# Beef and Cattle Market Situation & Outlook

### **Glynn Tonsor**

Dept. of Agricultural Economics
Kansas State University

June 12, 2012
Presentation for New Generation Feeds
Manhattan, KS

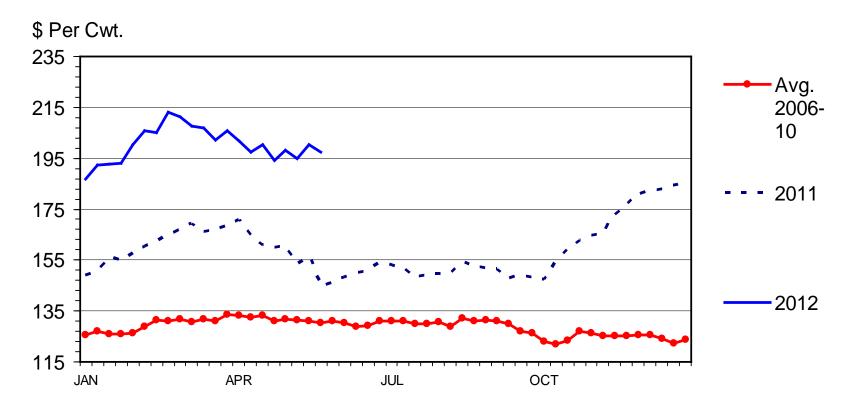


## Economic Outlook Overview: Cow-Calf

- Calf price pullback since early March; <u>BUT</u>
- Continued beneficiary of tight supplies and expanded heifer retention...
  - On the "right side" of industry capacity underutilization...
- Returns over cash costs may set historic records
  - 2013 may prove to be "peak return year" ...
- Business environment continues to change not everyone is comfortable with this...

#### MED. & LRG. #1 STEER CALF PRICES

400-500 Pounds, Southern Plains, Weekly



Livestock Marketing Information Center

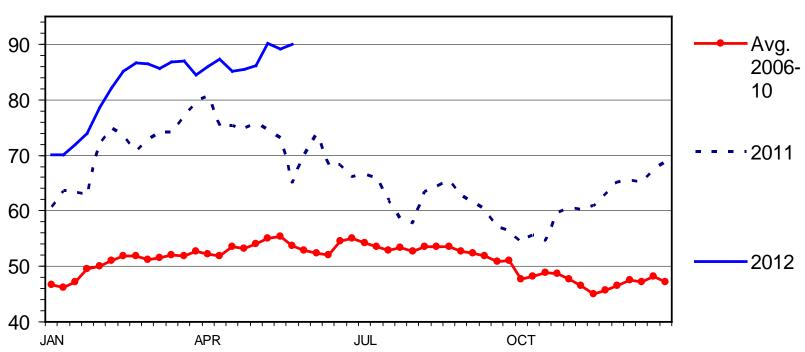




#### **SLAUGHTER COW PRICES**

Southern Plains, 85-90% Lean, Weekly





Livestock Marketing Information Center

Data Source: USDA-AMS

C-P-35 06/04/12



As of: 6/11/12



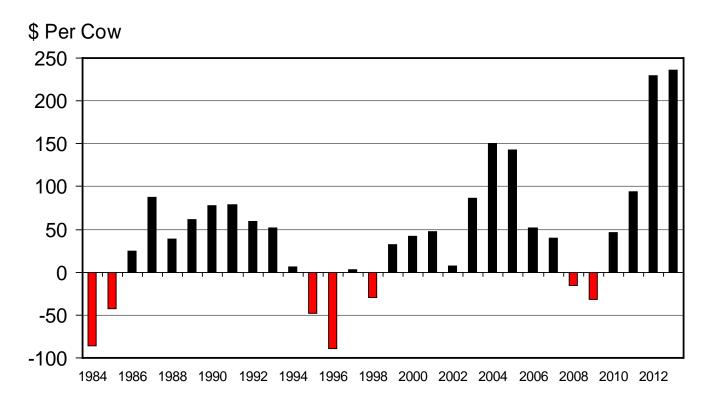






#### **ESTIMATED AVERAGE COW CALF RETURNS**

Returns Over Cash Cost (Includes Pasture Rent), Annual



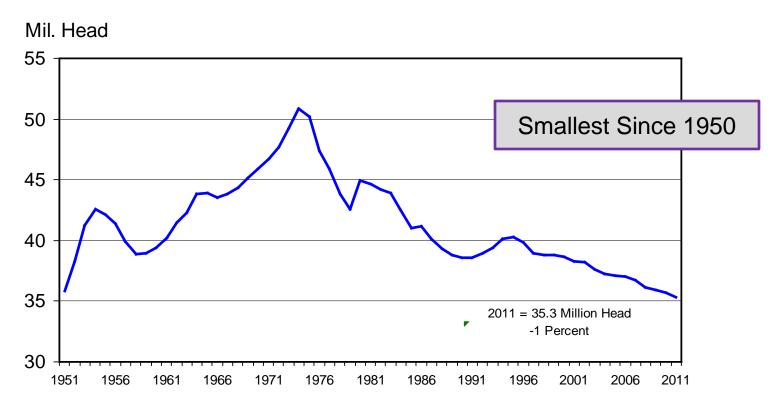
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#### **CALF CROP**

U.S., Annual



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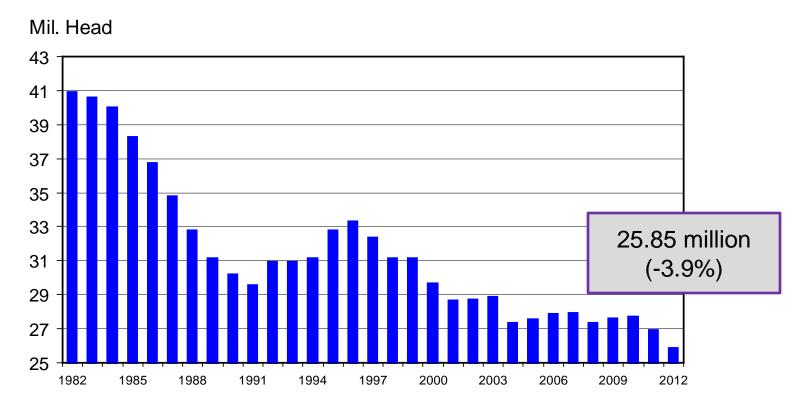
Data Source: USDA-NASS

C-N-18A 01/29/12



#### **JANUARY 1 FEEDER CATTLE SUPPLIES**

Residual, Outside Feedlots, U.S.



