Opportunities to Save on Cost of Production



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USDA Long-Term Projection

Beef long-term projections		Recent		Next 5 Years						10 Years Out
Item	Units	2015	2016	2017	2018	2019	2020	2021	2022	2026
Prices:										
Beef cattle, farm	$/cwt	147.92	119.47	105.87	117.57	118.15	114.88	115.69	110.80	104.16
Calves, farm	$/cwt	263.00	171.85	165.24	172.03	169.23	156.15	152.81	145.33	138.81
Steers, 5-area	$/cwt	148.12	119.94	106.25	117.99	118.57	115.28	116.10	111.19	104.52
Feeder steers, Oklahoma City	$/cwt	202.92	144.25	139.00	144.71	142.36	131.36	128.54	122.25	116.77
Cattle inventory	1,000 head	89,143	91,988	93,300	93,700	94,200	94,600	94,900	95,100	95,450
Beef cow inventory	1,000 head	29,302	30,331	30,944	30,616	31,121	31,328	31,785	31,668	31,246
Total cow inventory	1,000 head	38,609	39,646	40,300	40,000	40,532	40,755	41,222	41,108	40,645

Note: Cwt = hundredweight.
Source: http://www.usda.gov/oce/commodity/projections/; Released November 29, 2016

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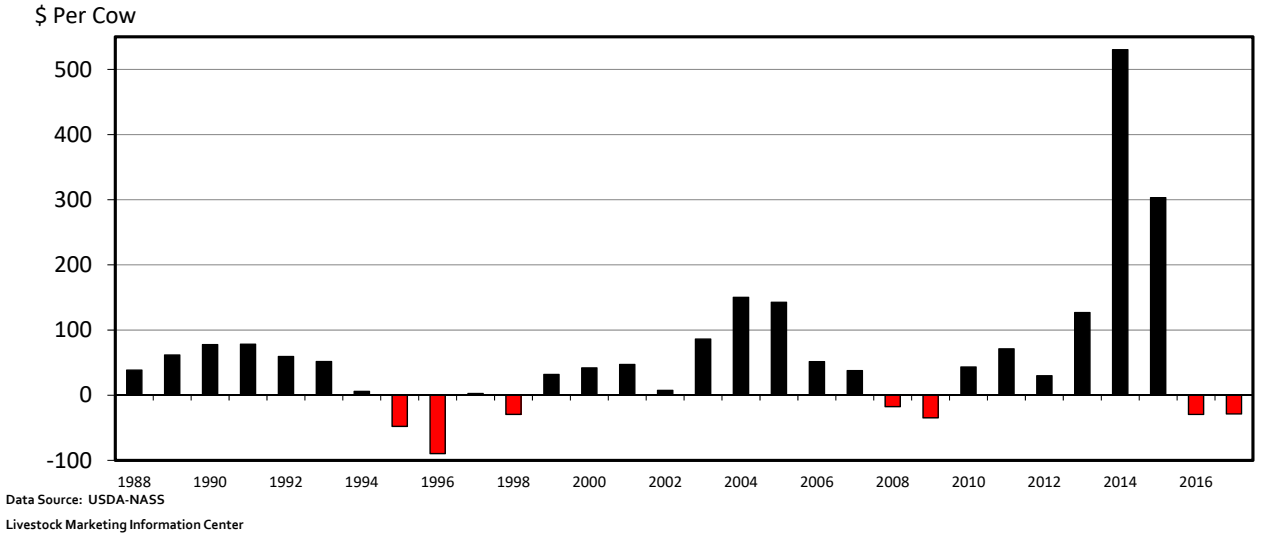
ESTIMATED AVERAGE COW CALF RETURNS
Returns Over Cash Cost (Includes Pasture Rent), Annual



Data Source: USDA-NASS
Livestock Marketing Information Center

Managing Costs & Returns

- What are the cost-return categories that separate the top third profitable farms from the bottom third?

