

2010



Value Optimization

August 12, 2010
9AM - 5PM

Frick Auditorium in Mosier Hall
Veterinary Medicine Complex
Kansas State University
Manhattan, KS

Alternate live remote viewing sites:
Pratt Community College
Butler Community College
Wakeeey Public Library

Event Sponsored By:
Intervet Schering-Plough Animal Health
Quality Liquid Feeds
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Pasture lease rates

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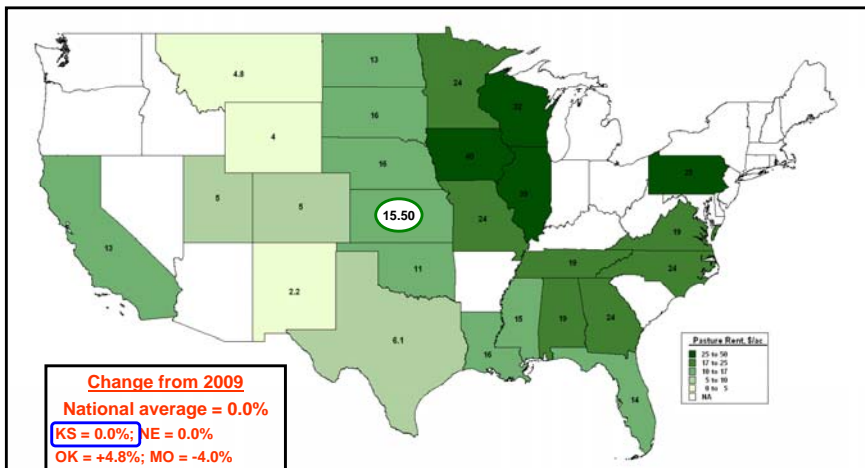


Factors impacting pasture lease rates...

- Supply (availability)
 - Competing uses of grass (hunting, urban, crops) -- acres
 - Growing conditions (rainfall, competition) – lbs/acre
- Demand
 - Cattle numbers
 - Feed prices
 - “Quality” of pasture (size, fence, water, productivity)
- S&D factors can vary considerably regionally (and even within a county)
- Other factors (L/T relationship, information, etc.)



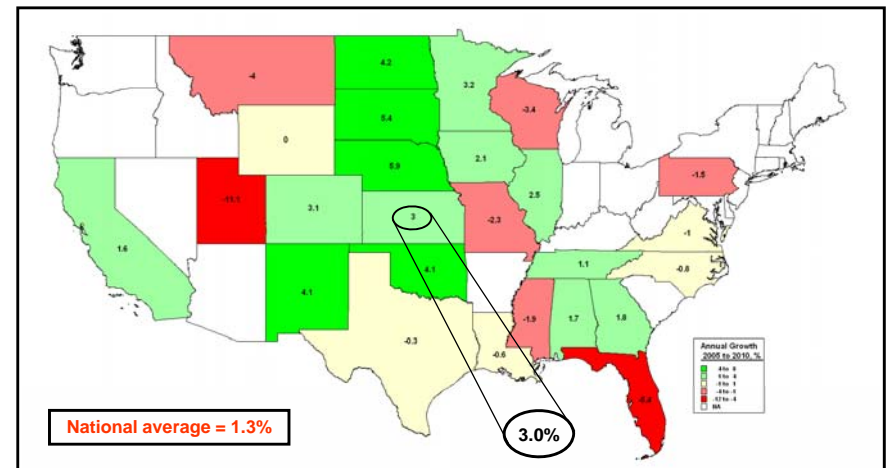
Pasture Land Average Rent per Acre, 2010



