

# **2008 Beef Enterprise Analysis**

## **KENTUCKY FARM BUSINESS MANAGEMENT PROGRAM**

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## A Special Note to Our Readers

*The data for this study are drawn from the detailed financial records of producers cooperating with the Kentucky Farm Business Management Program. The data are not drawn from a random sample of farms in the state. However, these data are the most accurate and detailed farm financial data which are available to researchers and educators. Every attempt has been made to select a set of farms for these research studies which are “typical” operations and have complete financial information available for analysis. These data are carefully cross-checked by our farm management specialists before inclusion in this analysis. It should be noted that farms included in this study are representative of commercial farms producing major commodities and livestock, but not of all farms in Kentucky.*

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## **Introduction**

Beef producers in 2008 saw negative returns over all costs. Total beef returns increased from 2003 to 2008. Although total returns increased, input costs increased more than returns. The results from this study are compared to results from the 2003 Beef Enterprise Analysis Report. Unfortunately, we are unable to compare with specific years within this 5 year period.

Even without the specific empirical analysis available, it can be said with confidence that livestock producers as a whole have faced difficult times in the recent years. Beef producers have not been spared from this reality. Volatility in input prices coupled with declining export and domestic demand is largely to blame. Many producers faced challenging weather in 2008 that resulted in driving up hay prices or even reduction in herd size to survive the dry period.

The aim of this study is to show the financial and production situation of like-type producers. Producers can use this study to potentially identify strengths and/or weaknesses in their own operations based on a set of good records. This may allow producers to make changes to their current operation to move toward or achieve a profitable scenario.

## **Description of Beef Cattle Enterprises**

In this study, two beef cattle enterprises are analyzed. Those in which calves are sold at weaning (calves sold) and those in which calves are retained for at least 45 days after weaning (calves backgrounded). There were 8 farms in the calves sold category and 10 farms in the calves backgrounded enterprise. It is important to note the small sample size used in the analysis. Caution should be exercised in assuming this information is characteristic of all Kentucky beef cattle operations. Instead, it is believed that these farms represent the

typical beef cattle farm on the Kentucky Farm Business Management Program.

## **Methods and Definitions**

The data for this study, both financial and production are a result of records kept by cooperators on the Kentucky Farm Business Management Program. The farms chosen were considered “typical” and “certified” by Farm Management Specialists to be included in this analysis. Allocation of costs were derived from monthly accounting records that specifically allocated expenses to given enterprises. In the cases where the costs are not easily split between enterprises (i.e. more than one enterprise using a certain input), decisions were made on an individual basis between the cooperator and the respective Farm Management Specialist to properly allocate expenses. It is important to note that only farms that represent the average beef cattle farm were used. In other words, we are only comparing like farms and not including data that is not typical. This gives a more robust depiction of the situation that beef producers are facing that are in the program.

Total Beef Returns - These are the total returns that can be attributed to the beef cattle enterprise. It accounts for sales of both breeding and market animals, inventory changes for both market and breeding animals, as well as, purchases of said animals. Other sources of income that are attributable to the beef cattle enterprises are also included in this calculation.

Feed Costs - This calculation is simply the value of feed fed to the beef animals. It is important to note that this includes not only feed purchases but accounts for the cost associated with having cattle on pasture and home raised feed.

Non-Feed Cash Costs - These are actual expenses in which cash was paid.

Non-Feed Non-Cash Costs – Includes capital interest charge<sup>1</sup>, building depreciation, machinery depreciation, unpaid labor, and breeding livestock depreciation. Depreciation costs are economic depreciation costs and not tax depreciation. Using economic depreciation gives the true costs associated with a particular asset, whereas tax depreciation may underestimate the true costs associated with a given asset.

Returns Per \$100 Feed Fed - This is a measure of feed usage. It is calculated by dividing total beef returns by total feed costs and multiplying by 100. A value of \$100 returns per \$100 feed fed indicates that, on average, the beef cattle enterprise returned exactly the value of feed fed to the enterprise. Values under \$100 indicate that the beef enterprise is returning less than the value of feed it has consumed.

Hay Equivalent - This calculation is reported in tons. Many different feed inputs can be used to feed cattle. Each of these different feeds has different nutritional values and subsequently results in different potential weight gains. This measure attempts to account for these variances and produces a measure that can be easily compared across different producers and time. It accounts for variances in the following feed: corn silage, other silage, hay silage, hay, miscellaneous crops, alfalfa, and pasture days.

High-Third and Low-Third - These are classified based on net returns. Simply, this is the third of the farms analyzed that had the highest (lowest) net returns.

## **Beef Enterprise Survey-Calves Sold**

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<sup>1</sup> Capital interest charge is an opportunity cost of having capital engaged in the farming activities. These assets could be invested in other activities. In 2008, we assumed a minimum return of 6.2% on non-land capital and 3.8% on land for these calculations.

For this cattle enterprise, negative net returns (over all costs) were realized. However, returns per \$100 feed fed was \$121. In other words, for every \$100 of feed that was fed, the beef enterprise returned \$121 on average. Compared with 2003, this feed usage measure was down almost 32%. In 2003, feed costs were lower and the gain in price received from 2003 to 2008 was not enough to account for the change in feed costs. However, it is important to note that other factors affect total beef returns other than just prices received.

Price received per CWT for market animals was \$92.21. Price received for breeding animals was at less than 50% of that of the market animals at \$42.21. For market animals, this was an increase of almost 8% since 2003. Yet, prices received for breeding animals actually decreased in the same time period by about 8%. As mentioned before, declining demand for beef is likely the blame for the decrease in price. When considering the price decrease for breeding animals, it may be the case the market was saturated with these animals as producers may have culled more animals than normal to avoid having to pay feed costs. The culling rate for 2008 was 13.1%

The average herd size was 104 cows that produced 58,105 pounds of beef or approximately 560 pounds of beef per cow. In comparison to 2003, this was a 32% increase in herd size, 42% increase in total pounds produced and an 8% increase in pounds of beef per cow.

Death loss (calculated as a percentage of pounds of beef lost to death of the animal as a percentage of total pounds of beef produced) was 5.9%. This was a decrease of about 14% from 2003. For 2008, calving rate was 97.9% on average.

Total concentrates fed increased 62% over the 5 year period to 184.6 LBS/CWT of beef

produced. Hay and dry roughage also saw a significant increase over the same time period of 51% or 1,121.3 pounds per CWT of beef produced. Pasture days per animal rose slightly (3.5%) for 2008 to 241.3 days per animal. Corn silage fed fell over 87% to just 26 pounds per CWT of beef produced. However, hay equivalent tons increased slightly (3%) to 6.49 tons per animal. This result indicates that even though some of these feed categories increased significantly, overall total feed per animal did not.

### **Beef Enterprise Survey-Calves Backgrounded**

For this enterprise, negative net returns were realized not only over feed costs but over all costs as well. It is important to note that the return above feed cost was -\$78.00 in total. When looked at as a per \$100 feed fed, this translates to being very close to breaking even on feed costs. Therefore, returns per \$100 of feed fed was \$99.83. In other words, for every \$100 of feed expense, the beef enterprise returned \$0.17 less than what was spent on feed. In 2003, returns per \$100 feed fed was positive at \$173. The increase in feed costs over this period was almost 40%.

Price received for market animals in this enterprise was \$96.00/CWT and for breeding animals was \$52.00/CWT. This was a 16% and 14% increase over prices received in 2003, respectively.

This enterprise had an average of 108 cows producing 62,071 total pounds of beef or an average of 611 pounds of beef per cow. This was a 5% decrease in herd size, 17.5% decrease in total pounds produced and a 7% decrease in pounds of beef produced per cow.

Death loss increased slightly to 7%. Calving rate was 90% and cull rate was 12%. Total concentrates fed decreased by 24% to 148 LBS/CWT of beef produced. Hay and dry

roughage fed increased 50% to 1,159 LBS/CWT. Corn silage and other silage increased the most of all feeds used. In this enterprise, pasture days per animal decreased as well by 10% to 206 days per animal. However, as was the case with calves sold group, hay equivalence stayed about the same at 7 tons per animal.

### **Summary of High-Third and Low-Third Classification-Calves Sold**

Classifying producers into high- and low-third performers gives yet another analysis benchmark to identify strengths and weaknesses in a particular operation. This is merely to show what costs and returns are for the high-third and low-third producers when placed against each other and the over all average. These distinctions are based on net returns over all costs. It is important to note that these are benchmarks and producers should consider their specific situations to see if changes can be made.

Total returns per CWT of beef produced was \$118.00 for the high-third producers compared to \$38.00 for the low-third group. Feed costs were higher for the high-third at \$55.30 compared to \$45.10 for the low-third group. Non-feed costs were also higher for the high-third group at \$43.95 per CWT compared to \$29.87 for the low-third group. Total non-feed costs were also higher. This resulted in total cost of production for the high-third group being higher than the low-third group at \$139.16/CWT compared to \$101.02/CWT.

The high-third performer realized returns per \$100 feed fed of \$211.00 compared to \$84.00 for the low-third group. The high-third also had better marketing of their animal. Prices received for market animals on a per CWT basis was \$93 for the high-third compared to \$90 for the low-third. The biggest difference in marketing was apparent in the prices received for breeding animals at \$35.00/CWT.

## **Summary of High-Third and Low-Third Classification-Calves Backgrounded**

Total returns per CWT were \$1.75 higher for the high-third group at \$75.78 than the low-third. Total feed costs were \$62.52/CWT of beef produced for the high-third compared to \$69.20/CWT for the low-third. There was also a significant difference between cash costs in the two groups. Total cash costs were \$14.87/CWT for the high-third and \$64.66/CWT for the low-third. Within these costs, fuel and oil and paid labor were the areas where the low-third incurred significantly more costs than the high-third.

Non-cash costs between the high- and low-third producers were also significant as well (\$19.14/CWT for the high-third and \$112.75 for the low-third). The two categories of these expenses that accounted for most of the difference was unpaid labor and non-cash interest.

Net returns (over all costs) were negative for both high- and low-third performers but of a smaller magnitude for the high-third performers.

### **Summary**

The bottom line for most producers involves factors that are largely out of their control (i.e. prices, weather, etc). Other factors that influence the over all operation is completely in the control of the producer. The Kentucky Farm Business Management program helps producers identify these controllable factors through accurate and precise record keeping mechanisms and analysis. After good records are established, producers can benchmark themselves against themselves and other like-type producers to identify strengths and weaknesses in the factors they can control.