Beef Cow-Calf Enterprise Returns over Variable Costs, 2011-2015

	Profit Category		
	High 1/3 Head / $	Mid 1/3 Head / $	Low 1/3 Head / $
Number of Farms	24	24	24
Labor allocated to livestock, %	37.1	34.4	29.6
Number of Cows in Herd	162	138	121
Number of Calves Sold	149	128	108
Calves Sold per Cow in Herd	0.922	0.925	0.897
Weight of Calves Sold	643	608	603
Calf Sales Price / Cwt	$170.29	$161.11	$170.25
Gross Income	**$1,091.59**	**$968.82**	**$956.59**
Feed	$314.26	$346.39	$447.26
Pasture	$158.44	$172.69	$161.85
Interest	$17.50	$12.44	$33.94
Vet Medicine / Drugs	$27.16	$27.07	$30.97
Livestock Marketing / Breeding	$14.56	$21.55	$21.35
Machinery	$83.98	$96.34	$108.86
Labor	$15.67	$15.15	$36.10
Other	$44.20	$42.27	$59.49
Total Variable Cost	**$675.78**	**$733.90**	**$899.82**
Return over Variable Costs	**$415.81**	**$234.92**	**$56.77**

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Managing Costs & Returns

Beef Cow-Calf Enterprise Returns over Variable Costs, 2011-2015

- Price & Weight - Not really
- 37.6% of difference in net return to management between high- and low-profit farms is due to gross income

	Profit Category		
	High 1/3 Head / $	Mid 1/3 Head / $	Low 1/3 Head / $
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Managing Costs & Returns

- Price & Weight – Not as much
- 37.6% of difference in net return to management between high- and low-profit farms is due to gross income.
- Where is the other 62.4% portion of net return differences?

Beef Cow-Calf Enterprise Returns over Variable Costs, 2011-2015

	Profit Category		
	High 1/3 Head / $	Mid 1/3 Head / $	Low 1/3 Head / $
Number of Farms	24	24	24
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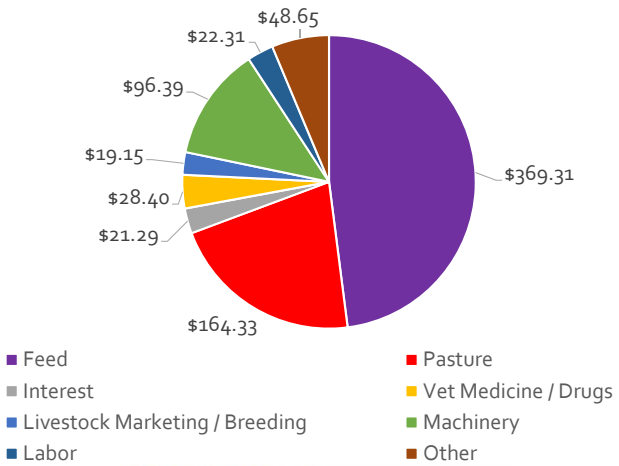
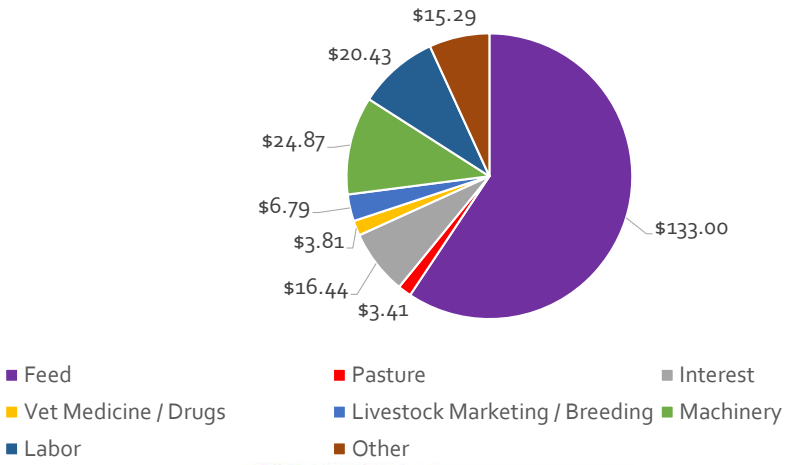
KFMA Cow-Calf Enterprise Variable Expenses