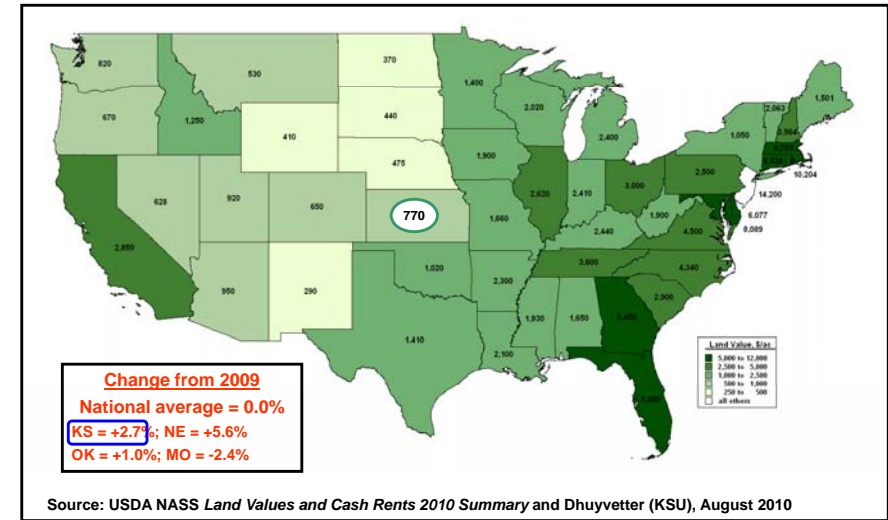
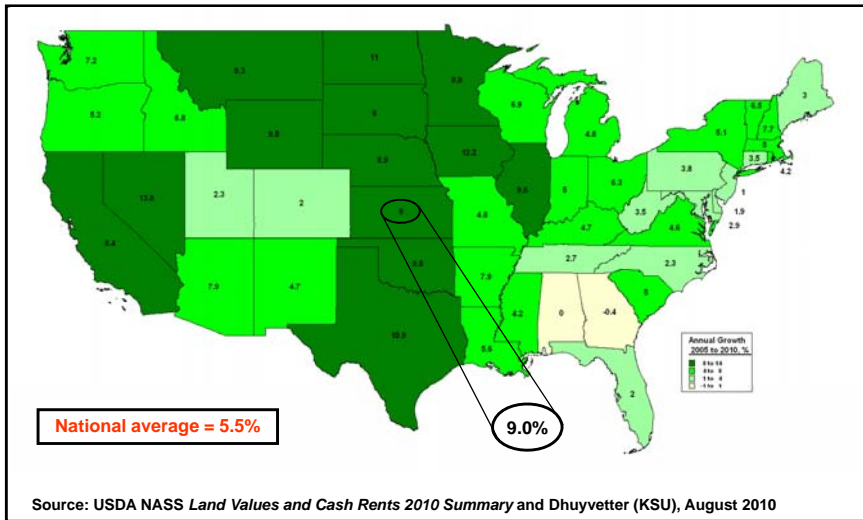
Source: USDA NASS Land Values and Cash Rents 2010 Summary and Dhuyvetter (KSU), August 2010

* Corresponding changes in crop land rents were US=+3.0%; KS=0.0%; NE=+6.2%; OK=0.0%; and MO=+4.4%.

Pasture Rent Average Annual Growth Rate 2005 to 2010, percent (geo mean)



Source: USDA NASS Land Values and Cash Rents 2010 Summary and Dhuyvetter (KSU), August 2010



* Corresponding changes in crop land values were US= +1.1%; KS=+6.7%; NE=+10.6%; OK=+2.7%; and MO=+5.1%.

Pasture values versus rents...

- In recent years, pasture land values have been increasing at faster rates than pasture rents
- Buying pasture ties up a lot of equity that is not generating a cash return unless some other income stream exists (e.g., lease hunting)
- Is this starting to change --- i.e., are rents going to start increasing at faster rates?

Pasture rental rates in Kansas



- Kansas Agricultural Statistics (KAS) collects data annually from landowners and producers regarding land values and cash rents
 - Agricultural Land Values – reported at the county level in 2009 (CRD level in years prior)
 - Bluestem Pasture – 14-county area, discontinued in 2010
- Local and regional surveys of leasing practices
- With surveys there is often a trade-off between statistical validity and level of aggregation (tremendous variability always exists, i.e., think S&D factors)

United States Department of Agriculture
National Agricultural Statistics Service, Kansas Field Office

AGRICULTURAL LAND VALUES & CASH RENTS

Kansas Agricultural Statistics

Cooperating with the Kansas Department of Agriculture
P.O. Box 3034 • Topeka, KS 66603-0304 • (785)321-2121 • www.nass.usda.gov/kansas • kas@nass.usda.gov
Released: August 21, 2009

Highlights

The average value of all farmland and buildings for 2009 in Kansas is estimated to be \$1,020 per acre. This compares with \$1,020 in 2008 and \$950 in 2007. Kansas' average value of all farmland and buildings increased 1.0 percent from 2008 to 2009. Irrigated cropland values rose 3.4 percent from 2008 while non-irrigated cropland increased 2.0 percent in value from last year. The value of Kansas pasture land remains unchanged from 2008 at \$700 per acre, leveling off after a 23 year increasing trend. Rental rates for irrigated cropland were up \$11.00 per acre and non-irrigated cropland increased by \$4.00 per acre. Pasture rents for 2009 rose \$1.00 to \$16.50 per acre.

Year	Cropland		Pasture		All Farmland and Buildings	Total
	Non-Irrigated	Irrigated	Non-Irrigated	Irrigated		
1999	1,020	825	690	65.00	370	1,330
2000	1,040	830	696	67.00	385	1,342
2001	1,000	830	673	72.00	390	1,260
2002	1,080	840	676	70.00	400	1,260
2003	1,080	845	684	68.00	410	1,280
2004	1,080	850	688	72.00	420	1,300
2005	1,180	770	656	75.00	500	1,342
2006	1,200	820	654	74.00	580	1,370
2007	1,240	880	614	62.00	660	1,460
2008	1,400	880	1,020	62.00	750	1,550
2009	1,500	1,000	1,020	68.50	750	1,650

*The Agricultural Land Value conducted during May and June respondents were asked to provide the value of the land they operate and rent data were collected from the Agricultural Survey to area estimators. A more extensive Cash Rents survey is currently being conducted to and County level cash rent estimates published in April 2010.