The long-term viability of an operation depends on the operation to cover all costs

associated. Hopefully, the operation will, in the long-run, generate positive returns to compensate the operators for their management.

The ability for an operation to continue to operate in times of negative returns depends on several factors. The overall financial position of the operation as well as the length and severity of the negative returns will determine how long it can survive in such conditions.

Some producers are inclined to conclude that non-cash costs are not important because no money is physically changing hands. However, this is a dangerous position to take since these are true costs of production. When these costs are not being covered, it indicates that there may need to be a shift in the operation in where both labor and money are applied. In other words, other investment opportunities may not be considered where profitable returns may exist. These may be other enterprise opportunities on the farm or off the farm.

**Table 1. 2008 KFBM Enterprise Production Summary: Beef Calves Sold**

	<b>Average</b>	<b>High-Third</b>	<b>Low-Third</b>
<b>NUMBER OF HERDS</b>	<b>8</b>	<b>3</b>	<b>3</b>
<b>SUMMARY</b>			
Total Returns	36776	49799	38175
Total Feed Costs	30429	23339	44562
Returns Above Feed Costs	6347	26461	-6387
Total Non-Feed Costs	40216	35390	55257
<b>Net Returns (over all costs)</b>	<b>-33869</b>	<b>-8929</b>	<b>-61644</b>
<b>OTHER ECONOMIC VARIABLES</b>			
Total Returns per \$100 Feed Fed	121	211	84
Price Rec'd per CWT: market	92	93	90
Price Rec'd per CWT: Breeding	42	63	35
<b>OTHER PRODCUTION VARIABLES</b>			
Average Number of Cows	104	95	152
Total Beef Produced (LB)	58105	42204	98813
Pounds of Beef per cow	560	546	658
Death Loss: % of LB Produced	6	2	9
Total Concentrates (LB/CWT of Beef)	185	35	67
Hay and Dry Forage (LB/CWT of Beef)	1121	959	1009
Corn Silage (LB/CWT of Beef)	26	0	70
Other Silage (LB/CWT of Beef)	11	0	30
Pasture Days per Animal Unit	241	259	234
Hay Equiv. per Cow (Ton)	6	6	7

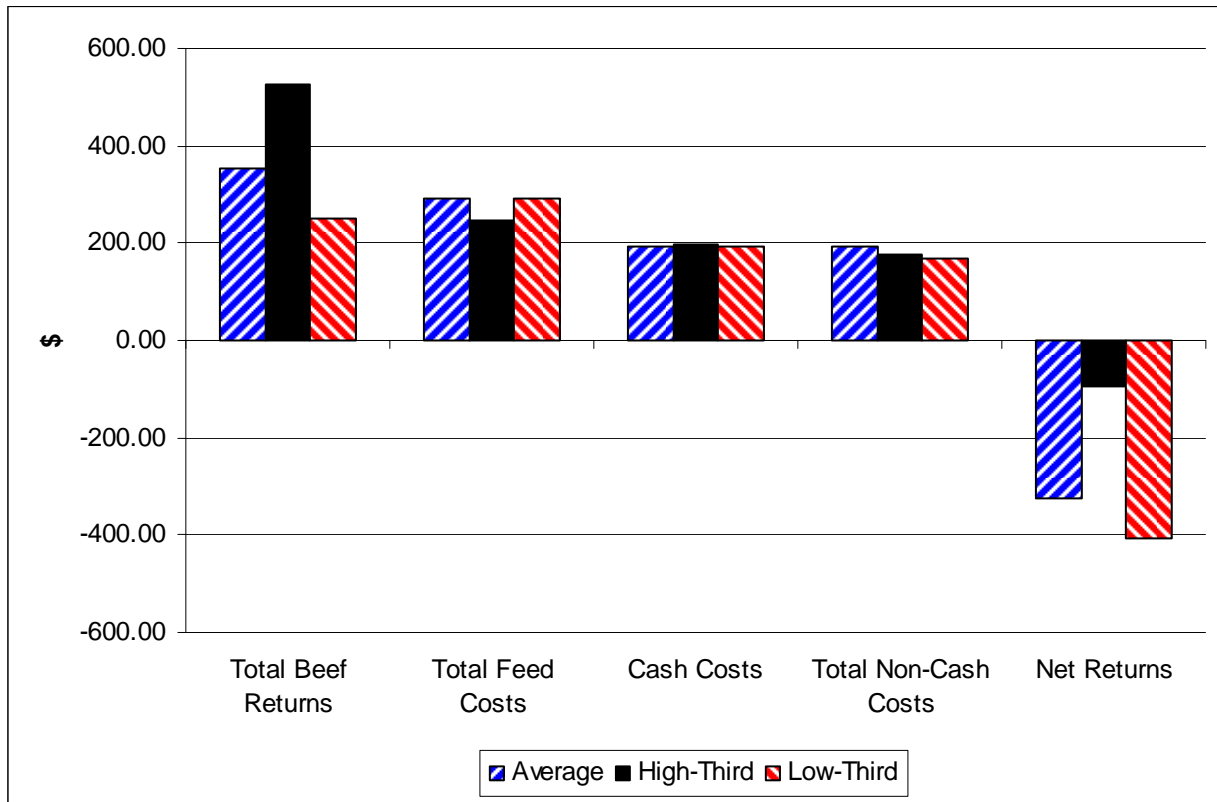
**Table 2. 2008 KFBM Enterprise Cost and Return Summary: Beef Calves Sold \$/Cow**

	Average	High-Third	Low-Third
<b>NUMBER OF HERDS</b>	<b>8</b>	<b>3</b>	<b>3</b>
<b>TOTAL BEEF RETURNS</b>	<b>353.61</b>	<b>526.05</b>	<b>251.71</b>
<b>FEED COSTS</b>			
Corn	15.88	0.00	0.00
Other Grain	1.19	3.48	0.00
Mineral	31.75	23.77	38.72
Hay	134.03	132.08	130.33
Corn Silage	4.36	0.00	7.98
Other Silage	1.00	0.00	1.84
Misc. Roughage	14.76	0.00	23.34
Pasture	89.62	87.21	91.61
<b>Total Feed Costs</b>	<b>292.58</b>	<b>246.54</b>	<b>293.82</b>
<b>NON-FEED CASH COSTS</b>			
Veterinary & Livestock Supplies	26.53	20.04	33.06
Fuel & Oil	20.12	31.18	12.97
Machinery Repairs	32.70	43.07	30.25
Bldg/ Fence Repairs	15.92	17.42	16.41
Machinery Hire	4.31	0.00	4.84
Utilities	15.18	22.50	13.02
Light Vehicle-Farm Share	0.00	0.00	0.00
Paid Labor	26.87	17.62	37.57
Insurance, Property Tax, & Misc	30.96	19.54	40.37
Cash Interest	22.16	24.56	6.08
<b>Total Non-feed Cash Costs</b>	<b>194.75</b>	<b>195.92</b>	<b>194.58</b>
<b>NON-FEED NON-CASH COSTS</b>			
Unpaid Labor	58.35	74.32	32.70
Machinery Depreciation	25.59	24.04	26.13
Bldg/Fence Depreciation	9.75	13.56	8.09
Non-Cash Interest	94.74	66.00	102.83
Breeding Livestock Economic Depreciation	3.51	0.00	0.00
<b>Total Non-Feed Non-Cash Costs</b>	<b>191.94</b>	<b>177.92</b>	<b>169.75</b>
<b>Total Costs of Production</b>	<b>679.28</b>	<b>620.37</b>	<b>658.15</b>
<b>Net Returns (over all costs)</b>	<b>-325.66</b>	<b>-94.32</b>	<b>-406.44</b>
<b>COSTS AND RETURNS SUMMARY</b>			
Total Beef Returns	353.61	526.05	251.71
Feed Costs	292.58	246.54	293.82
Non-feed Costs	386.69	373.84	364.33
<b>Net Returns (over all costs)</b>	<b>-325.66</b>	<b>-94.32</b>	<b>-406.44</b>
<b>COSTS SUMMARY</b>			
Feed Costs	292.58	246.54	293.82
Non-Feed Cash Costs	194.75	195.92	194.58
Non-Feed Non-Cash Costs	191.94	177.92	169.75

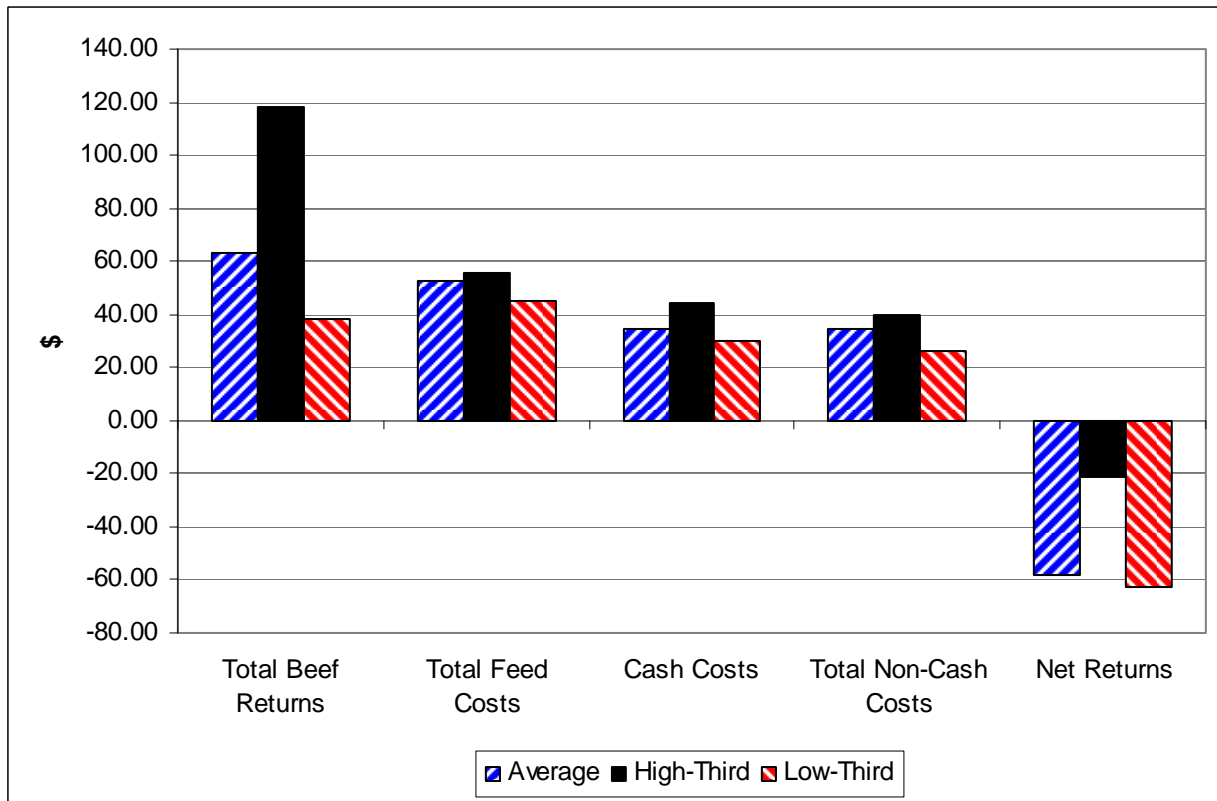
**Table 3. 2008 KFBM Enterprise Cost and Return Summary: Beef Calves Sold \$/CWT**