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Data Source: USDA-NASS

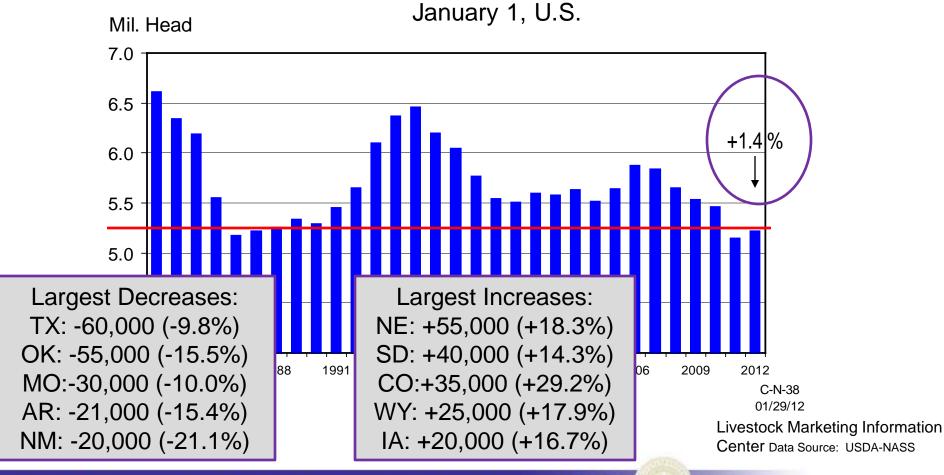




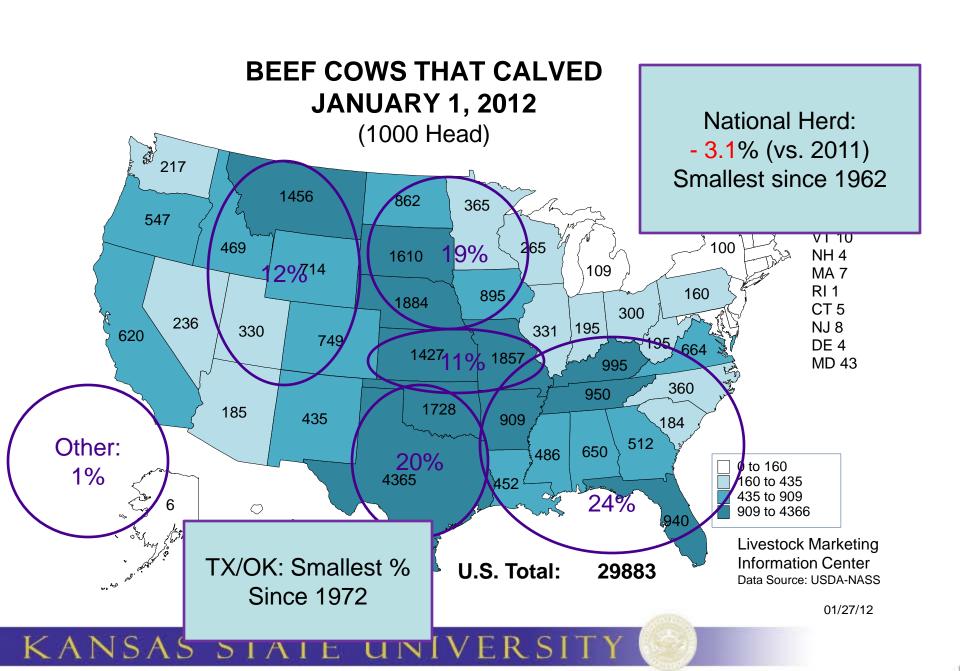
When will U.S. national herd expand?
-- by 2014??? -- who & where will expansion occur???

## HEIFERS HELD AS BEEF COW REPLACEMENTS

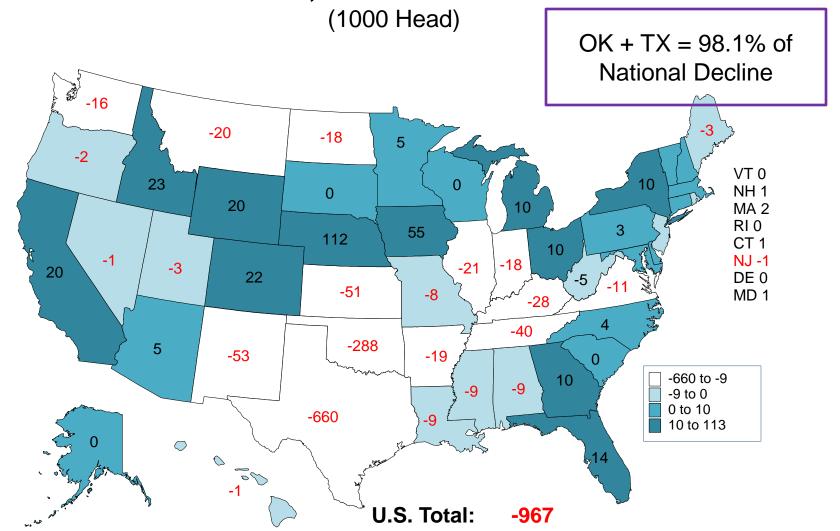
KS: +5,000 (+2.0%)