Switched to county-level in 2009.

BLUESTEM PASTURE RELEASE - 2009

Released: April 24, 2009

The bluestem pasture condition in the First Hills region is rated at 2 percent poor, 10 percent adequate, 57 percent good, and 23 percent excellent going into the 2009 grazing season. As of April 22, bluestem moisture conditions were still mostly adequate to surplus across the bluestem region. Sources of stock water being used are: ponds, 52 percent; streams, 20 percent; wells, 1 percent; and spring developments, 4 percent. Water supplies are rated adequate to surplus, with 50 percent reporting adequate or better supplies.

The percentage of available pasture already contracted, as of mid-April, stood at 60 percent. Of the acres contracted, 52 percent are under full summer season contracts, 20 percent under partial-season contracts, and 10 percent are leased for the full year. Partial season contracts may include both early winter grazing and three-quarter length season contracts. The average grazing season start date for full summer season contracts is April 22. The average ending date for the grazing season is October 10. The average starting date for partial season or intensive grazing is April 22. The average number of grazing days for steers and heifers under 700 pounds is 99 days.

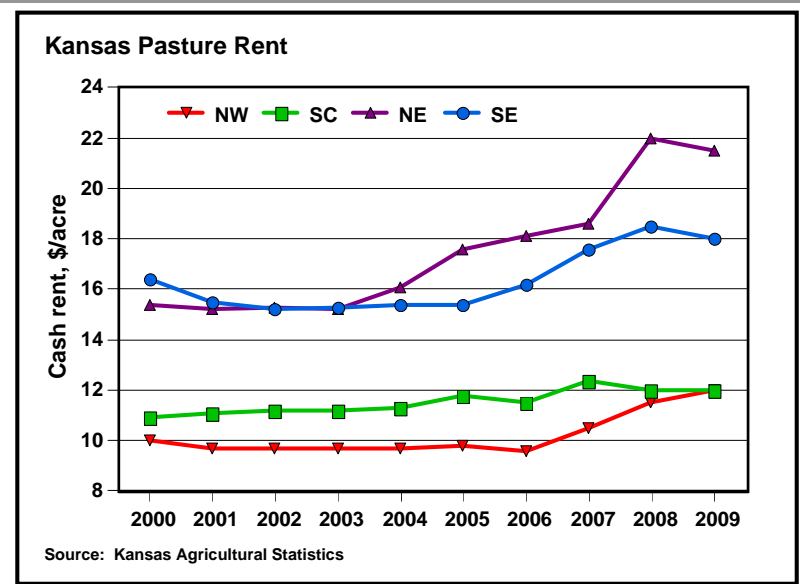
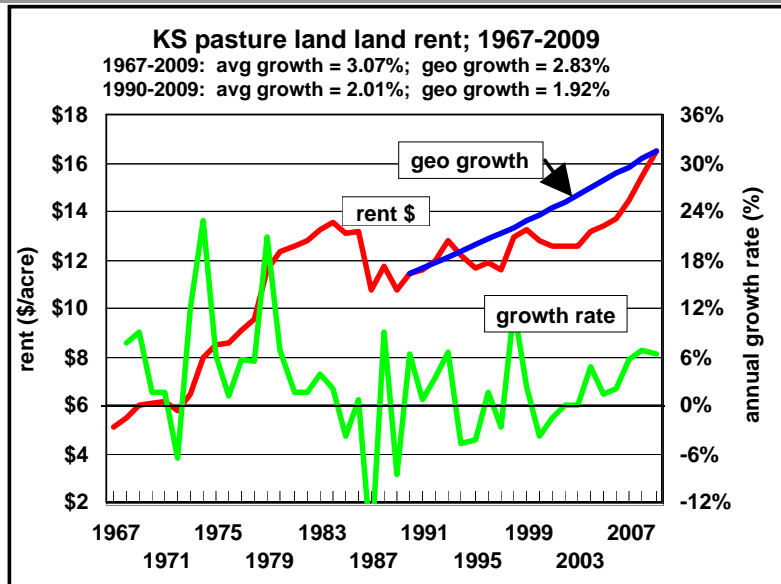
Partial season contracts have been broken into two categories: contracts with steady grazing days or less and contracts with winter grazing days or less and summer grazing days or less. For winter cow grazing arrangements, the average reported price is \$12.50 with 8.9 acres guaranteed. Lease rates on a per acre basis averaged \$15.10 for the full year.