	Average	High-Third	Low-Third
<b>NUMBER OF HERDS</b>	<b>8</b>	<b>3</b>	<b>3</b>
<b>TOTAL BEEF RETURNS</b>	<b>63.29</b>	<b>118.00</b>	<b>38.63</b>
<b>FEED COSTS</b>			
Corn	2.99	0.00	0.00
Other Grain	0.21	0.78	0.00
Mineral	5.68	5.33	5.94
Hay	23.99	29.63	20.00
Corn Silage	0.78	0.00	1.22
Other Silage	0.18	0.00	0.28
Misc. Roughage	2.64	0.00	3.58
Pasture	16.04	19.56	14.06
<b>Total Feed Costs</b>	<b>52.37</b>	<b>55.30</b>	<b>45.10</b>
<b>NON-FEED CASH COSTS</b>			
Veterinary & Livestock Supplies	4.75	4.49	5.07
Fuel & Oil	3.60	6.99	1.99
Machinery Repairs	5.85	9.66	4.64
Bldg/ Fence Repairs	2.85	3.91	2.52
Machinery Hire	0.77	0.00	0.74
Utilities	2.72	5.05	2.00
Light Vehicle-Farm Share	0.00	0.00	0.00
Paid Labor	4.81	3.95	5.77
Insurance, Property Tax, & Misc	5.54	4.38	6.20
Cash Interest	3.97	5.51	0.93
<b>Total Non-feed Cash Costs</b>	<b>34.86</b>	<b>43.95</b>	<b>29.87</b>
<b>NON-FEED NON-CASH COSTS</b>			
Unpaid Labor	10.44	16.67	5.02
Machinery Depreciation	4.58	5.39	4.01
Bldg/Fence Depreciation	1.75	3.04	1.24
Non-Cash Interest	16.96	14.80	15.78
Breeding Livestock Economic Depreciation	0.63	0.00	0.00
<b>Total Non-Feed Non-Cash Costs</b>	<b>34.35</b>	<b>39.91</b>	<b>26.05</b>
<b>Total Costs of Production</b>	<b>121.58</b>	<b>139.16</b>	<b>101.02</b>
<b>Net Returns (over all costs)</b>	<b>-58.29</b>	<b>-21.16</b>	<b>-62.38</b>
<b>COSTS AND RETURNS SUMMARY</b>			
Total Beef Returns	63.29	118.00	38.63
Feed Costs	52.37	55.30	45.10
Non-feed Costs	69.21	83.86	55.92
<b>Net Returns (over all costs)</b>	<b>-58.29</b>	<b>-21.16</b>	<b>-62.38</b>
<b>COSTS SUMMARY</b>			
Feed Costs	52.37	55.30	45.10
Non-Feed Cash Costs	34.86	43.95	29.87
Non-Feed Non-Cash Costs	34.35	39.91	26.05

**Figure 1. 2008 Costs and Returns per Cow: Beef Calves Sold**



**Figure 2. 2008 Costs and Returns per CWT: Beef Calves Sold**



**Table 4. 2008 KFBM Enterprise Production Summary: Beef Calves Backgrounded**

	<b>Average</b>	<b>High-Third</b>	<b>Low-Third</b>
<b>NUMBER OF HERDS</b>	<b>10</b>	<b>3</b>	<b>3</b>
<b>SUMMARY</b>			
Total Returns	45931	50569	43196
Total Feed Costs	46008	41721	40315
Returns Above Feed Costs	-78	8848	2881
Total Non-Feed Costs	50173	22697	103361
<b>Net Returns (over all costs)</b>	<b>-50251</b>	<b>-13849</b>	<b>-100480</b>
<b>OTHER ECONOMIC VARIABLES</b>			
Total Returns per \$100 Feed fed	100	1	1
Price Rec'd per CWT: market	96	91	90
Price Rec'd per CWT: Breeding	52	68	54
<b>OTHER PRODUCTION VARIABLES</b>			
Average Number of Cows	108	103	108
Total Beef Produced (LB)	62071	66728	58261
Pounds of Beef per cow	611	647	538
Death Loss: % of LB Produced	7	6	9
Total Concentrates (LB/CWT of Beef)	148	141	178
Hay and Dry Forage (LB/CWT of Beef)	1159	1000	1143
Corn Silage (LB/CWT of Beef)	392	289	461
Other Silage (LB/CWT of Beef)	72	241	0
Pasture Days per Animal Unit	206	252	144
Hay Equiv. per Cow (Ton)	7	7	6

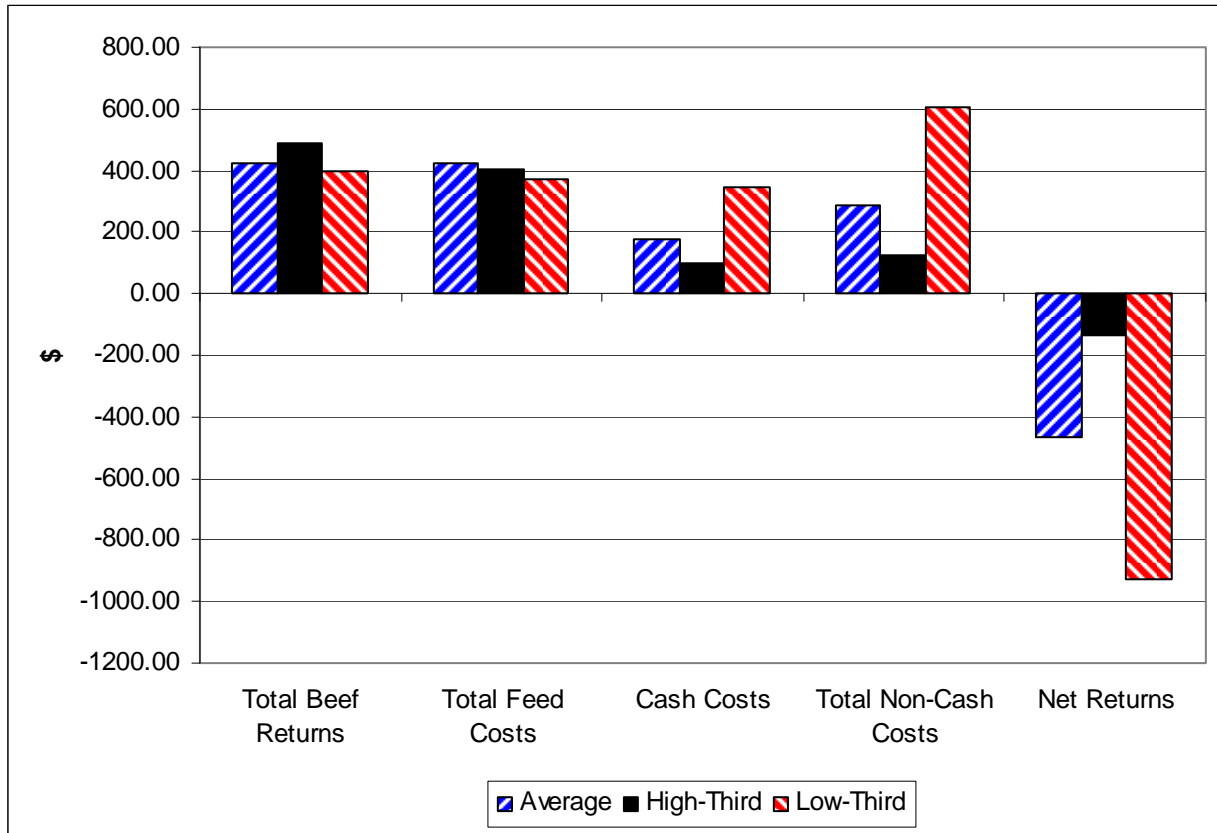
**Table 5. 2008 Enterprise Cost and Return Summary: Beef Calves Backgrounded \$/Cow**