#### KANSAS STATE UNIVERSITY



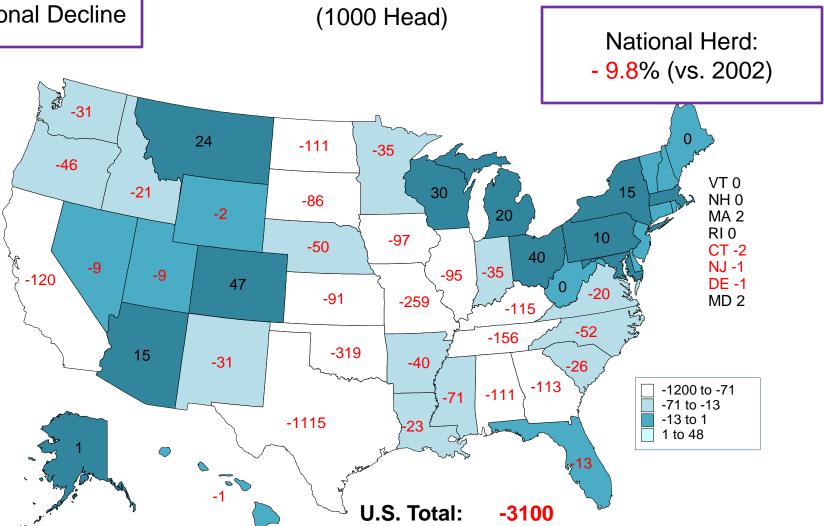
## **CHANGE IN BEEF COWS NUMBERS JANUARY 1, 2011 TO JANUARY 2012**





OK + TX = 46.2% of National Decline

## CHANGE IN BEEF COWS NUMBERS JANUARY 1, 2002 TO JANUARY 2012

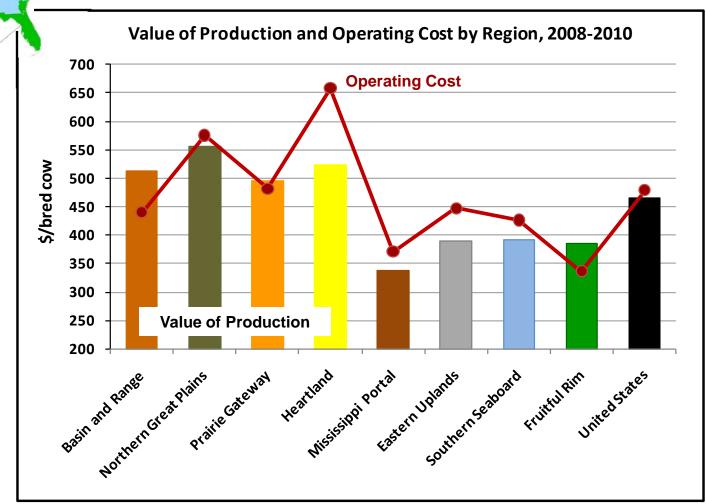


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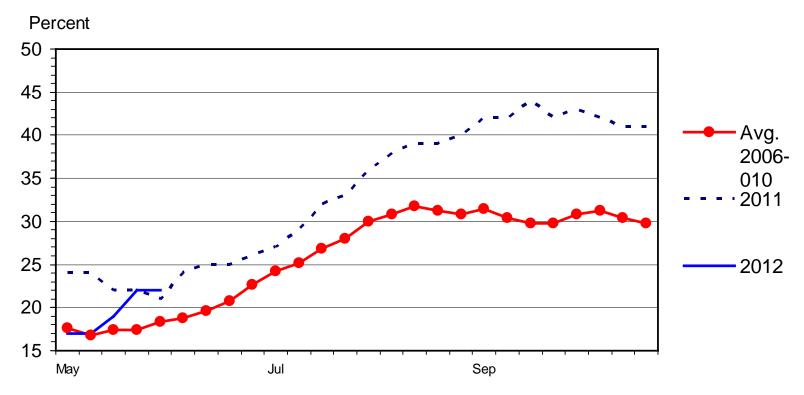
## Do some regions have an economic advantage for expansion?



Data source: USDA-ERS

#### US RANGE AND PASTURE CONDITION

Percent Poor and Very Poor, Weekly



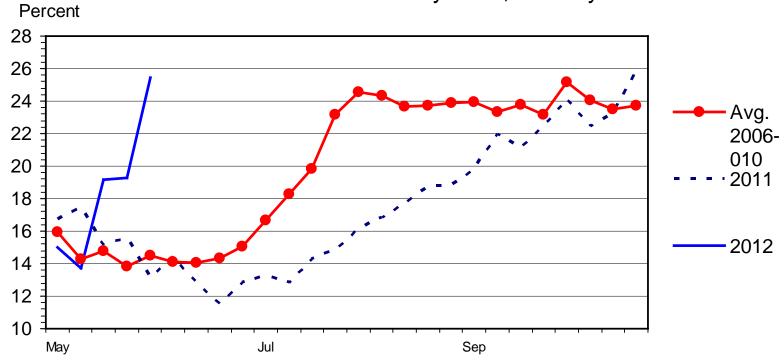
G-NP-30 06/04/12

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## GREAT PLAINS REGION RANGE AND PASTURE CONDITION

Percent Poor and Very Poor, Weekly



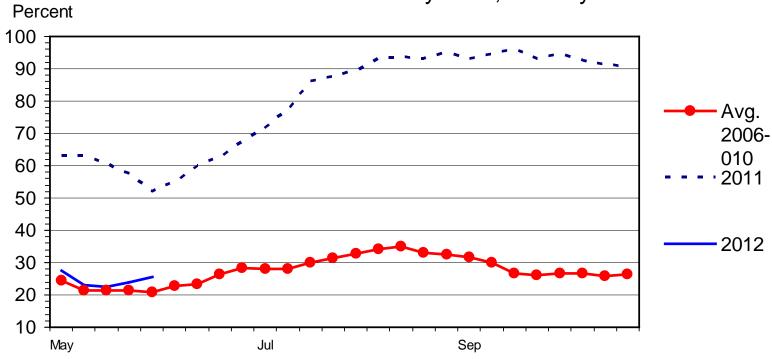
G-NP-32 06/04/12

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## SOUTHERN PLAINS REGION RANGE AND PASTURE CONDITION

Percent Poor and Very Poor, Weekly



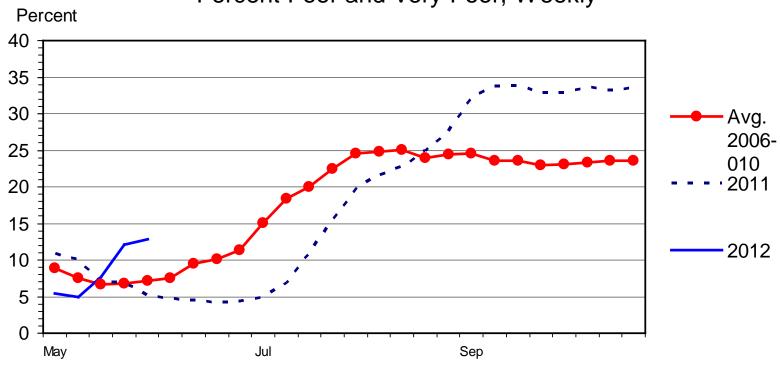
G-NP-33 06/04/12

Livestock Marketing Information Center



## CORNBELT REGION RANGE AND PASTURE CONDITION

Percent Poor and Very Poor, Weekly



G-NP-34 06/04/12

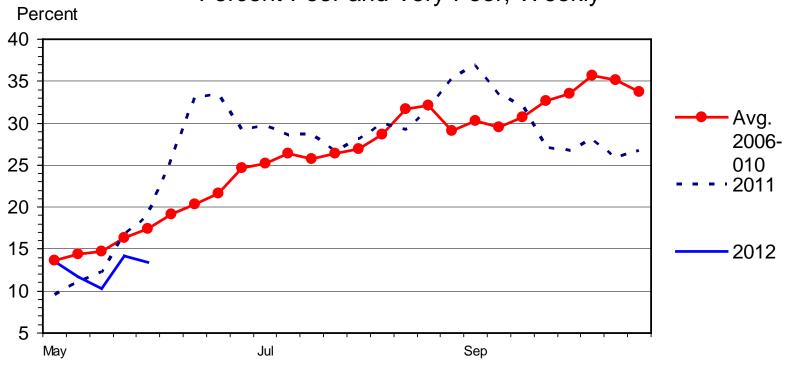
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AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, & WV