KFMA Cow-Calf Enterprise Variable Expenses: Differences between Top 1/3 and Bottom 1/3



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Ways to Reduce Feed Costs

1. Enhance pasture productivity
2. Extend grazing season
3. Analyze forages
4. Incorporate alternative feeds
5. Critically evaluate "cure-alls"
6. Utilize a ration balancing program
7. Split cattle into age/size appropriate groups
8. Minimize waste
9. Efficient cattle through genetics
10. Improve record keeping to reduce inputs

Source: Gunn and Schwab (2016), Iowa State University

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Crop Residue

- Advantages
  - Feed savings/additional weight gain
  - Reduced wear-and-tear of facilities and equipment
  - Additional income
- Disadvantages
  - Remove nutrients and organic matter
  - Requires fencing and water source
  - Lack of shelter
  - Soil compaction?

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Crop Residue

- River Valley and Post Rock Extension Districts 2015 Leasing Survey
  - Crop Residue: $9.00 per acre (Range $3-$25)
  - Cover Crops: $12.50 per acre (Range $10-$15)
- University of Nebraska 2015 Survey
  - Corn Stalks: $11-$15 per acre
- Iowa State University 2016 Cash Rental Rates Survey
  - Corn Stalks: $12 per acre (Range $8-$19)

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Cover Crops

- Advantages
  - Improve soil and water quality
  - Erosion control
  - Winter feed source
- Disadvantages
  - Increased costs, management and labor
  - Require fencing and water source
  - Insufficient yields will make grazing a net loss
- Cover Crop Cost-Return Budget
  - Budget on AgManager.info

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Cover Crop Cost-Return Budget

Cereal Rye & Turnip in Southeastern Kansas

Department of Agricultural Economics - www.AgManager.info

Robin Reid & Mykel Taylor	**Doug Shoup**		
Agricultural Economics	Agronomy Specialist, SE		
INCOME PER ACRE	**Yield Level, tons/ac**		
A. Yield per acre	**1.00**	**1.75**	**2.50**
B. Net Grazing Income	$56.52	$84.26	$120.37
D. Government Payment	**$0.00**	**$0.00**	**$0.00**
E. Miscellaneous income	**$0.00**	**$0.00**	**$0.00**
F. Returns/acre (B+D+E)	$56.52	$84.26	$120.37
COSTS PER ACRE			
1. Seed	$33.00	$33.00	$33.00
2. Herbicide	0.00	0.00	0.00
3. Insecticide / Fungicide	0.00	0.00	0.00
4. Fertilizer	0.00	22.40	44.80
8. Miscellaneous	**0.00**	**0.00**	**0.00**
9. Machinery Expense	19.77	25.96	25.96
10. Non-machinery Labor	7.50	7.50	7.50
G. SUB TOTAL	$60.27	$88.86	$111.26
13. Interest on 1/2 Nonland Costs	1.51	2.22	2.78
H. TOTAL COSTS	$61.78	$91.08	$114.04
I. RETURNS OVER COSTS (F - H)	**($5.26)**	**($6.82)**	**$6.33**
J. TOTAL COSTS/TON (H/A)	**$61.78**	**$52.05**	**$45.62**
K. RETURN TO ANNUAL COST (I+13)/G	**-6.22%**	**-5.18%**	**8.19%**

- **Profitability depends on yields**
- **Head/acre: 1, 1.5, 2.1**
- **Rent charged: $0.75/head/day**
- **75 grazing days**

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Winter Wheat

- Dual purpose wheat
- Wheat is grazed out
- Tools
  - Wheat Stocker Planner & Grazeout (OSU)
  - Wheat Grazing and Wheat Graze-Out
    - Budgets on AgManager.info

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Minimize Feed Waste

- Storage
  - 6% - 37% loss
- Feeding
  - Types of bales
  - Feeding method
    - 4% - 50% loss
- Losses due to storage and feeding
  - +$12-$58/cow
- Limit amount feed hay

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