	Average	High-Third	Low-Third
<b>NUMBER OF HERDS</b>	<b>10</b>	<b>3</b>	<b>3</b>
<b>TOTAL BEEF RETURNS</b>	<b>423.71</b>	<b>489.38</b>	<b>398.73</b>
<b>FEED COSTS</b>			
Corn	24.36	19.99	15.27
Other Grain	6.30	10.90	0.00
Mineral	69.40	103.33	33.56
Hay	184.76	138.74	185.91
Corn Silage	40.85	23.81	48.93
Other Silage	3.75	13.13	0.00
Misc. Roughage	16.5	0.00	33.42
Pasture	78.5	93.86	33.42
<b>Total Feed Costs</b>	<b>424.43</b>	<b>403.75</b>	<b>372.14</b>
<b>NON-FEED CASH COSTS</b>			
Veterinary & Livestock Supplies	32.10	27.65	32.40
Fuel & Oil	40.28	19.84	95.52
Machinery Repairs	18.10	11.84	32.92
Bldg/ Fence Repairs	10.37	8.66	9.87
Machinery Hire	0.20	0.70	0.00
Freight	1.44	5.03	0.00
Utilities	17.36	1.85	45.97
Light Vehicle-Farm Share	1.84	0.00	6.14
Paid Labor	31.18	5.63	96.05
Insurance, Property Tax, & Misc	16.64	13.09	18.48
Cash Interest	8.51	1.75	10.38
<b>Total Non-Feed Cash Costs</b>	<b>178.02</b>	<b>96.04</b>	<b>347.73</b>
<b>NON-FEED NON-CASH COSTS</b>			
Unpaid Labor	95.46	46.92	181.41
Machinery Depreciation	19.86	11.19	29.71
Bldg/Fence Depreciation	6.55	1.17	11.66
Non-Cash Interest	152.01	58.96	380.49
Breeding Livestock Economic Depreciation	10.95	5.36	3.11
<b>Total Non-Feed Non-Cash Costs</b>	<b>284.83</b>	<b>123.61</b>	<b>606.83</b>
<b>Total Costs of Production</b>	<b>2063.73</b>	<b>1167.35</b>	<b>1660.46</b>
<b>Net Returns (over all costs)</b>	<b>-1640.01</b>	<b>-677.97</b>	<b>-1261.73</b>
<b>COSTS AND RETURNS SUMMARY</b>			
Total Beef Returns	423.71	489.38	398.73
Feed Costs	424.43	403.75	372.14
Non-feed Costs	462.85	219.65	954.10
<b>Net Returns (over all costs)</b>	<b>-463.57</b>	<b>-134.02</b>	<b>-927.51</b>
<b>COSTS SUMMARY</b>			
Feed Costs	424.43	403.75	372.14
Non-Feed Cash Costs	178.02	91.01	347.73
Non-Feed Non-Cash Costs	284.83	123.61	606.38

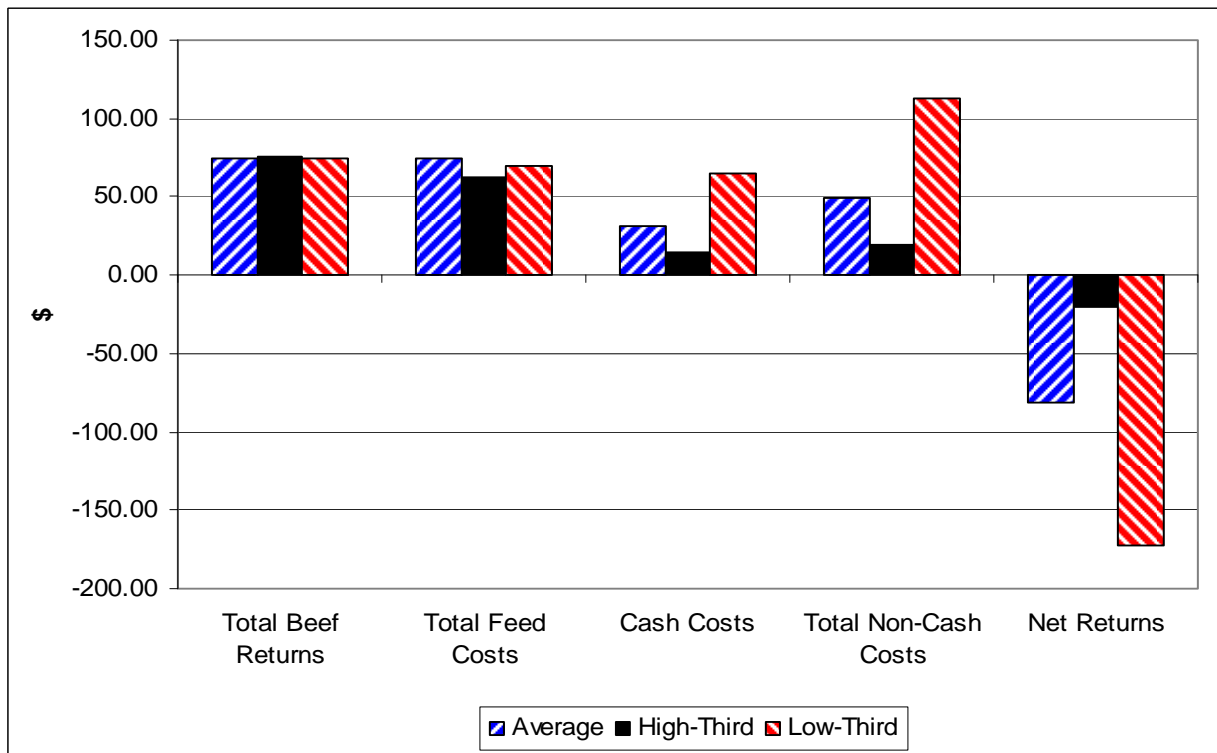
**Table 6. 2008 Enterprise Cost and Return Summary: Beef Calves Backgrounded \$/CWT**

	Average	High-Third	Low-Third
<b>NUMBER OF HERDS</b>	<b>10</b>	<b>3</b>	<b>3</b>
<b>TOTAL BEEF RETURNS</b>	<b>74.00</b>	<b>75.78</b>	<b>74.03</b>
<b>FEED COSTS</b>			
Corn	4.25	3.10	2.84
Other Grain	1.10	1.69	0.00
Mineral	12.12	16.00	6.24
Hay	32.27	21.49	34.57
Corn Silage	7.13	3.69	9.10
Other Silage	0.66	2.03	0.00
Misc. Roughage	2.88	0.00	6.21
Pasture	13.71	14.53	6.21
<b>Total Feed Costs</b>	<b>74.12</b>	<b>62.52</b>	<b>69.20</b>
<b>NON-FEED CASH COSTS</b>			
Veterinary & Livestock Supplies	5.61	4.28	6.02
Fuel & Oil	7.03	3.07	17.76
Machinery Repairs	3.16	1.83	6.12
Bldg/ Fence Repairs	1.81	1.34	1.84
Machinery Hire	0.04	0.11	0.00
Freight	0.25	0.78	0.00
Utilities	3.03	0.29	8.55
Light Vehicle-Farm Share	0.32	0.00	1.14
Paid Labor	5.44	0.87	17.86
Insurance, Property Tax, & Misc	2.91	2.03	3.44
Cash Interest	1.49	0.27	1.93
<b>Total Non-feed Cash Costs</b>	<b>31.09</b>	<b>14.87</b>	<b>64.66</b>
<b>NON-FEED NON-CASH COSTS</b>			
Unpaid Labor	16.67	7.27	33.73
Machinery Depreciation	3.47	1.73	5.52
Bldg/Fence Depreciation	1.14	0.18	2.17
Non-Cash Interest	26.55	9.13	70.75
Breeding Livestock Economic Depreciation	1.91	0.83	0.58
<b>Total Non-Feed Non-Cash Costs</b>	<b>49.74</b>	<b>19.14</b>	<b>112.75</b>
<b>Total Costs of Production</b>	<b>154.95</b>	<b>96.54</b>	<b>246.61</b>
<b>Net Returns (over all costs)</b>	<b>-81.24</b>	<b>-20.75</b>	<b>-172.58</b>
<b>COSTS AND RETURNS SUMMARY</b>			
Total Beef Returns	73.72	75.78	74.03
Feed Costs	74.12	62.52	69.20
Non-feed Costs	80.83	34.01	177.41
<b>Net Returns (over all costs)</b>	<b>-81.24</b>	<b>-20.75</b>	<b>-172.58</b>
<b>COSTS SUMMARY</b>			
Feed Costs	74.12	62.52	69.20
Non-Feed Cash Costs	31.09	14.87	64.66
Non-Feed Non-Cash Costs	49.74	19.14	112.75

**Figure 3. 2008 Costs and Returns per Cow: Beef Calves Backgrounded**



**Figure 4. 2008 Costs and Returns per CWT: Beef Calves Backgrounded**



**Table 7. KFBM Enterprise Production Summary: Beef Calves Sold**

	2003	2008	% Change
<b>NUMBER OF HERDS</b>	<b>47</b>	<b>8</b>	
Total Beef Returns	30469	36776	20.70%
Total Feed Costs	17165	30429	77.27%
Returns Above Feed Costs	13304	6347	-52.29%
Total Non-Feed Costs	21723	40216	63.02%
<b>Net Returns (Over all Costs)</b>	<b>-8420</b>	<b>-33869</b>	<b>302.24%</b>
<b>OTHER ECONOMIC VARIABLES</b>			
Returns Per \$100 Feed Fed	177.5	121	-31.83%
Price Rec'd Per CWT.: Market	85.5	92.21	7.85%
Price Rec'd Per CWT.: Breeding	45.87	42.13	-8.15%
<b>OTHER PRODUCTION VARIABLES</b>			
Number of Cows	79	104	31.65%
Total Beef Produced (LB)	40997	58104.88	41.73%
Pounds of Beef Per Cow	519.2	560.18	7.89%
Death Loss: % of LBS Produced	6.85	5.8625	-14.42%
Total Concentrates (LBS/CWT)	114	184.625	61.95%
Hay and Dry Roughage (LBS/CWT)	743	1121.25	50.91%
Corn Silage (LBS/CWT)	199	26.375	-86.75%
Other Silage (LBS/CWT)	0	11.38	
Pasture Days per animal	233	241.25	3.54%
Hay Equivalent Tons	6.3	6.49	3.02%

**Table 8. KFBM Enterprise Production Summary: Beef Calves Sold \$/Cow**

	<b>2003</b>	<b>2008</b>
<b>NUMBER OF HERDS</b>	<b>47</b>	<b>8</b>
<b>TOTAL BEEF RETURNS</b>	<b>386</b>	<b>353.61</b>
<b>FEED COSTS</b>		
Corn		15.88
Other Grain		1.19
Mineral		31.75
Hay		134.03
Corn Silage		4.36
Other Silage		1.00
Misc. Roughage		14.76
Pasture		89.62
<b>Total Feed Costs</b>	<b>217</b>	<b>292.58</b>
<b>NON-FEED CASH COSTS</b>		
Veterinary & Livestock Supplies	17	26.53
Fuel & Oil	13	20.12
Machinery Repairs	18	32.70
Bldg/ Fence Repairs	17	15.92
Machinery Hire	1	4.31
Utilities	7	15.18
Light Vehicle-Farm Share	1	0.00
Paid Labor	26	26.87
Insurance, Property Tax, & Misc	11	30.96
Cash Interest	9	22.16
<b>Total Non-feed Cash Costs</b>	<b>120</b>	<b>194.75</b>
<b>NON-FEED NON-CASH COSTS</b>		
Unpaid Labor	56	58.35
Machinery Depreciation	18	25.59
Bldg/Fence Depreciation	12	9.75
Non-Cash Interest	69	94.74
Breeding Livestock Economic Depreciation		3.51
<b>Total Non-Feed Non-Cash Costs</b>	<b>155</b>	<b>191.94</b>
<b>Total Costs of Production</b>	<b>492</b>	<b>679.28</b>
<b>Net Returns (over all costs)</b>	<b>-106</b>	<b>-325.66</b>
<b>COSTS AND RETURNS SUMMARY</b>		
Total Beef Returns	386	353.61
Feed Costs	217	292.58
Non-feed Costs	275	386.69
<b>Net Returns (over all costs)</b>	<b>-106</b>	<b>-325.66</b>
<b>COSTS SUMMARY</b>		
Feed Costs	217	292.58
Non-Feed Cash Costs	120	194.75
Non-Feed Non-Cash Costs	155	191.94
<b>Total Cost of Production</b>	<b>492</b>	<b>679.28</b>