## SOUTHEAST REGION RANGE AND PASTURE CONDITION

Percent Poor and Very Poor, Weekly



G-NP-36 06/04/12

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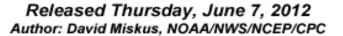
## June 2012: 13% of Beef Cows in States with > 40% Poor to Very Poor Pasture Conditions (was 28% in 2011)...

U.S. Drought Monitor June 5, 2012 Valid 7 a.m. EDT Intensity: Drought Impact Types: D0 Abnormally Dry Delineates dominant impacts D1 Drought - Moderate S = Short-Term, typically <6 months D2 Drought - Severe (e.g. agriculture, grasslands) D3 Drought - Extreme L = Long-Term, typically >6 months D4 Drought - Exceptional (e.g. hydrology, ecology) USDA

http://droughtmonitor.unl.edu/

for forecast statements.

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

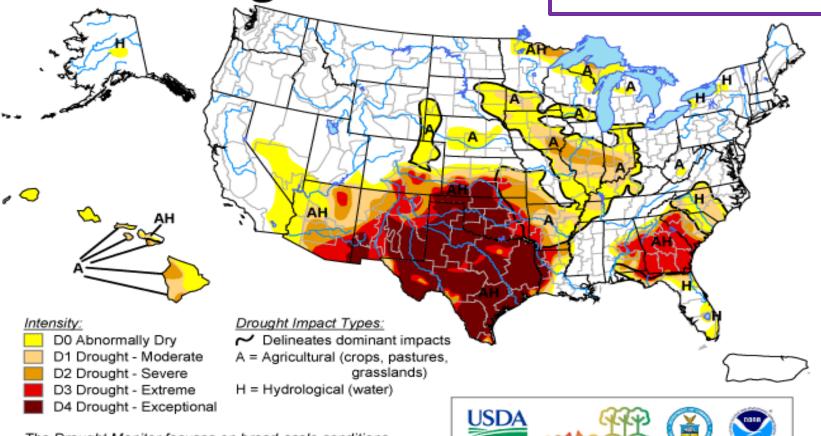




July 2011: 40% of Beef Cows in States with > 40% Poor to Very Poor Pasture Conditions (was 4% in 2010)...

U.S. Drought Monitor

September 13, 2011



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

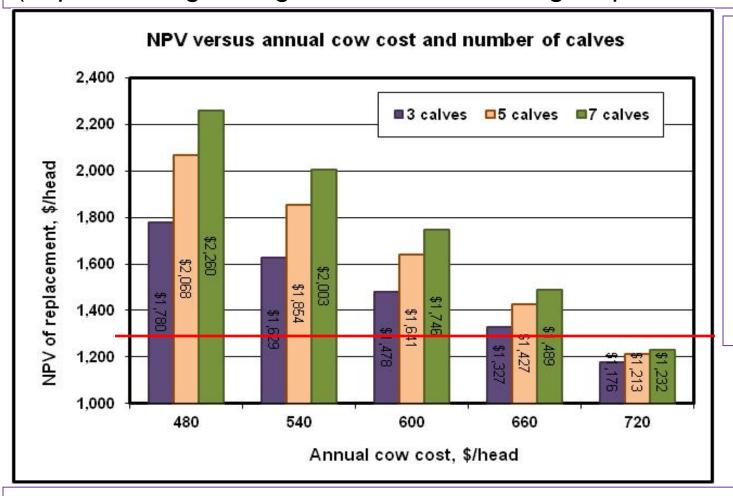
http://drought.unl.edu/dm







Released Thursday, September 15, 2011 Author: Mark Svoboda, National Drought Mitigation Center KSU – Beef Replacement; Excel Spreadsheet Decision Tool (http://www.agmanager.info/livestock/budgets/production/default.asp)



6/8/12'

Young Bred Cow Prices: \$1,000 to \$1,600

Notable variation...

Scenario1: FARPI Adjusted \$/cwt (550 lbs calves @ \$158 in 2012 to \$161 in 2021) 6.5% interest/discount rate; 3% calf death loss

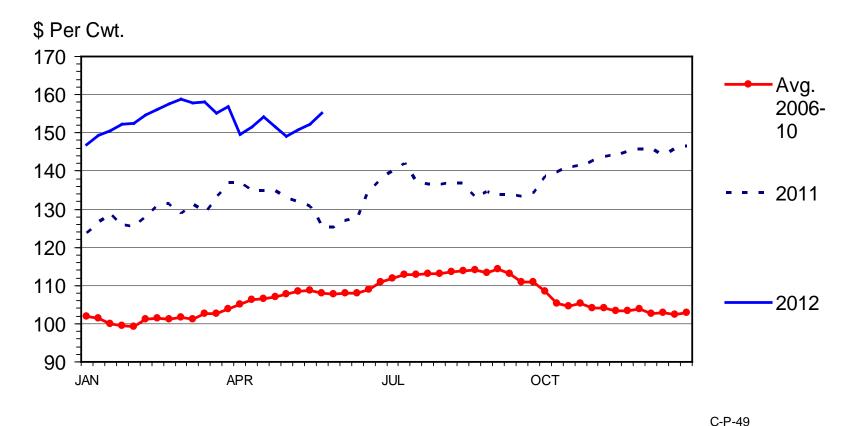
## Economic Outlook Overview: Stockers

- Continued sophistication of this segment
  - "cheap corn days" are unlikely to return
- Expected margins squeezed early this spring by run on calves
  - Note historically strong basis on calves...
- Accounting and economic profit divergence
  - Increased value of consumed forage ...



