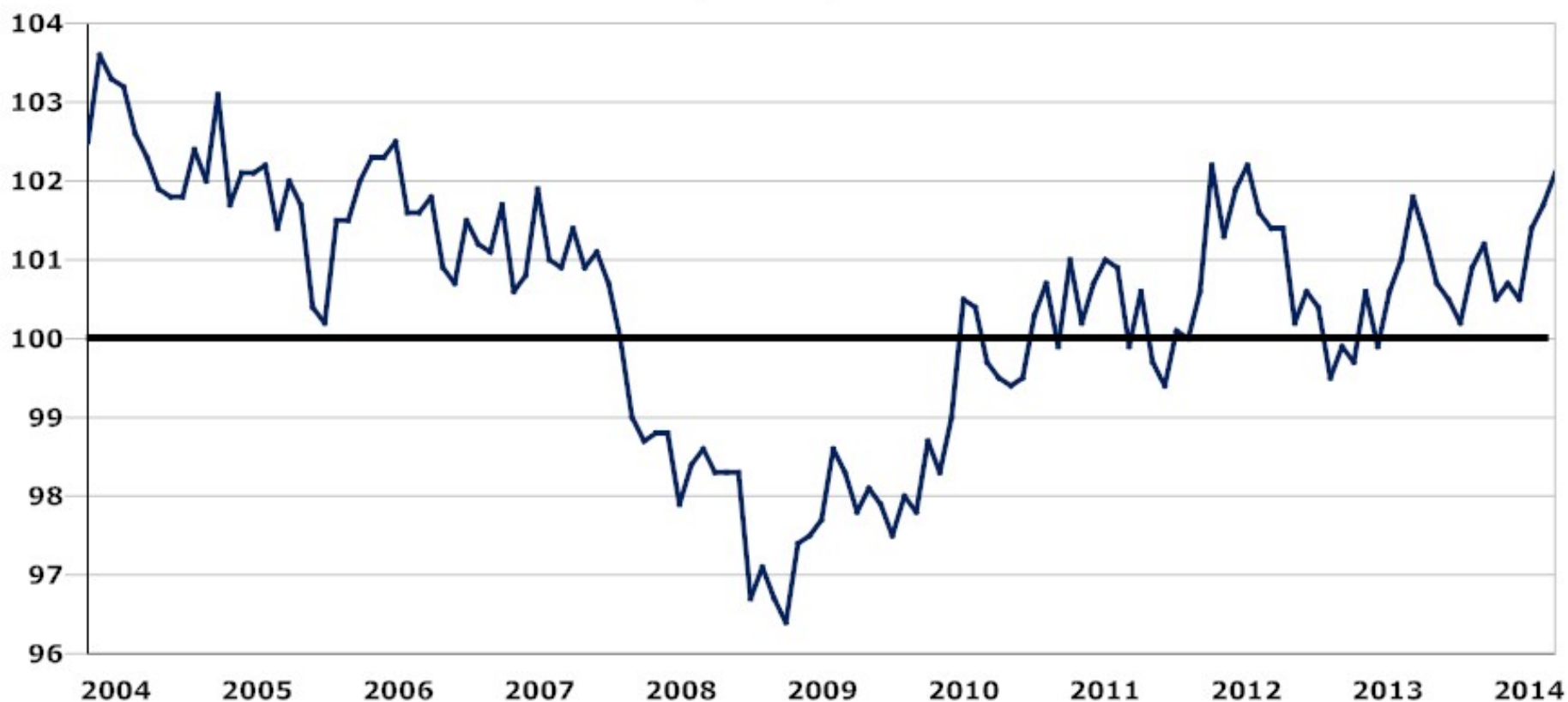


Data Source: USDA-NASS

Livestock Marketing Information Center

## Restaurant Performance Index

Values Greater than 100 = Expansion; Values Less than 100 = Contraction

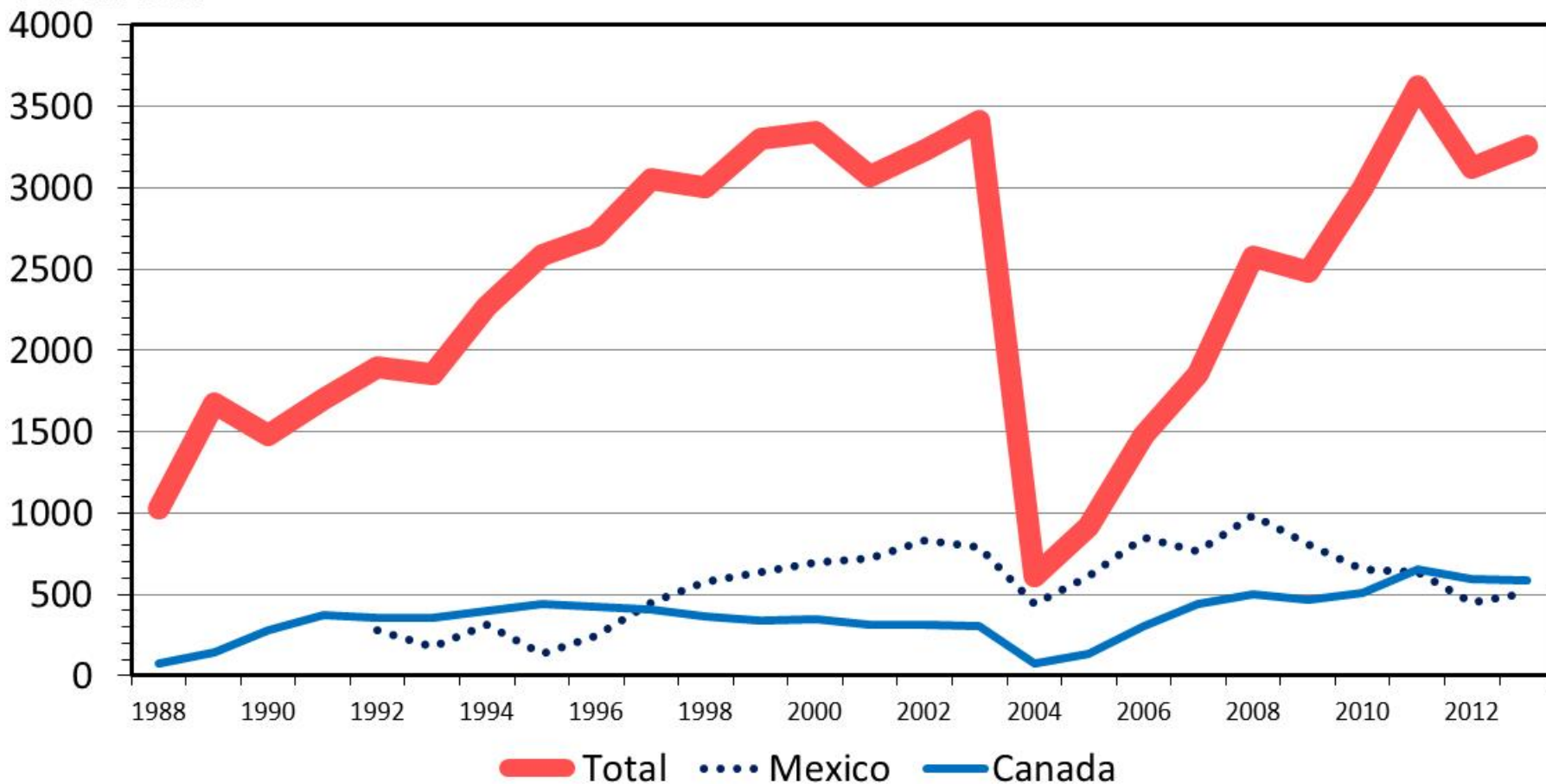


Source: National Restaurant Association

# US BEEF AND VEAL EXPORTS

Animal Equivalents, Annual

Thou. Head



# The Last Three Corn Crops

- 2012 – Corn crop that kept getting smaller
  - 13 B bushels becomes 10.8 B bushels
  - Corn price jumps nearly \$3 during season
- 2013 – Corn crop that kept getting bigger
  - Very inverted corn market
  - Old crop vs. new crop
- 2014 – following a large crop with another large crop – first estimate noon today
  - Market has taken nearly \$1.50 off expected harvest time price



# Corn Impacts on Feeder Cattle Markets

- Corn price inversely related to price slides
  - Value of pounds added
- Corn price effect smaller at high corn prices
  - Substitution affect
- Greater price impact on calves in fall
  - More corn needed to finish
- Less impact on calves in spring
  - Who is bidding on calves when?