**Table 9. Calves Sold \$/CWT**

	<b>2003</b>	<b>2008</b>
<b>NUMBER OF HERDS</b>	<b>47</b>	<b>8</b>
<b>TOTAL BEEF RETURNS</b>	<b>74.32</b>	<b>63.29</b>
<b>FEED COSTS</b>		
Corn		2.99
Other Grain		0.21
Mineral		5.68
Hay		23.99
Corn Silage		0.78
Other Silage		0.18
Misc. Roughage		2.64
Pasture		16.04
<b>Total Feed Costs</b>	<b>41.87</b>	<b>52.37</b>
<b>NON-FEED CASH COSTS</b>		
Veterinary & Livestock Supplies	3.28	4.75
Fuel & Oil	2.47	3.60
Machinery Repairs	3.42	5.85
Bldg/ Fence Repairs	3.28	2.85
Machinery Hire	0.14	0.77
Utilities	1.30	2.72
Light Vehicle-Farm Share	0.23	0.00
Paid Labor	5.04	4.81
Insurance, Property Tax, & Misc	2.14	5.54
Cash Interest	1.80	3.97
<b>Total Non-feed Cash Costs</b>	<b>23.10</b>	<b>34.86</b>
<b>NON-FEED NON-CASH COSTS</b>		
Unpaid Labor	10.85	10.44
Machinery Depreciation	3.52	4.58
Bldg/Fence Depreciation	2.22	1.75
Non-Cash Interest	13.29	16.96
Breeding Livestock Economic Depreciation		0.63
<b>Total Non-Feed Non-Cash Costs</b>	<b>29.88</b>	<b>34.35</b>
<b>Total Costs of Production</b>	<b>94.86</b>	<b>121.58</b>
<b>Net Returns (over all costs)</b>	<b>-20.54</b>	<b>-58.29</b>
<b>COSTS AND RETURNS SUMMARY</b>		
Total Beef Returns	74.32	63.29
Feed Costs	41.87	52.37
Non-feed Costs	52.99	69.21
<b>Net Returns (over all costs)</b>	<b>-20.54</b>	<b>-58.29</b>
<b>COSTS SUMMARY</b>		
Feed Costs	41.87	52.37
Non-Feed Cash Costs	23.11	34.86
Non-Feed Non-Cash Costs	29.88	34.35
<b>Total Cost of Production</b>	<b>94.86</b>	<b>121.58</b>

**Table 10. Calves Backgrounded**

	<b>2003</b>	<b>2008</b>	<b>% Change</b>
<b>NUMBER OF HERDS</b>	<b>45</b>	<b>10</b>	
Total Beef Returns	56929	45931	-19.32%
Total Feed Costs	32969	46008	39.55%
Returns Above Feed Costs	23960	-78	-100.33%
Total Non-Feed Costs	38868	50173	29.09%
<b>Net Returns (Over all Costs)</b>	<b>-14909</b>	<b>-50251</b>	<b>237.05%</b>
<b>OTHER ECONOMIC VARIABLES</b>			
Returns Per \$100 Feed Fed	173	99.83	-42.18%
Price Rec'd Per CWT.: Market	83	96	15.72%
Price Rec'd Per CWT.: Breeding	46	52	13.57%
<b>OTHER PRODUCTION VARIABLES</b>			
Number of Cows	114	108	-5.08%
Total Beef Produced(LB)	75203	62071	-17.46%
Pounds of Beef Per Cow	659	611	-7.26%
Death Loss: % of LBS Produces	6	7	17.37%
Total Concentrates (LB/CWT)	194	148	-23.61%
Hay and Dry Roughage (LB/CWT)	774	1159	49.77%
Corn Silage (LB/CWT)	210	392	86.48%
Other Silage (LB/CWT)	21	72	244.76%
Pasture Days per animal	230	206	-10.43%
Hay Equivalent Tons	7	7	-1.25%

**Table 11. Calves Backgrounded \$/Cow**

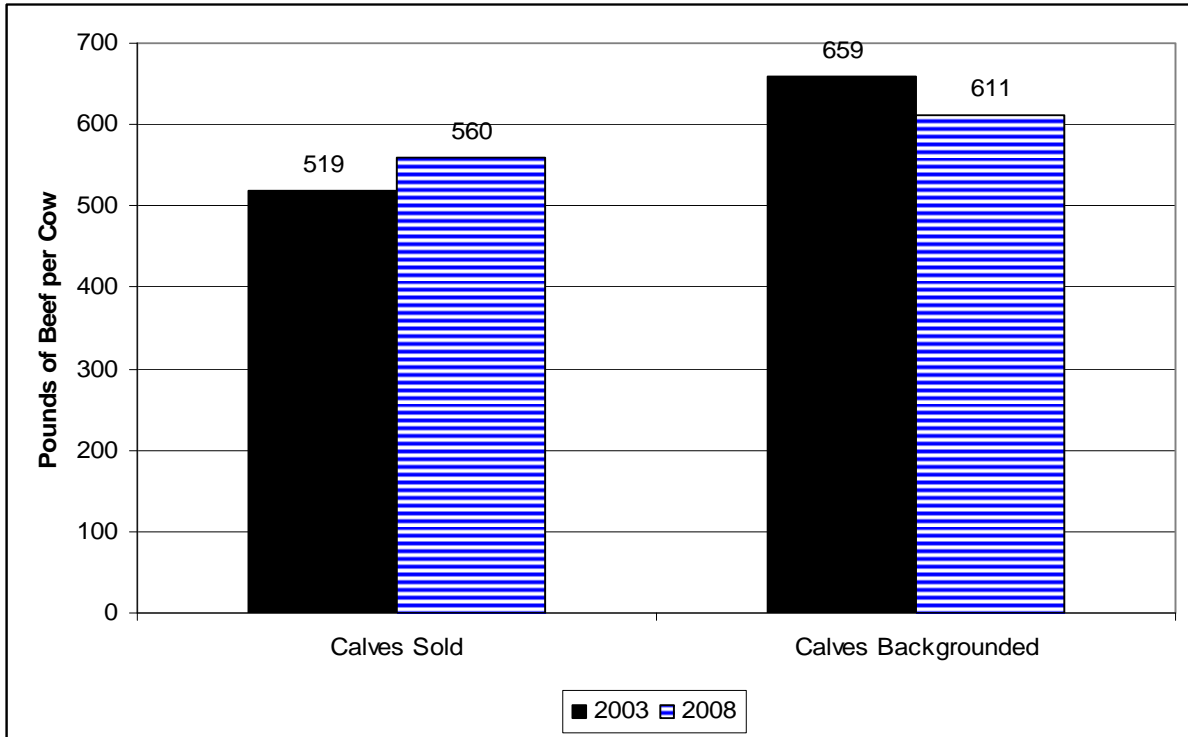
	<b>2003</b>	<b>2008</b>
<b>NUMBER OF HERDS</b>	<b>45</b>	<b>10</b>
<b>TOTAL BEEF RETURNS</b>	<b>499</b>	<b>423.71</b>
<b>FEED COSTS</b>		
Corn		19.33
Other Grain		5.00
Mineral		55.07
Hay		146.62
Corn Silage		32.42
Other Silage		2.98
Misc. Roughage		13.10
Pasture		62.30
<b>Total Feed Costs</b>	<b>289</b>	<b>336.81</b>
<b>NON-FEED CASH COSTS</b>		
Veterinary & Livestock Supplies	29	25.48
Fuel & Oil	13	31.96
Machinery Repairs	25	14.36
Bldg/ Fence Repairs	23	8.23
Machinery Hire	3	0.16
Freight	0	1.14
Utilities	4	13.78
Light Vehicle-Farm Share	1	1.46
Paid Labor	17	24.74
Insurance, Property Tax, & Misc	14	13.21
Cash Interest	12	6.75
<b>Total Non-Feed Cash Costs</b>	<b>141</b>	<b>141.27</b>
<b>NON-FEED NON-CASH COSTS</b>		
Unpaid Labor	91	75.75
Machinery Depreciation	15	15.76
Bldg/Fence Depreciation	5	5.20
Non-Cash Interest	88	120.63
Breeding Livestock Economic Depreciation		10.95
<b>Total Non-Feed Non-Cash Costs</b>	<b>199</b>	<b>228.29</b>
<b>Total Costs of Production</b>	<b>629</b>	<b>706.37</b>
<b>Net Returns (over all costs)</b>	<b>-130</b>	<b>-282.66</b>
<b>COSTS AND RETURNS SUMMARY</b>		
Total Beef Returns	499	423.71
Feed Costs	289	336.81
Non-feed Costs	340	369.56
<b>Net Returns (over all costs)</b>	<b>-130</b>	<b>-282.66</b>
<b>COSTS SUMMARY</b>		
Feed Costs	289	336.81
Non-Feed Cash Costs	141	141.27
Non-Feed Non-Cash Costs	199	228.29
<b>Total Cost of production</b>	<b>629</b>	<b>706.37</b>