#### MED. & LRG. #1 FEEDER STEER PRICES

700-800 Pounds, Southern Plains, Weekly



Livestock Marketing Information Center

Data Source: USDA-AMS, Compiled & Analysis by LMIC



06/04/12



#### "Buy-Sell" spreadsheet tool

(http://www.agmanager.info/livestock/budgets/production/beef/cattlebuysell.swf)

#### 6/11/12' Salina, KS Situation:

 BeefBasis.com forecasted price of 750 lb steer September 15, 2012 is \$158.02/cwt

- What is break-even purchase price of a 550
   Ib steer purchased on June 15, 2012?
  - forecasted price is \$174.24/cwt



#### "Buy-Sell" spreadsheet tool

(http://www.agmanager.info/livestock/budgets/production/beef/cattlebuysell.swf)

	Selling Price							
Purchase	\$152.02	\$154.02	\$156.02	\$158.02	\$160.02	\$162.02	\$164.02	
Weight <sup>1</sup>	Breakeven Purchase Price <sup>2</sup>							
450	182.96	186.14	189.31	192.49	195.66	198.84	202.01	
500	174.46	177.33	180.20	183.07	185.94	188.81	191.68	
550	167.54	170.16	172.79	175.41	178.03	180.65	183.28	
600	161.82	164.24	166.65	169.07	171.48	173.90	176.31	
650	157.02	159.26	161.50	163.74	165.98	168.22	170.46	
700	152.94	155.03	157.12	159.21	161.30	163.39	165.48	
750	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

<sup>&</sup>lt;sup>1</sup> Enter the minimum purchase weight you are willing to consider.

Expected Return: +\$2.34/head [2.0 \*(\$175.41-\$174.24)]

Feeding COG \$80 = +\$9.00/head Expected Return Feeding COG \$100 = -\$4.32/head Expected Return

But "true" expected purchase price may not be \$174 ...

<sup>&</sup>lt;sup>2</sup> Based on a feeding cost of gain of \$90/cwt.

## Economic Outlook Overview: Feedlots

Excess capacity concerns will remain an issue

- Growing relevance of premiums, by-product values, and diversity across operations...
  - Great weather this winter = strong growth rates

Probable losses for the year...



## Feedlot Capacity – to - Calf Crop Ratio

Assuming: 2011 Calf crop of 35.3 mil. hd

	Capacity (mil. Hd)					
DOF	15.5	16	16.5	17	17.5	
138	1.16	1.20	1.24	1.27	1.31	
148	1.08	1.12	1.15	1.19	1.22	
158	1.01	1.05	1.08	1.11	1.15	
168	0.95	0.98	1.02	1.05	1.08	

### Assuming: 2021 Calf crop of 40.6 mil. hd

	Capacity (mil. Hd)					
DOF	15.5	16	16.5	17	17.5	
138	1.01	1.04	1.08	1.11	1.14	
148	0.94	0.97	1.00	1.03	1.06	
158	0.88	0.91	0.94	0.97	1.00	
168	0.83	0.86	0.88	0.91	0.94	

### Feedlot Operations and Marketings

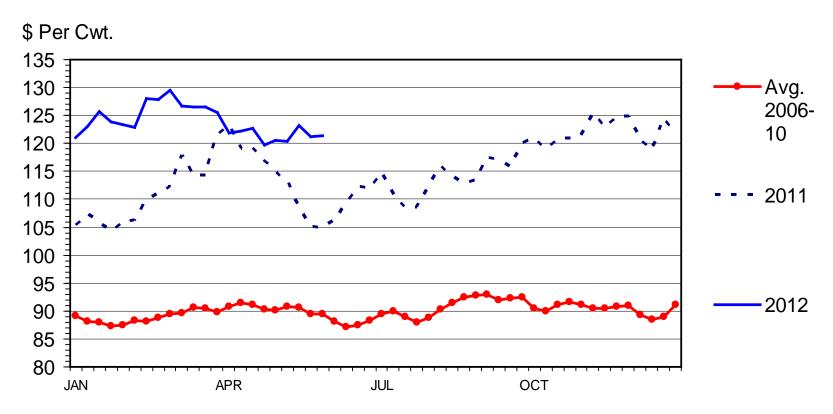
	Operations	Marketings (mil. hd)	Annual Change in	% of Total
	Operations	Marketings (mil. hd)	Marketings	Marketings
2006	86,000	3.64		13.94%
2007	85,000	3.70	1.6%	14.14%
2008	80,000	4.05	9.5%	15.31%
2009	80,000	3.91	-3.5%	15.27%
2010	75,000	4.03	3.1%	15.43%
2011	75,000	3.17	-21.3%	12.31%

#### **Feedlots: Over 1,000 Head Capacity**

	# Operations	Marketings (mil Hd)	Annual Change in	% of Total
	# Operations	Marketings (mil. Hd)	Marketings	Marketings
2006	2,165	22.48		86.06%
2007	2,160	22.46	-0.1%	85.86%
2008	2,170	22.40	-0.3%	84.69%
2009	2,170	21.69	-3.2%	84.73%
2010	2,140	22.08	1.8%	84.57%
2011	2,120	22.58	2.3%	87.69%

#### **SLAUGHTER STEER PRICES**

5 Market Weighted Average, Weekly

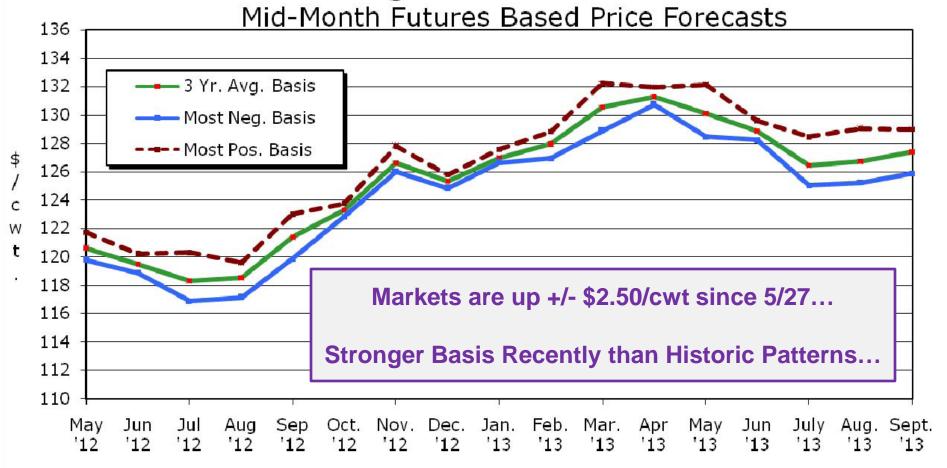


**Livestock Marketing Information Center** 

Data Source: USDA-AMS



#### **Kansas Slaughter Steer Price Forecasts**



Month & Year

Source: USDA-AMS, CME, & K-State Ag. Economics Based on 5.27.12 CME Live Cattle settlement prices