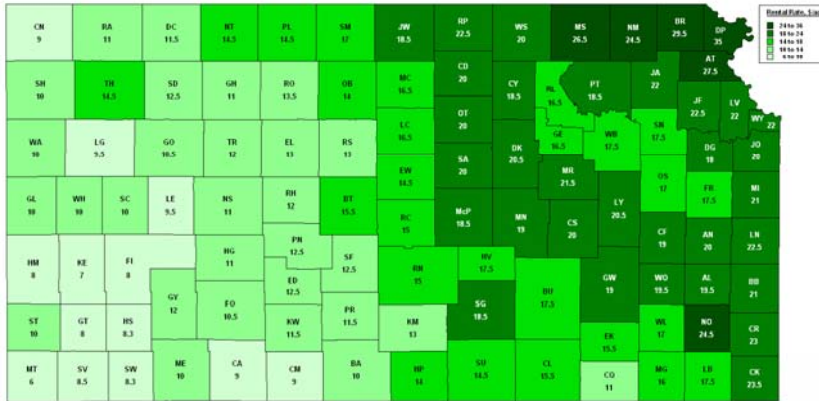
In winter steeler grazing arrangements, the average reported price is \$8.40 per head per month with 5.2 acres guaranteed. For winter cow grazing arrangements, the average reported price is \$12.50 with 8.9 acres guaranteed. Lease rates on a per acre basis averaged 7.5 acres guaranteed.

Seventy-eight percent of the respondents reported burning of pastures, down 5 percentage points from last year. The average burning date was April 9.

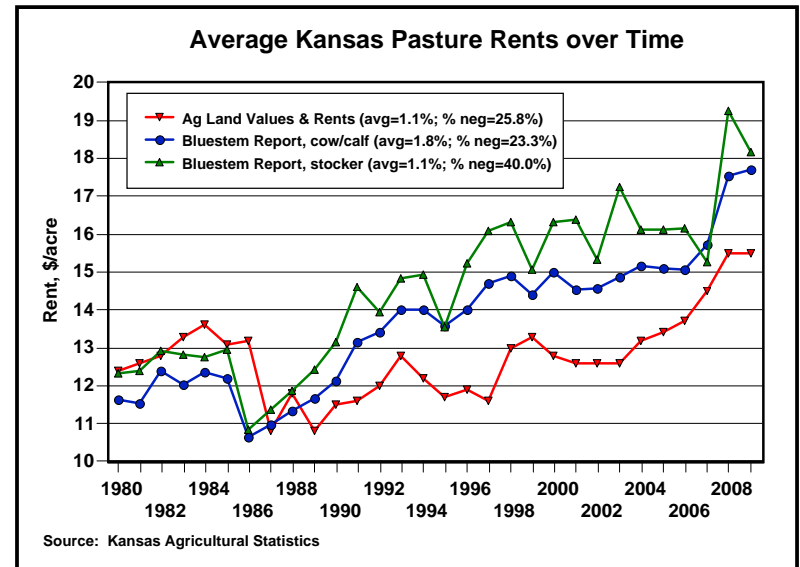
Services provided by the landlord or caretaker in full summer season leasing arrangements are: mowed, 44 percent;

Discontinued in 2010.

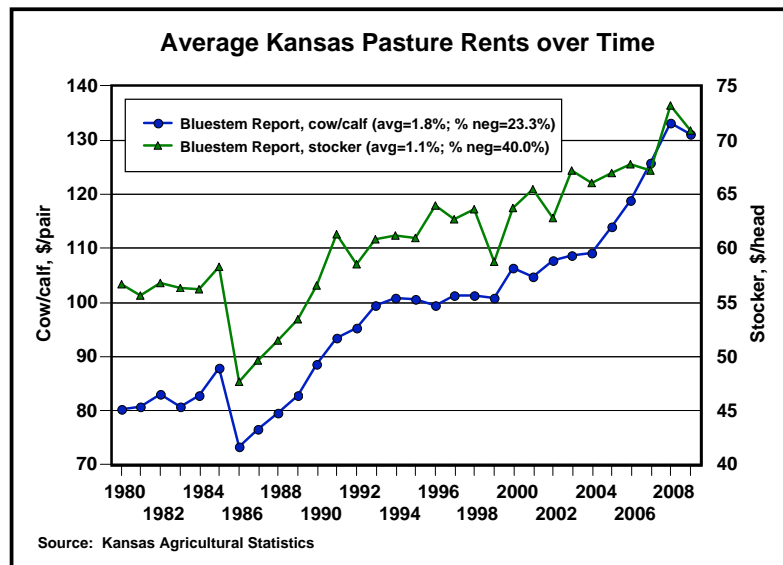




USDA NASS County-level average pasture rents (\$/ac) for 2009 (available at <http://quickstats.nass.usda.gov/>)



Rent per pair (head) is a better measure than per acre...