**Table 12. Calves Backgrounded \$/CWT**

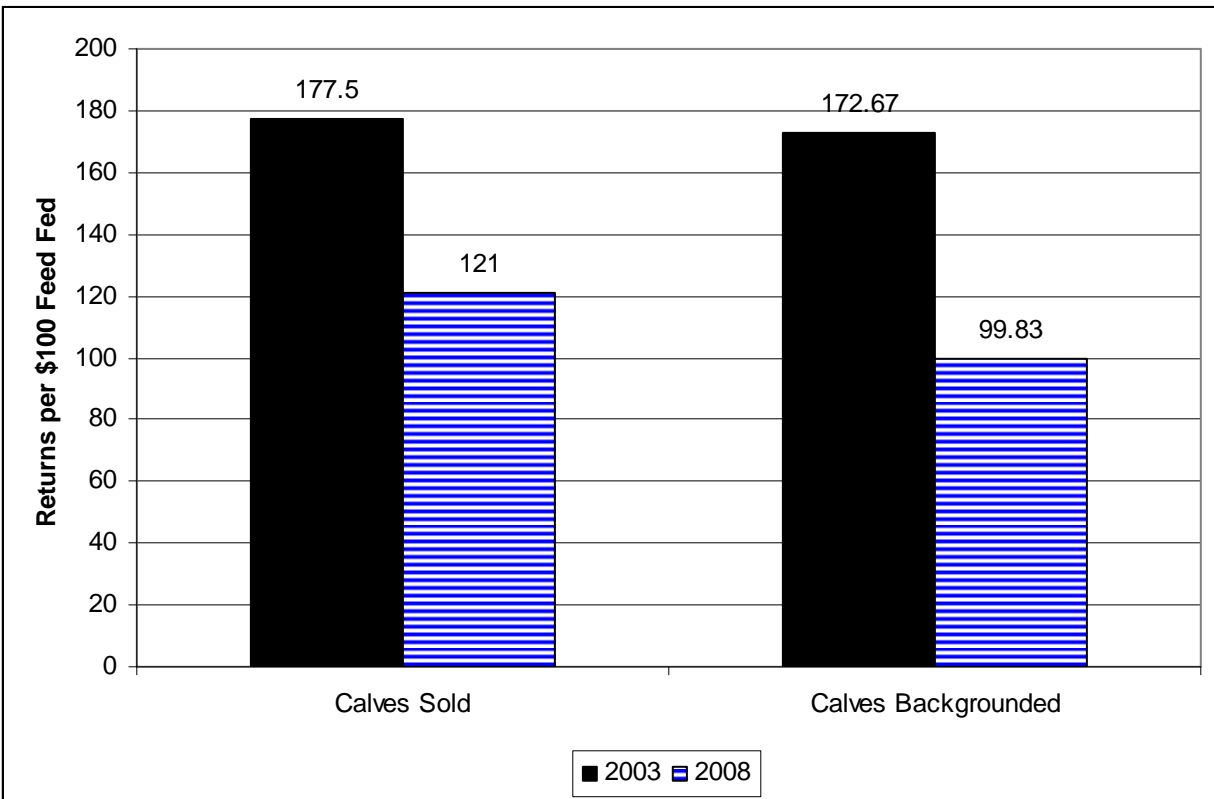
	<b>2003</b>	<b>2008</b>
<b>NUMBER OF HERDS</b>	<b>45</b>	<b>10</b>
<b>TOTAL BEEF RETURNS</b>	<b>75.7</b>	<b>74.00</b>
<b>FEED COSTS</b>		
Corn		4.25
Other Grain		1.10
Mineral		12.12
Hay		32.27
Corn Silage		7.13
Other Silage		0.66
Misc. Roughage		2.88
Pasture		13.71
<b>Total Feed Costs</b>	<b>43.84</b>	<b>74.12</b>
<b>NON-FEED CASH COSTS</b>		
Veterinary & Livestock Supplies	4.35	5.61
Fuel & Oil	1.99	7.03
Machinery Repairs	3.8	3.16
Bldg/ Fence Repairs	3.49	1.81
Machinery Hire	0.4	0.04
Freight		0.25
Utilities	0.67	3.03
Light Vehicle-Farm Share	0.21	0.32
Paid Labor	2.58	5.44
Insurance, Property Tax, & Misc	2.1	2.91
Cash Interest	1.82	1.49
<b>Total Non-Feed Cash Costs</b>	<b>21.41</b>	<b>31.09</b>
<b>NON-FEED NON-CASH COSTS</b>		
Unpaid Labor	13.8	16.67
Machinery Depreciation	2.33	3.47
Bldg/Fence Depreciation	0.71	1.14
Non-Cash Interest	13.43	26.55
Breeding Livestock Economic Depreciation		1.91
<b>Total Non-Feed Non-Cash Costs</b>	<b>30.27</b>	<b>49.74</b>
<b>Total Costs of Production</b>	<b>95.52</b>	<b>154.95</b>
<b>Net Returns (over all costs)</b>	<b>-19.82</b>	<b>-80.96</b>
<b>COSTS AND RETURNS SUMMARY</b>		
Total Beef Returns	75.7	74.00
Feed Costs	43.84	74.12
Non-Feed Costs	51.68	80.83
<b>Net Returns (over all costs)</b>	<b>-19.82</b>	<b>-80.96</b>
<b>COSTS SUMMARY</b>		
Feed Costs	43.84	74.12
Non-Feed Cash Costs	21.42	31.09
Non-Feed Non-Cash Costs	30.27	49.74
<b>Total Cost of Production</b>	<b>95.52</b>	<b>154.95</b>

**APPENDIX**

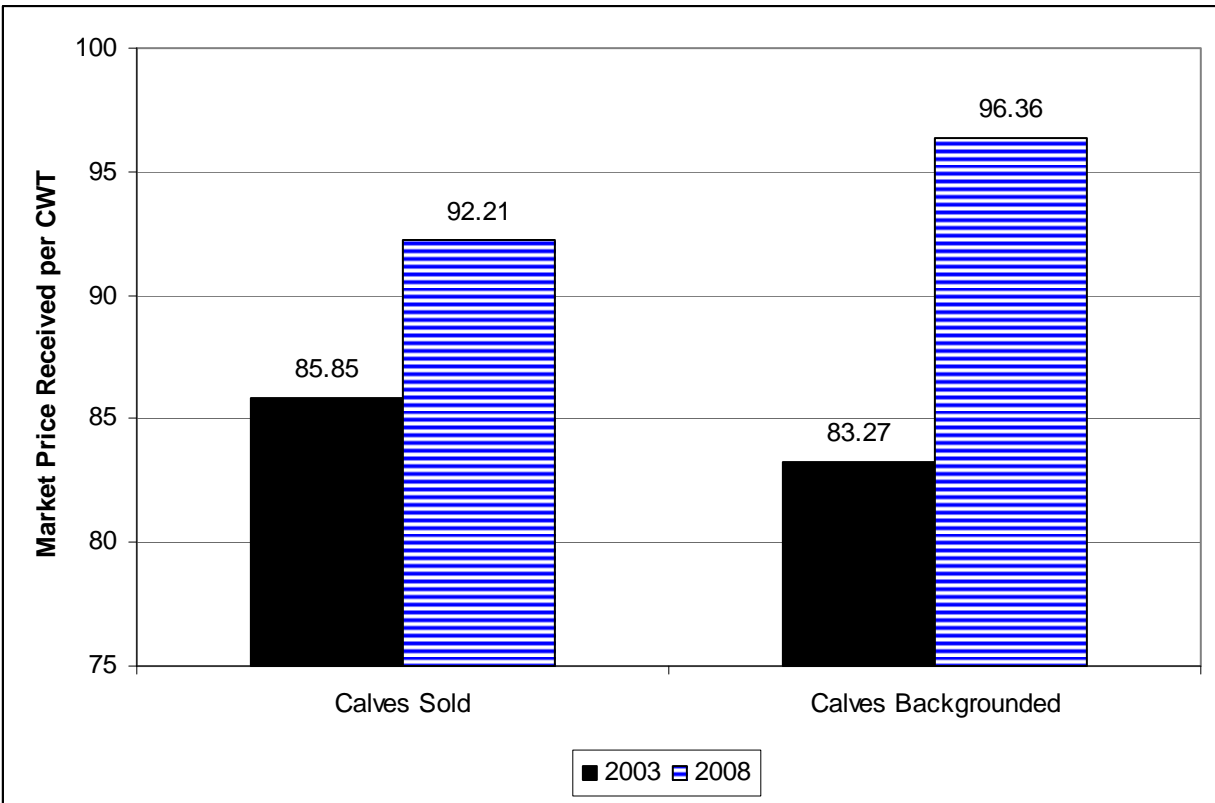
**Figure 5. Pounds of Beef per Cow**



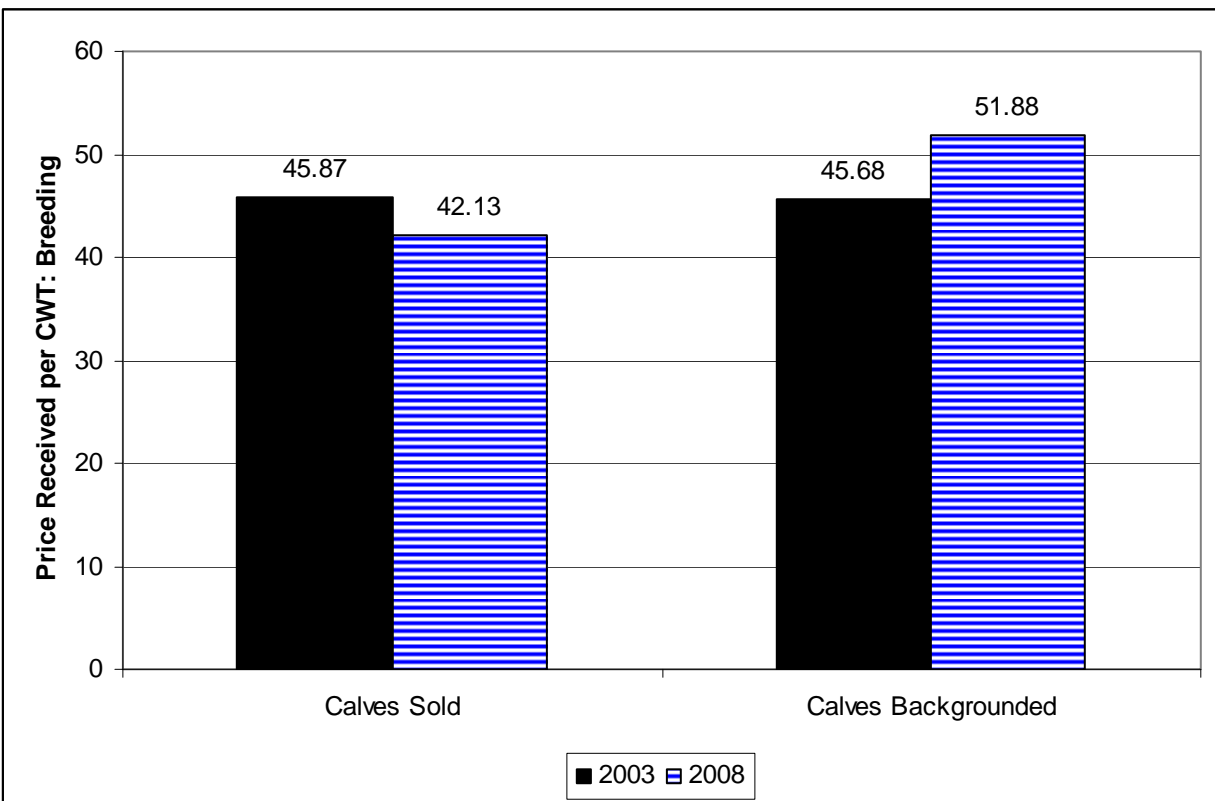
**Figure 6. Returns per \$100 Feed Fed**