KSU Dept. of Ag Econ www.agmanager.info

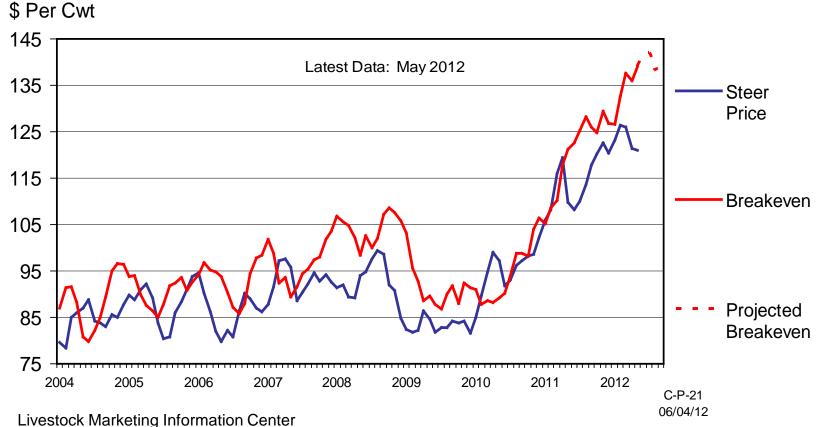


NAIBER (<a href="http://www.naiber.org/">http://www.naiber.org/</a>) 6/11/12' Forecasts:

750 lb KS Steer placed on 6/15 & sold at 1,268 lbs on 11/15/12' = -\$43/hd;

#### CHOICE STEER PRICE VS BREAKEVEN

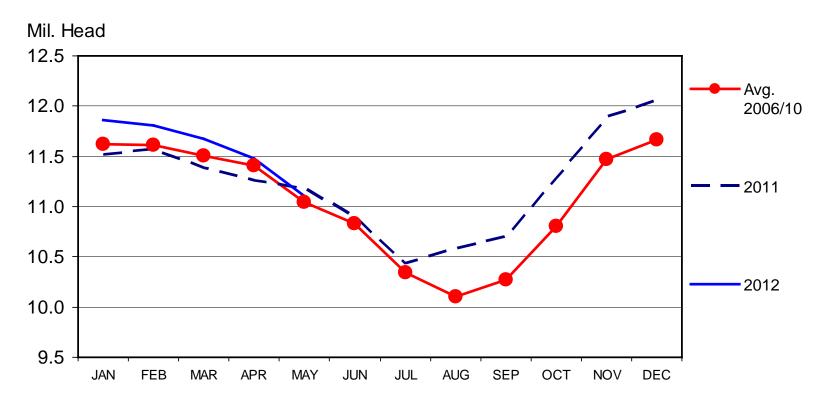
Cattle Feeding, S. Plains, Monthly





#### **CATTLE ON FEED**

US Total, Monthly



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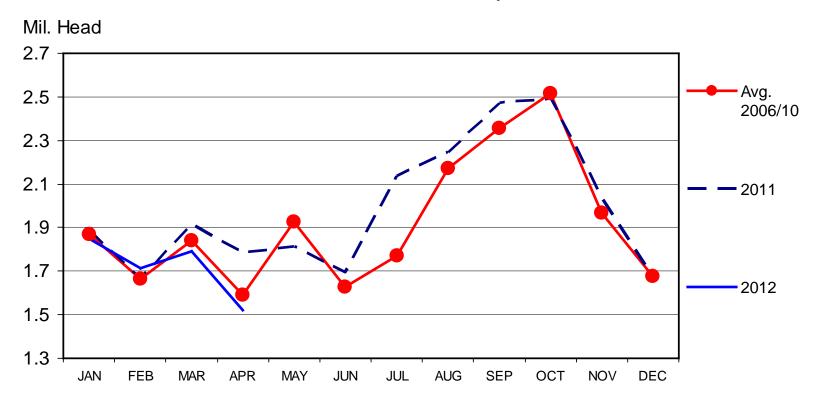
Data Source: USDA-NASS