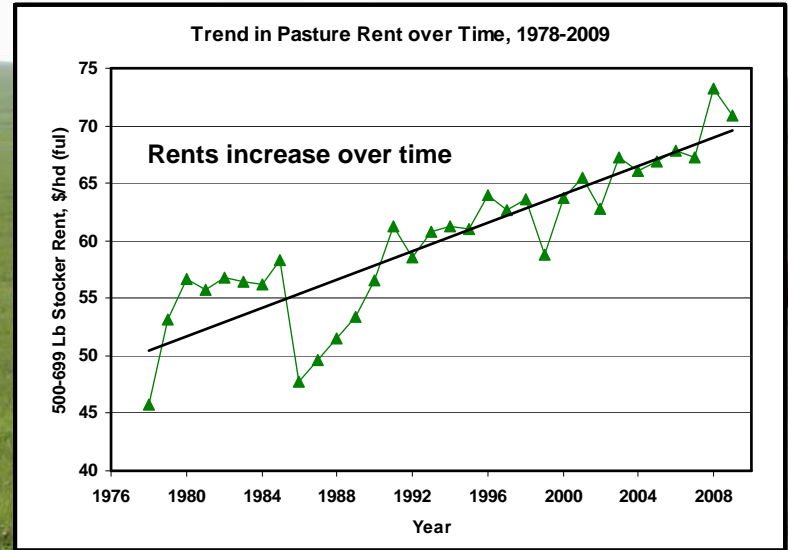


USDA NASS survey values...

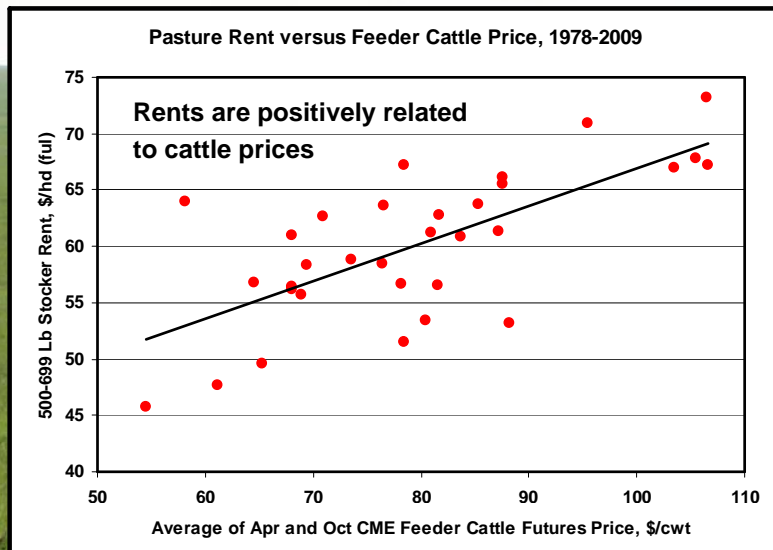
- Values represent average paid (received) from survey respondents
- Typically there is no information reported regarding variability within a county or region
- Question that arises is, How well do these average values reflect the “going market” rates?

Determining futures rental rates in the absence of publicly available reports

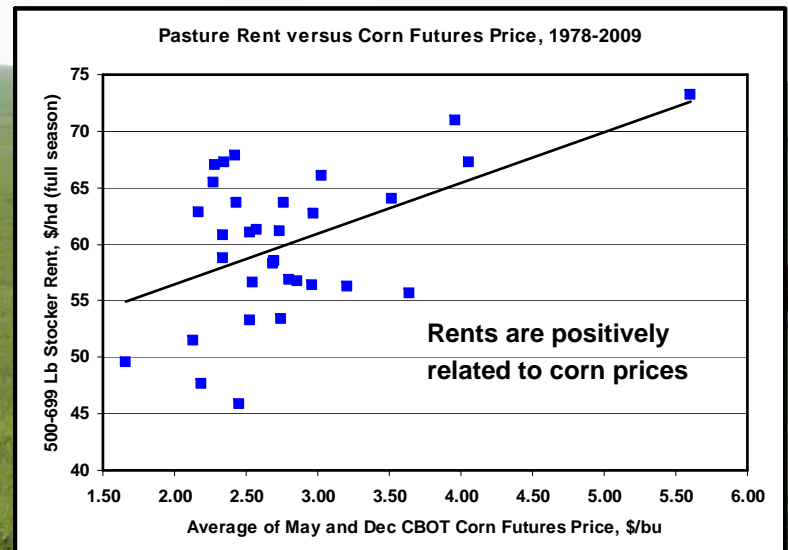
What drives pasture rental rates?



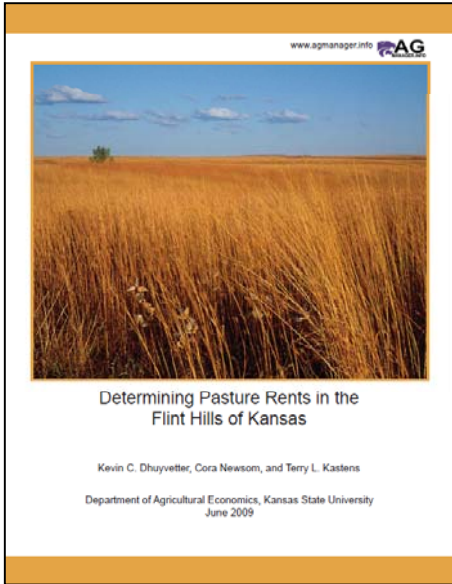
What drives pasture rental rates?



What drives pasture rental rates?



What drives pasture rental rates?