# Crop Information Timeline



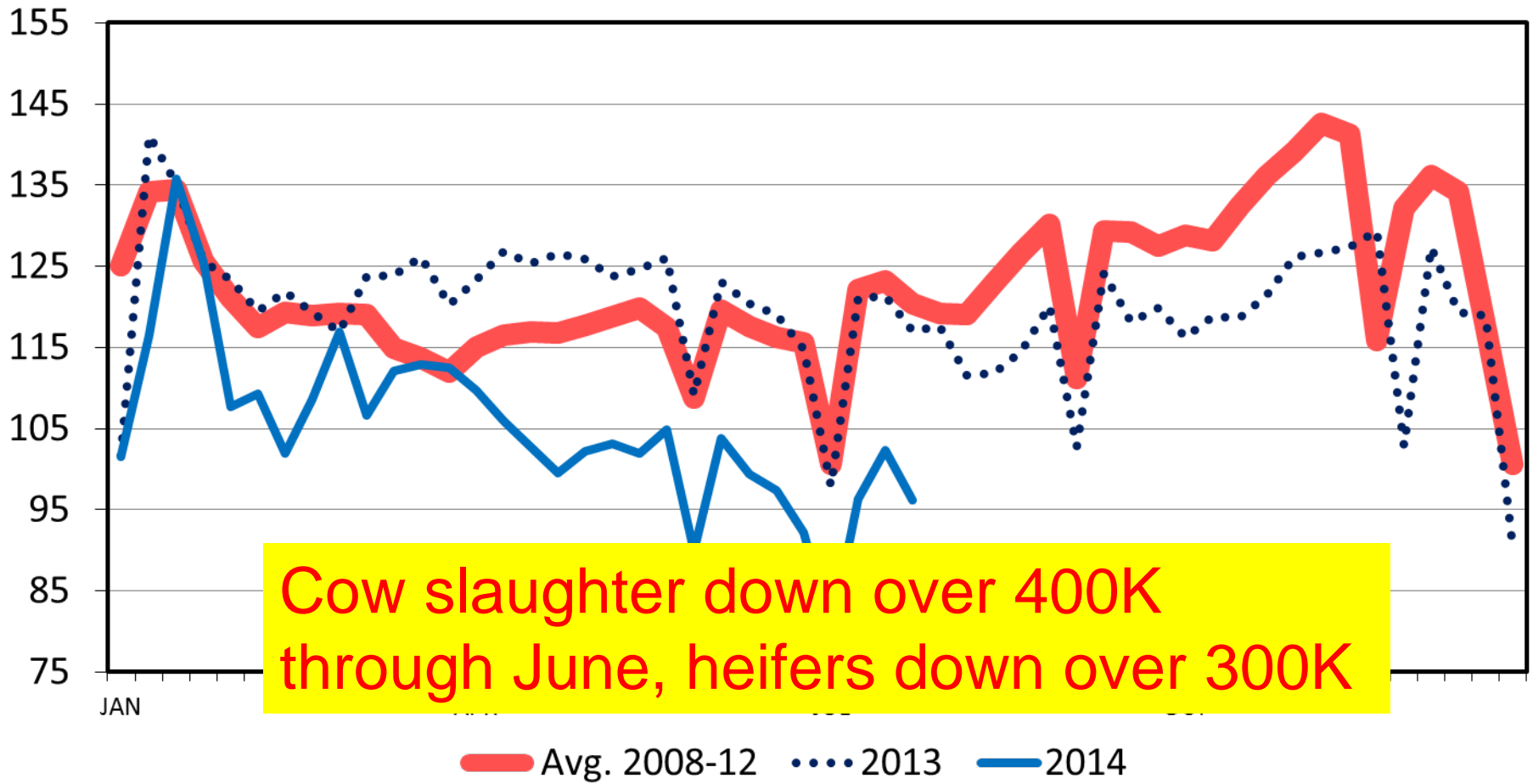
# Some Thoughts on Expansion

- Profit can't make it rain
  - Consider 2004-2006
  - Is there pent up expansion desire?
- Competition from other land uses
  - Reverse conversion?
  - Do we have the farmer / land base to do it?
- It's more than heifer retention
  - Culling patterns
  - Impact on speed of expansion

# TOTAL COW SLAUGHTER

Federally Inspected, Weekly

Thou. Head



Cow slaughter down over 400K  
through June, heifers down over 300K

# Some Thoughts on Expansion

- Breeding stock is a long-term Capital Investment
  - Likely 8-12 years
- Current only matters so much
  - Danger with single annual budget approach
  - Expectations get bid into female values
  - **Risk impacts desired returns**
- Volatility equals risk

# Hypothetical Cash Flow per

Now	Year 1	Year 2	Year 3	Year 4	Year 5
(\$2,200)	\$300	\$275	\$220	\$200	\$175
	Year 6	Year 7	Year 8	Year 9	Year 10
	\$150	\$125	\$100	\$75	\$900

- Now: Purchase or development costs
- Yrs. 1-9: calf sales – expenses
- Yr 10: (Calf sales – expenses) + cull value

# Assumptions of the Analysis

- Total fixed and variable costs
  - \$550, \$650, \$750, \$850, \$950
- Bred heifer expected to have 10 productive years
  - 85% weaning rate
- Bred heifer costs
  - \$1,750, \$2,000, \$2,250, \$2,500, \$2,750
- Calf prices start roughly at today's levels
  - (1) flat prices, (2) 20% steady decrease, and (3) 40% steady decrease over the next 10 years

Return for Bred Heifers Steady Price Scenario					
	Total Costs per Cow				
Bred Heifer Cost	\$550	\$650	\$750	\$850	\$950
\$1,750	25%	19%	12%	6%	-
\$2,000	21%	15%	10%	3%	-
\$2,250	18%	13%	7%	2%	-
\$2,500	15%	11%	6%	-	-
\$2,750	13%	9%	4%	-	-
<u>Assumptions:</u> 10 year useful life; 85% combined calving/weaning rate; 550 lb steer/heifer and \$2.15/lb combined price, \$1000 cull value.					