#### FEEDLOT PLACEMENTS

US Total, Monthly



Livestock Marketing Information Center

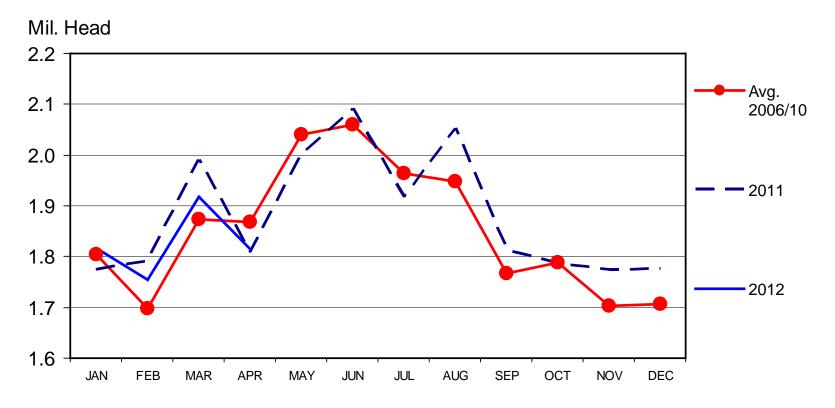
Data Source: USDA-NASS

C-N-08 05/18/12



#### FED CATTLE MARKETINGS

US Total, Monthly



Livestock Marketing Information Center

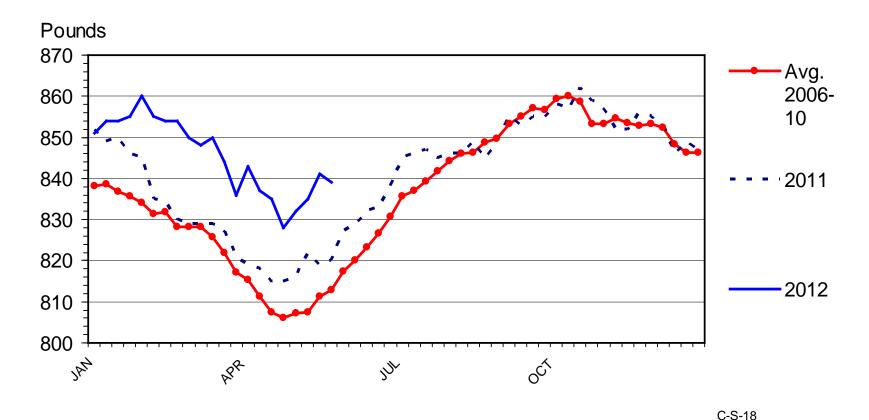
Data Source: USDA-NASS

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#### STEER DRESSED WEIGHT

Federally Inspected, Weekly



Livestock Marketing Information Center

Data Source: USDA-AMS & USDA-NASS



06/08/12

### QUARTERLY FORECASTS (LMIC:6/7/12)

		% Chg.	Average	% Chg.	Comm'l	% Chg.
Year	Comm'l	from	Dressed	from	Beef	from
Quarter	Slaughter	Year Ago	Weight	Year Ago	<b>Production</b>	Year Ago
2011						
l	8,314	1.8	771	0.7	6,410	2.6
II	8,640	-0.5	759	0.7	6,559	0.2
III	8,738	-0.2	771	-0.3	6,736	-0.5
IV	8,395	-3.0	773	-0.8	6,490	-3.7
Year	34,087	-0.5	768	0.1	26,195	-0.4
2012						
I	8,027	-3.5	783	1.5	6,283	-2.0
II	8,295	-4.0	779	2.6	6,461	-1.5
III	8,098	-7.3	793	2.8	6,421	-4.7
IV	7,938	-5.4	791	2.3	6,276	-3.3
Year	32,358	-5.1	786	2.3	25,441	-2.9
2013						
I	7,556	-5.9	790	0.9	5,968	-5.0
I	7,898	-4.8	782	0.3	6,173	-4.5
III	8,006	-1.1	800	0.9	6,404	-0.3
IV	7,694	-3.1	797	0.8	6,129	-2.3
Year	31,154	-3.7	792	0.7	24,674	-3.0

## QUARTERLY FORECASTS (LMIC: 6/7/12)

	Live Sltr.	% Chg.	Feeder Steer Price	
Year	<b>Steer Price</b>	from	Southern Plains	
Quarter	5-Mkt Avg	Year Ago	7-800#	5-600#
2011				
I	110.12	23.1	129.06	150.07
II	112.79	17.1	132.03	148.61
III	114.05	19.5	135.93	141.69
IV	121.99	21.7	143.15	153.11
Year	114.74	20.3	135.04	148.37
2012				
I	125.29	13.8	154.25	182.41
II	121-122	7.7	152-153	183-185
III	120-122	6.1	151-154	179-182
IV	124-127	2.9	153-157	173-178
Year	122-125	7.6	152-155	178-183
2013				
I	126-130	2.2	152-157	178-184
II	129-134	8.2	156-162	181-189
III	125-131	5.8	159-166	179-188
IV	128-135	4.8	157-166	174-185
Year	128-132	5.3	157-162	178-185

# Economic Outlook Overview: Beef Demand

- Meat prices rising w/i basket of purchases...
- Domestic demand has surprised analysts...
- Export success "tempered" but prospects remain bullish...
- Discussion on demand "getting complicated"
  - Growing interest in "how my food is produced"
    - Animal welfare, food safety, antibiotics, hormone use, local, organic, traceability...
  - LFTB (lean finely textured beef) discussion...
  - Customer vs. consumer distinction importance...

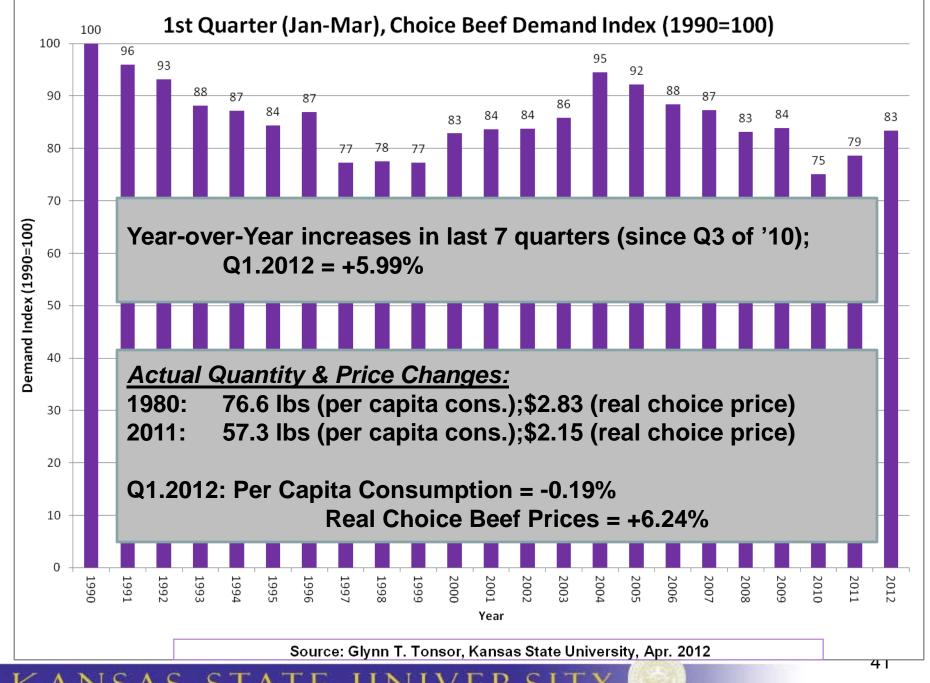


Gian Robinson, Phil DiNuzzo

Source: March 12, 2012 TIME magazine

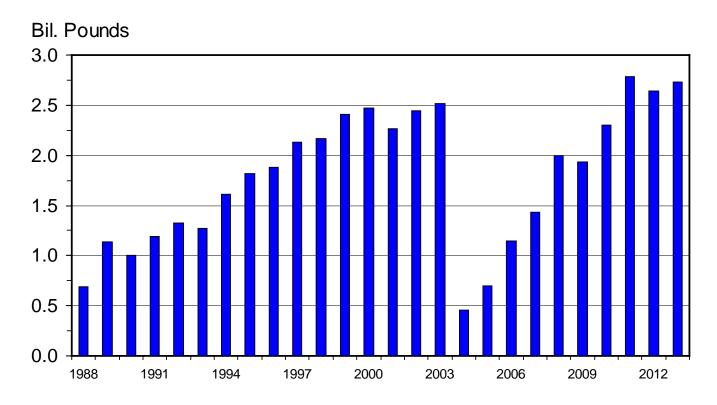
you eat test-tube meat?