Publication on *agmanager.info* that reports historical pasture rents and equations that can be used to forecast future rents (where forecasts are a function of time, feeder cattle prices, and corn prices).

Equations are also built into an online web tool...

(tool could be helpful in helping to determine how to change rents from year-to-year)

Determining Pasture Rents in the Flint Hills of Kansas

Inputs

Year: 2011
 Feeder Cattle Futures Prices (\$/cwt): \$110.00
 Corn Futures Prices (\$/bu): \$4.07

Estimates of Cash Rental Rates

	Stoker Cattle		Cow-Calf Pairs			
	Full Season <500 lbs	500-700	Short Season <500 lbs	500-700	Spring Calves	Fall Calves
Rent, \$/head	\$66.70	\$71.86	\$59.16	\$62.62	\$132.43	\$131.38
Stocking rate, ac/hd	3.90	4.10	2.80	2.90	7.70	8.00
Rent, \$/acre	\$17.10	\$17.53	\$21.13	\$21.59	\$17.20	\$16.42

Formulas used in this tool are reported in Bluestem Pasture Rents Paper available through the link below.

Developed by: Kevin Dhuyvetter (kcd@ksu.edu), Cora Newsom, and Terry Kastens (tkastens@ksu.edu)
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Determining Pasture Rents in the Flint Hills of Kansas

Inputs

Year: 2010
 Feeder Cattle Futures Prices (\$/cwt): \$107.30
 Corn Futures Prices (\$/bu): \$3.83

Estimates of Cash Rental Rates

	Stoker Cattle		Cow-Calf Pairs			
	Full Season <500 lbs	500-700	Short Season <500 lbs	500-700	Spring Calves	Fall Calves
Rent, \$/head	\$66.55	\$71.49	\$58.15	\$61.99	\$129.78	\$129.90
Stocking rate, ac/hd	3.90	4.10	2.80	2.90	7.70	8.00
Rent, \$/acre	\$17.06	\$17.44	\$20.77	\$21.38	\$16.85	\$16.24

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Determining Pasture Rents in the Flint Hills of Kansas

Inputs

Year: 2011
 Feeder Cattle Futures Prices (\$/cwt): \$113.00
 Corn Futures Prices (\$/bu): \$4.40

Estimates of Cash Rental Rates

	Stoker Cattle		Cow-Calf Pairs			
	Full Season <500 lbs	500-700	Short Season <500 lbs	500-700	Spring Calves	Fall Calves
Rent, \$/head	\$65.85	\$71.49	\$59.77	\$62.29	\$133.94	\$131.46
Stocking rate, ac/hd	-1.05%	0.00%	+2.79%	+0.48%	+3.21%	+1.91%
Rent, \$/acre	\$16.89	\$17.44	\$21.35	\$21.48	\$17.39	\$16.43

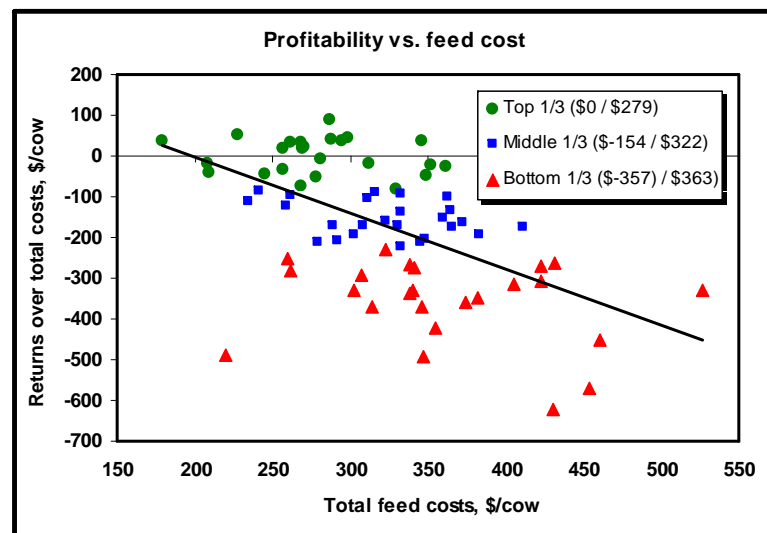
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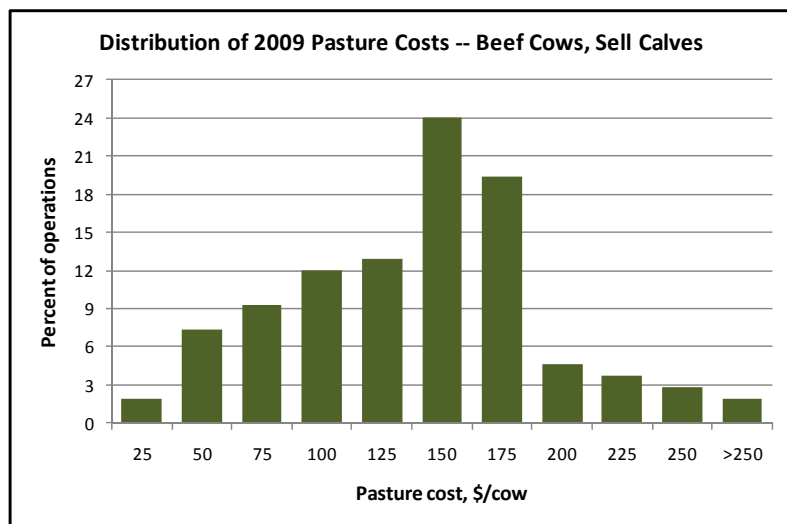