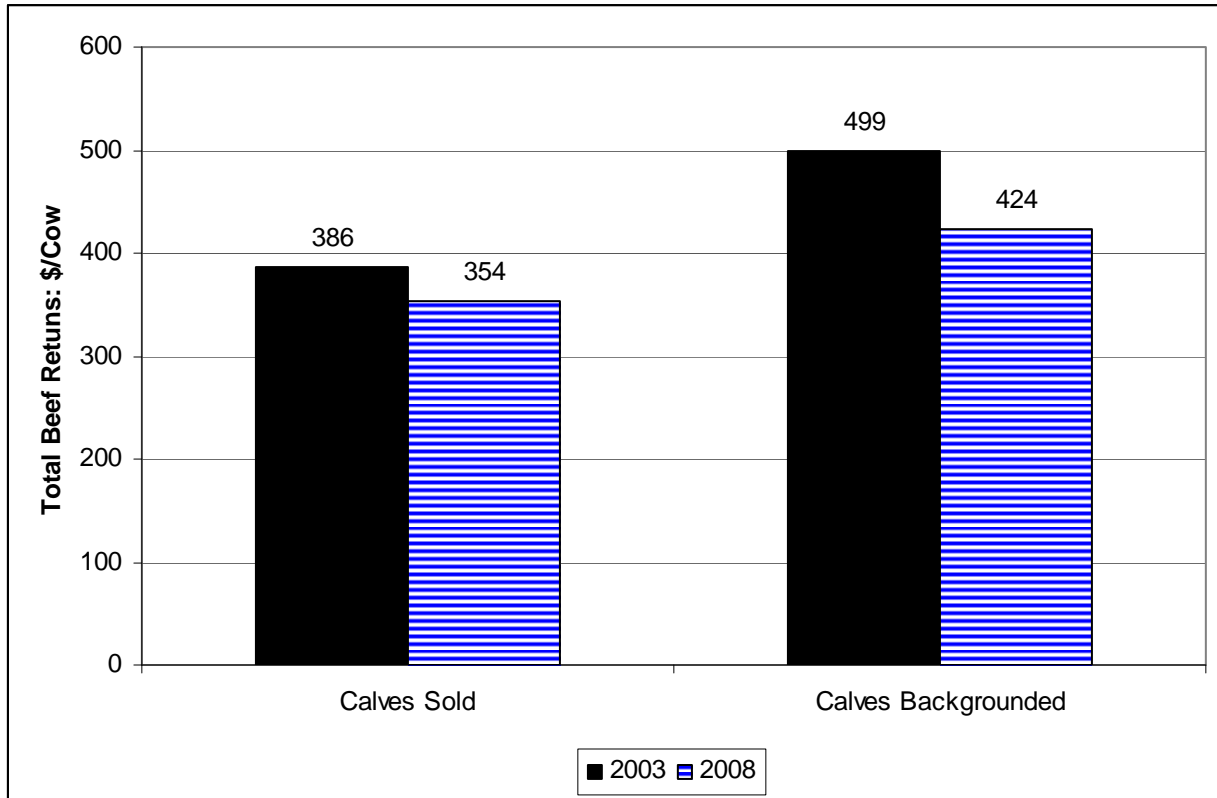
**Figure 7. Price Received per CWT: Market**



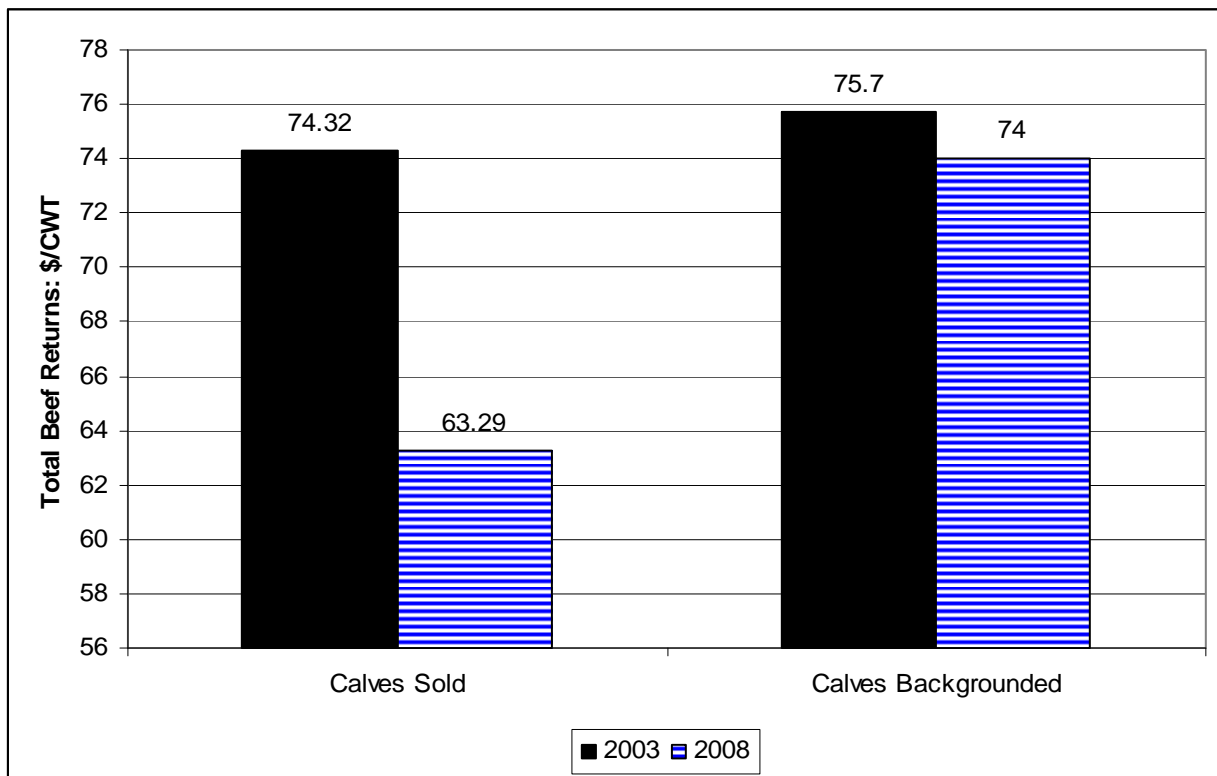
**Figure 8. Price Received per CWT: Breeding**