#### US BEEF AND VEAL EXPORTS

Carcass Weight, Annual



Livestock Marketing Information Center

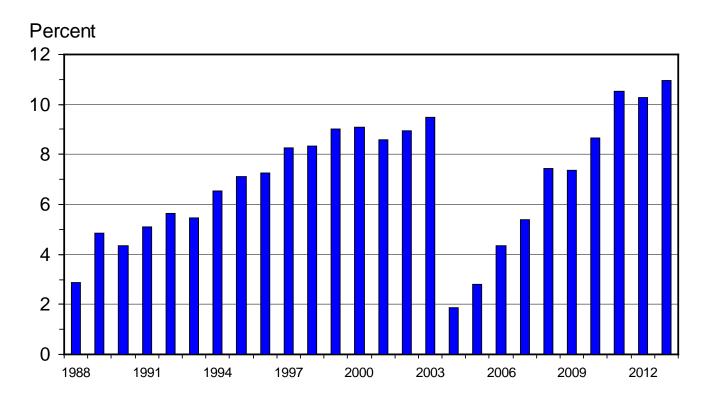
Data Source: USDA-ERS & USDA-FAS, Compiled & Analysis by LMIC

I-N-06 05/11/12



#### US BEEF AND VEAL EXPORTS

As a Percentage of Production, Carcass Weight, Annual



Livestock Marketing Information Center

Data Source: USDA-ERS & USDA-FAS, Compiled & Analysis by LMIC

I-N-07 05/11/12



## "Developing" trade discussions are new normal ...

Japan <u>may</u> start accepting older cattle...

FTA = reduction of South Korea tariffs

 USMEF – ID/Traceability study == U.S. falling behind

- WTO MCOOL ruling & U.S. response(s)
  - Will Mexico ultimately place tariffs on U.S. pork?
  - Limited U.S. consumer awareness ...



## USDA's longer-term projections (as of Feb. 2012) ...

http://www.ers.usda.gov/Publications/OCE121/



#### USDA Agricultural Projections to 2021

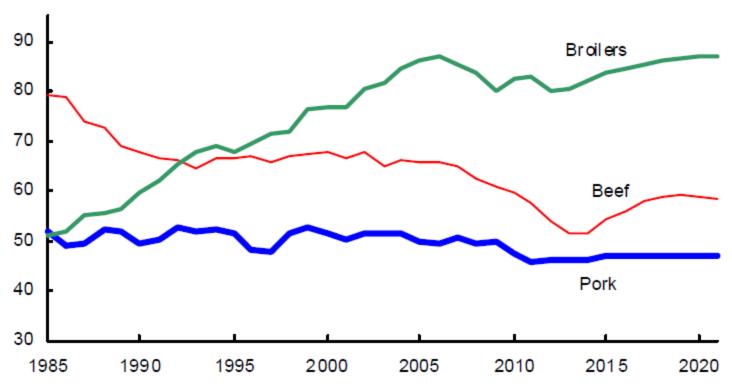
U.S. per capita meat consumption

Pounds per capita, retail weight

World Agricultural Outlook Board

Projections Repor OCE-2012-1

February 2012



## USDA's longer-term projections (as of Feb. 2012) ...

http://www.ers.usda.gov/Publications/OCE121/

#### Beef cow inventory:

- 29.8 million in 2012
- 34.5 million in 2021 (+/- 1997 levels)

## Domestic per capita red meat and poultry consumption:

- 221 lbs in 2004-2007 (Beef=65.7 lbs; Pork=50.4 lbs; Poultry=103.8 lbs)
- 198 lbs in 2013 (Beef=51.3 lbs; Pork=46.3 lbs; Poultry=98.5 lbs)
- 213 lbs in 2021 (Beef=58.7 lbs; Pork=47.2 lbs; Poultry=105.8 lbs)

#### Beef exports:

- 2.30 billion lbs in 2010
- 2.77 billion lbs in 2011
- 3.16 billion lbs in 2021



## Is overall uncertainty holding back investment???

- WTO MCOOL ruling, response, next steps...
- Animal welfare
- GIPSA "fair market" proposed rules / "anticompetition" listening sessions ...
  - Ultimately little action w/r/t beef cattle industry
  - <u>BUT</u> lots of wasted time & energy...
- Environmental regulation concerns persist
- Farm bill and tax code/policy uncertainties...
  - If cow-calf herd used to expand when Exp.
    Profit=\$100/cow, what trigger is needed today???



## Beef industry changes underway

- BEEF Magazine Poll (N=99 as of 8/17/11')
  - "If you had to liquidate cattle this year because of flooding or drought, what do you plan to do with the proceeds?
    - 47% Restock with cows when conditions improve
    - 9% Restock but change production models (e.g., buy stockers rather than cows)
    - 27% Keep the cash; leave the business
    - 6% Reinvest the cash in another non-livestock ag enterprise
    - 10% Don't know
- Sales value of cull cows is about = for all
  - Those with higher costs, opportunities to row crop, etc. increasingly exit
- Excess capacity (feedlot & packing) may take time to resolve ...



## **Bottom-line Summary**

- New normal includes heightened uncertainty and volatility
  - Signals opportunity to many = expansion
  - Triggers discomfort to many = exist/status quo
    - within industry variations in views and comparative advantages will determine the ability to profit and shape future of industry...
- Industry is dynamic = "keep up or get out"
  - Export growth = reduced domestic per capita consumption, changing customer base ...
  - Increasing demand for "higher quality" for consumers worldwide to justify higher costs of consumed protein...



#### More information available at:



### This presentation is available in PDF format at:

http://www.agmanager.info/about/contributors/individual/tonsor.asp

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# K-State Decision Aides: Cattle Price Oriented

(http://www.agmanager.info/Tools/default.asp)

- Expectations on Future Cash Prices
  - http://www.beefbasis.com/
- Examine Feeder Cattle Risk Management Alternatives
  - "K-State Feeder Cattle Risk Management Tool"
- Project Premium/Discount of Calf/Steer Attributes
  - "K-State Feeder Cattle Price Analyzer"
- Stocker Breakeven Selling/Purchasing Prices
  - "Cattle Breakeven Selling and Purchase Prices"



## Other K-State Decision Aides

(http://www.agmanager.info/Tools/default.asp)

- NPV of Beef Replacements
  - "KSU-Beef Replacements"

- Beef Cow Lease Agreements
  - "KSU-CowLease"

- Determining Flint Hills Pasture Rents
  - "KSU-Graze.xls"





## webinars



Beef-Cattle Economics





## **Beef-Cattle Economics webinar series**

Series of quarterly webinars on beef-cattle markets and other industry-related issues.

2012 schedule (all webinars begin at 1:30 CST)

February 7

May 1

August 7

**November 6** 

For details about specific topics and registering for webinars see additional information on AgManager.info AND

http://www.meatingplace.com/Industry/Webinars