KANSAS FARM MANAGEMENT ASSOCIATION PROFIT CENTER ANALYSIS: 5-YEAR AVERAGE & 2009 BEEF COWS, SELL CALVES: STATE AVERAGES			
	2004-2008 Average		2009
Number of Farms	104		108
Number of Cows in Herd	123		127
Number of Calves Sold	102		107
Average Weight Calves Sold	581		566
Calf Selling Price / Cwt	\$110.61		\$96.94
Gross Income / Cow	\$669.95		\$482.00
Feed Cost / Cow	\$303.29		\$367.37
Nonfeed Cost / Cow	\$334.61		\$381.93
Pounds Beef Produced / Cow	572		546
GROSS INCOME	\$69,191.00	\$99.61	\$569.95
EXPENSES:			
Labor Hired	\$1,781.34	\$2.56	\$14.67
General Machinery Repairs	3,916.24	5.64	32.26
Interest Paid	3,137.28	4.52	25.64
Feed Purchased	36,819.92	53.01	303.29
Pasture	-	-	17,454.24
Machine Hire - Lease	301.06	0.43	2.48
Farm Op Fees / Travel / Publ	591.65	0.85	4.87
Vet Medicine / Drugs	1,825.05	2.63	15.03
Livestock Marketing / Breeding	1,283.63	1.85	10.57
Gas / Fuel / Oil	2,593.65	3.73	21.36
Personal Property Tax	210.43	0.30	1.73
General Farm Insurance	963.90	1.39	7.94
Utilities	1,358.38	1.96	11.19
Auto Expense	413.82	0.60	3.41
TOTAL VARIABLE COSTS	\$65,196.33	\$79.46	\$454.66
RETURN ABOVE VARIABLE COSTS	\$13,995.27	\$20.15	\$115.28
Depreciation	\$3,626.85	\$5.22	\$29.88
Real Estate Tax	624.97	0.90	5.15
Unpaid Operator Labor	8,134.53	11.71	67.01
Interest Charge *	9,858.77	14.19	81.21
TOTAL FIXED COSTS	\$22,245.11	\$32.02	\$183.24
TOTAL EXPENSE	\$77,441.44	\$111.48	\$637.90
NET RETURN TO MANAGEMENT	(\$2,240.83)	(\$11.88)	(\$67.96)
NET RETURN TO LABOR-MGT	\$1,666.03	\$2.40	\$13.72

Starting in 2009, total feed costs are classified as "Pasture" and "Feed Purchased."



Based on analysis of 73 farms having at least three years of data from 2005-2009.



Total of 108 farms (avg = \$127; range = \$19-\$327) – 96 farms between \$50-\$250 (avg \$133)



Range of Bluestem Pasture Lease Rates, 2009, Full Summer Season							
Type of Lease	Lease Price Range per Head for Full Season (Dollars)						
	Steers and Heifers				Cow/Calf Pairs		Price for Pastures Rented on Per Acre Basis
	Under 500 Pounds	500-699 Pounds	Under 700 Pounds	700 Pounds Or More	With Fall Calves	With Spring Calves	
14 COUNTY BLUESTEM PASTURE AREA							
With Service	60-122	50-153	50-153	58-185	50-185	90-225	50-225
Without Service	25-100	25-100	25-100	25-120	25-300	25-245	25-300
Combined Average Lease Rate	25-122	25-153	25-153	25-185	25-300	25-245	25-300

Wide range across all cow/calf lease types surveyed.

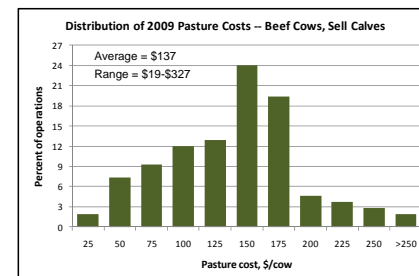
Bluestem Report (combined average lease rate)