# Return for Bred Heifers Moderate Price Drop Scenario

	Total Costs per Cow				
Bred Heifer Cost	\$550	\$650	\$750	\$850	\$950
\$1,750	19%	12%	4%	-	-
\$2,000	15%	9%	2%	-	-
\$2,250	13%	7%	-	-	-
\$2,500	10%	5%	-	-	-
\$2,750	8%	3%	-	-	-

Assumptions: 10 year useful life; 85% combined calving/weaning rate; 550 lb steer/heifer, start at \$2.15/lb combined price and decline to \$1.72 by year 10. \$800 cull value.

# Return for Bred Heifers Large Price Drop Scenario

	Total Costs per Cow				
Bred Heifer Cost	\$550	\$650	\$750	\$850	\$950
\$1,750	12%	2%	-	-	-
\$2,000	8%	-	-	-	-
\$2,250	5%	-	-	-	-
\$2,500	3%	-	-	-	-
\$2,750	1%	-	-	-	-

Assumptions: 10 year useful life; 85% combined calving/weaning rate; 550 lb steer/heifer, start at \$2.15/lb combined price and decline to \$1.29 by year 10, \$600 cull value.

# Breeding Stock Investment

- Bred heifer prices much like land values
  - assume continued current profit levels
- What are producer expectations for price over next several years?
- For upper end of bred heifer price range...
  - Both continued high price levels and very low costs structure need
- How have the last few years impacted required returns?
- Keeping mature cows vs. purchasing heifers

# Thoughts for Summer Backgrounders

- Market has forgiven many mistakes this year
- Price early – I would stay the course
- Unpriced – protect what you have made thus far
- Don't get greedy
  - Years like this often followed by severe underpricing

# Thoughts on Winter Backgrounding

- Board was on a roll through Wednesday, calf basis super strong
- Feeder futures now inverted, expect calf basis to weaken
- Spring 2015 futures suggesting 8wts in mid-\$190's, 7wts upper \$160's – low \$170's
  - March / April board around \$205
- We usually take gross margins \$350-450
  - Put 5wt steers in \$215 - \$235 range
- Re-evaluate at weaning / placement

# Sensitivity of Gross Margin (Revenue minus calf expense)

		850# feeder price		
		\$185	\$195	\$205
550# calf price	\$215	\$390	\$475	\$560
	\$225	\$335	\$420	\$505
	\$235	\$280	\$365	\$450

What do I expect for winter  
margins?

# Winter Backgrounding Budget est.

Sales	# units	unit	price / unit	total
Feeder	851.5	lbs	\$1.95	\$1,660.43
Expenses				
Stocker Calf	550	lbs	\$2.25	\$1,237.50
Hay	1407	lbs	\$0.04	\$56.28
Hulls / Gluten	1,407	lbs	\$0.10	\$140.70
Feed 2	0	lbs	\$0.04	\$0.00
Mineral	0.25	lbs / day	\$0.40	\$13.40
Vet / Med	1	head	\$25.00	\$25.00
Commision	1	head	\$15.00	\$15.00
Hauling	1	head	\$12.00	\$12.00
Other	1	head	\$5.00	\$5.00
Interest	6%	rate		\$32.44
Death loss	2%			\$25.26
Total Expenses				\$1,562.58
Return to Land, Capital and Management				\$98



# A few things to remember...

- A \$1 movement in futures is worth about \$1.50 on calves
- Think through cost differences – owned calves vs. purchased
- Sometimes you make your money on the buy...
  - Budgets based on 550# @ \$2.25
  - Each nickel is worth \$27.50
- Manage downside sale price risk
  - 10% increase in feed costs – (\$20) WINTER
  - 10% decrease in sale price – (**\$166.00**)

# My Predictions

- I expect cow numbers to grow slightly during 2014
  - Delay is less relevant this time - culling
  - Likely expand quicker in early stages
  - Slower growth after cow-herd stabilizes
- Prices more sensitive with tight supplies
  - Fed cattle prices peak in 2015
  - Prices decrease fall-over-fall in 2015 for calves and feeders

# Contact Information

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