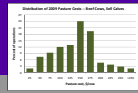
Average with fall calves = \$127.60

Average with spring calves = \$131.30

Overall average = \$130.10

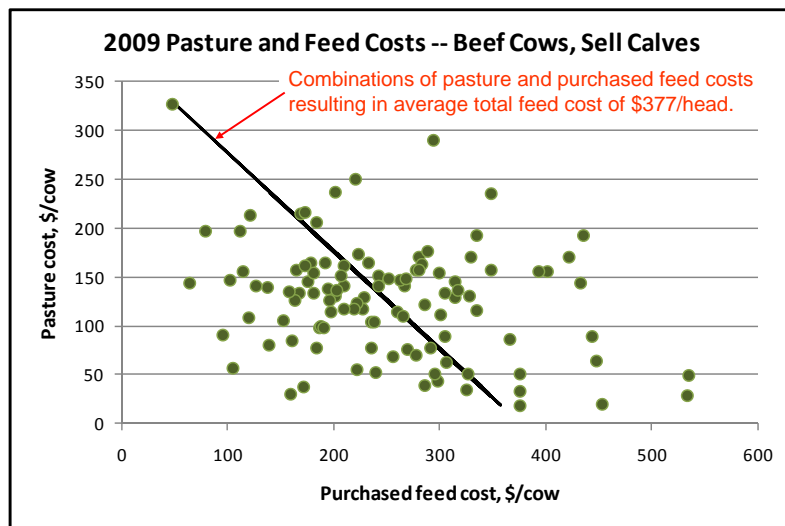
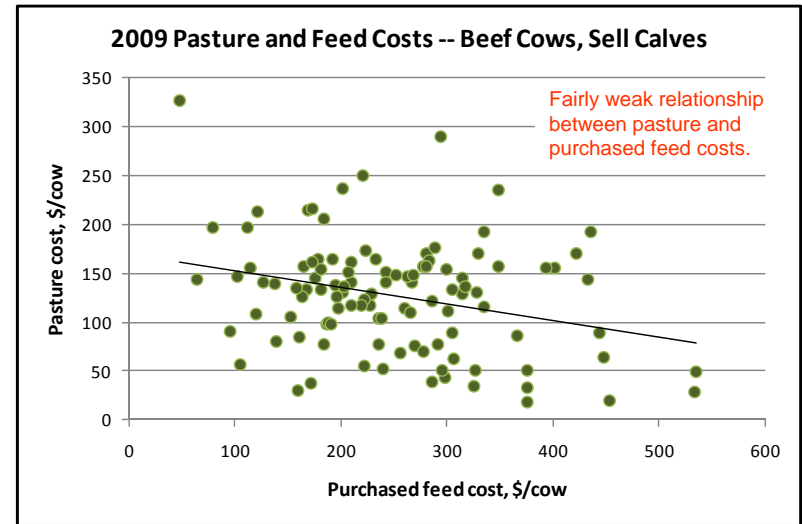
KFMA producer enterprise data and Bluestem survey data match up quite well!



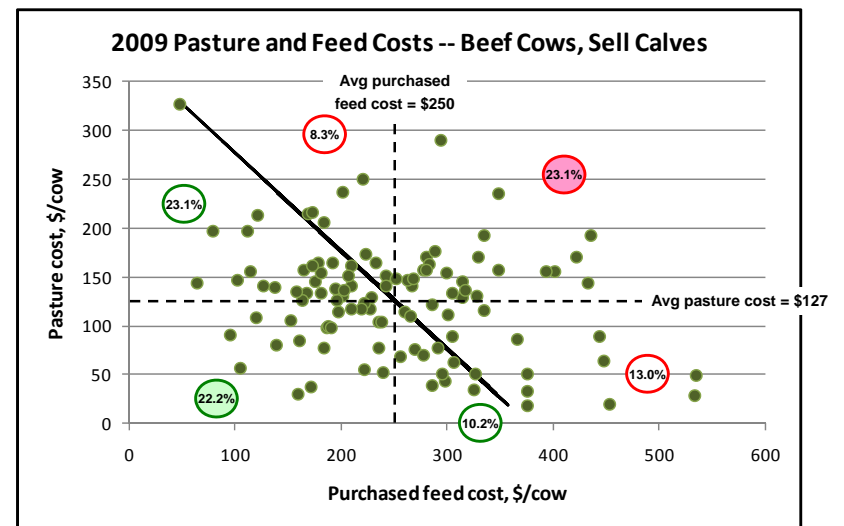


What is driving variability across producers?

- Length of grazing season
 - Trade-off between pasture cost and purchased feed cost
 - Ability to graze stalks in late fall/winter
- Pasture management / intensity
 - Rotational grazing
 - Pasture size / efficiency of use
- Lease rate paid
- Other?



60 of 108 (55%) operations are to the left of the line and 48 (45%) are to the right of the line.



Identifying where your farm falls on this figure (and why) is an important benchmark.

Summary

- **Publicly available data for analyzing and setting pasture rental rates is changing...**
 - Bluestem Pasture Report -- discontinued
 - CRD-level rates being replaced by NASS county-level rates
- **Problems with using reported pasture rates**
 - survey averages do not always reflect the “market”
 - \$/acre is not particularly useful w/o knowing productivity
 - \$/hd (pair) will become less meaningful as practices change
- **Tremendous variability in rates exists and it is important to understand drivers of this**
- **Make sure you know if the rates you are paying on rented land are competitive and thus sustainable**

Questions ???



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