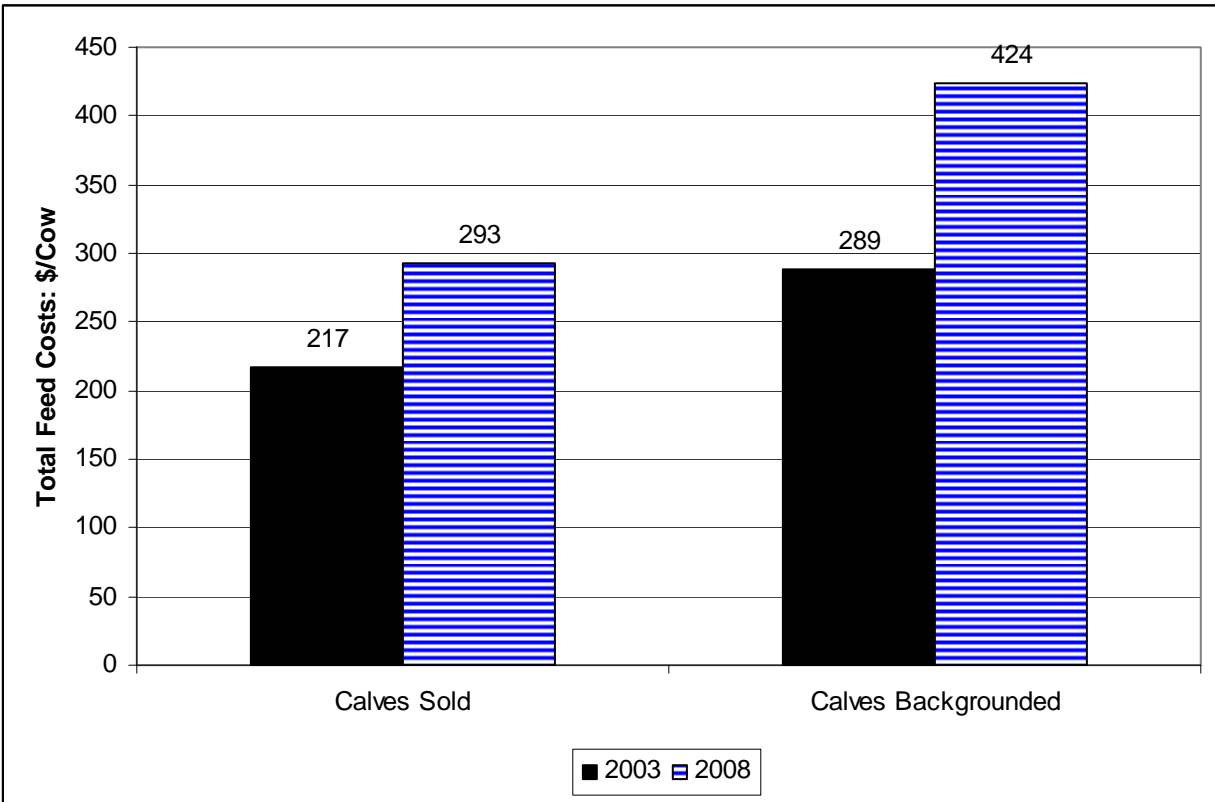
**Figure 9. Total Beef Returns \$/Cow**



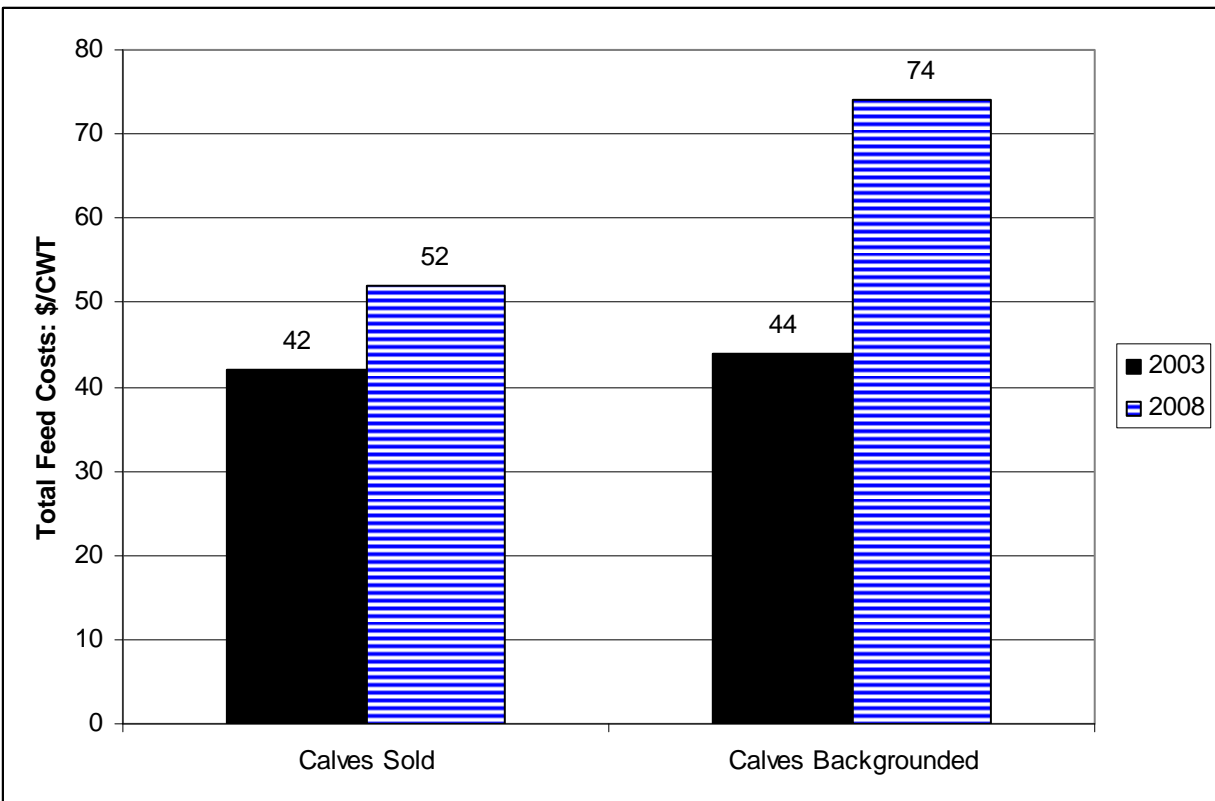
**Figure 10. Total Beef Returns \$/CWT**



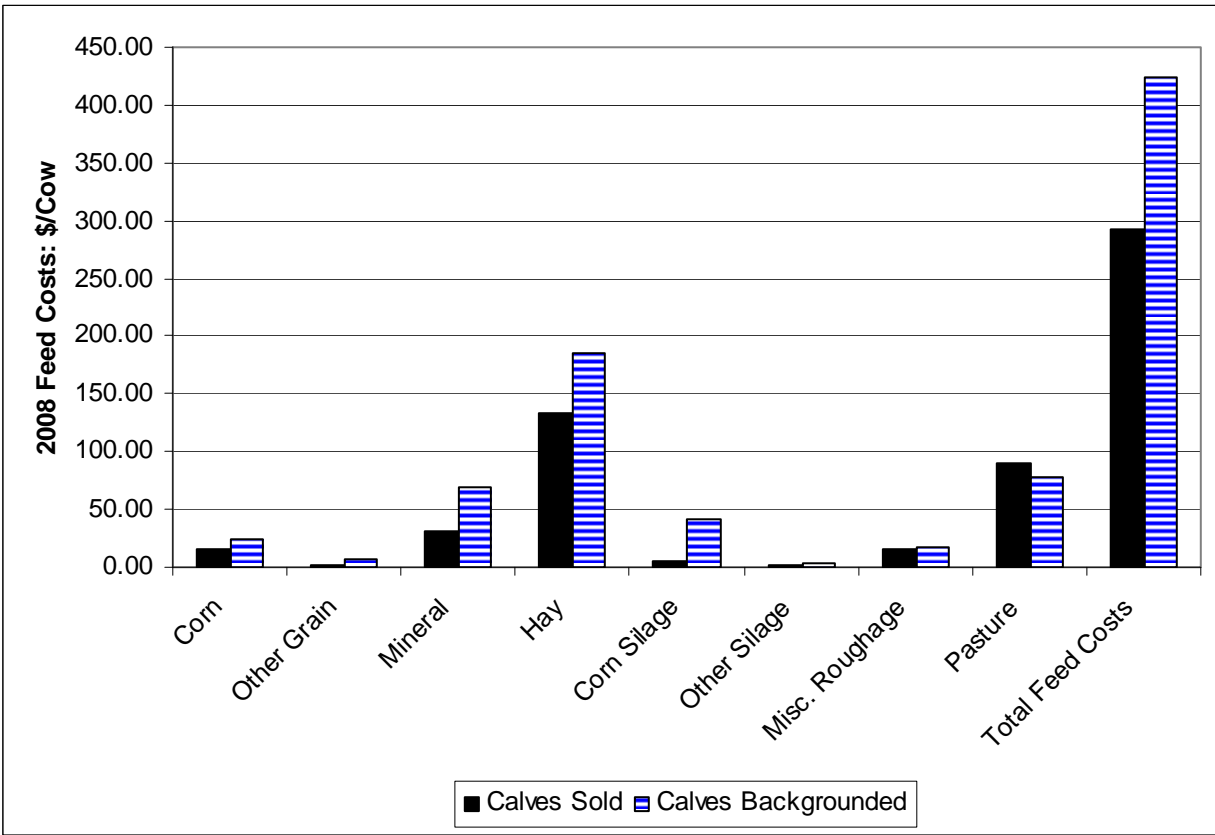
**Figure 11. Total Feed Costs \$/Cow**



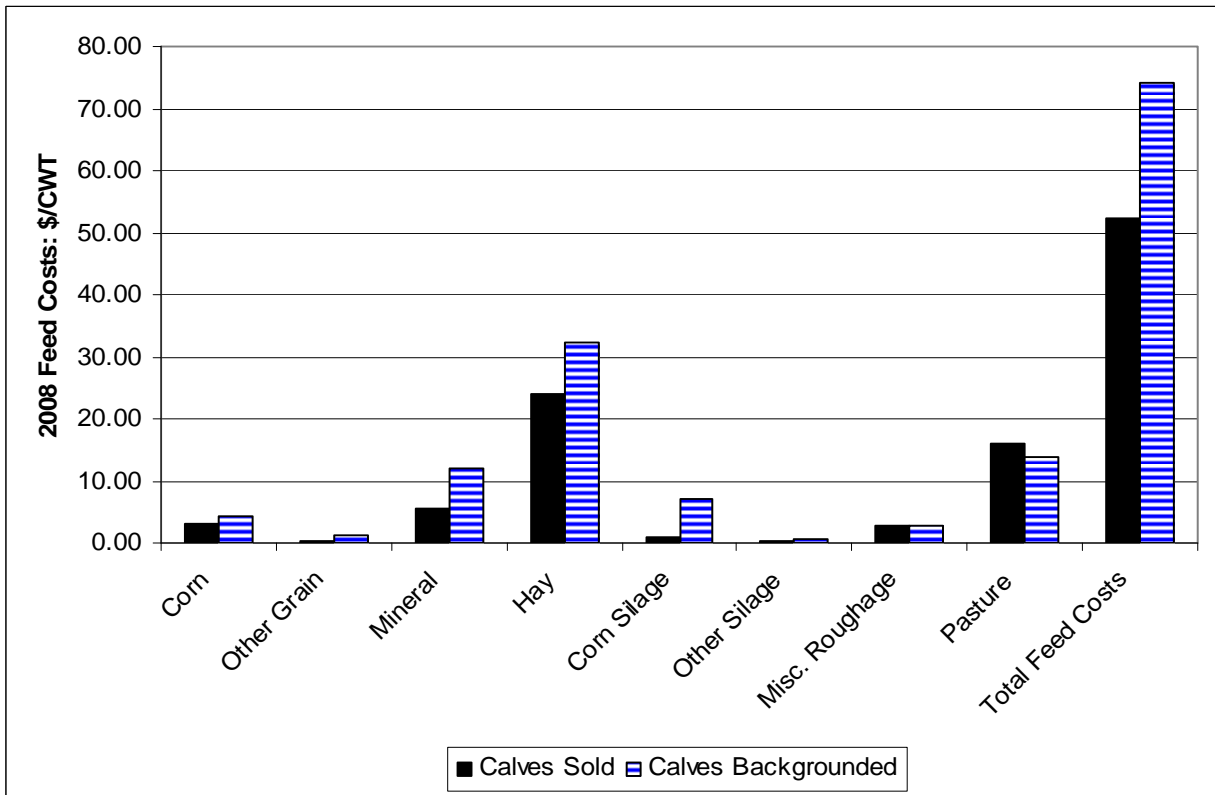
**Figure 12. Total Feed Costs \$/CWT**



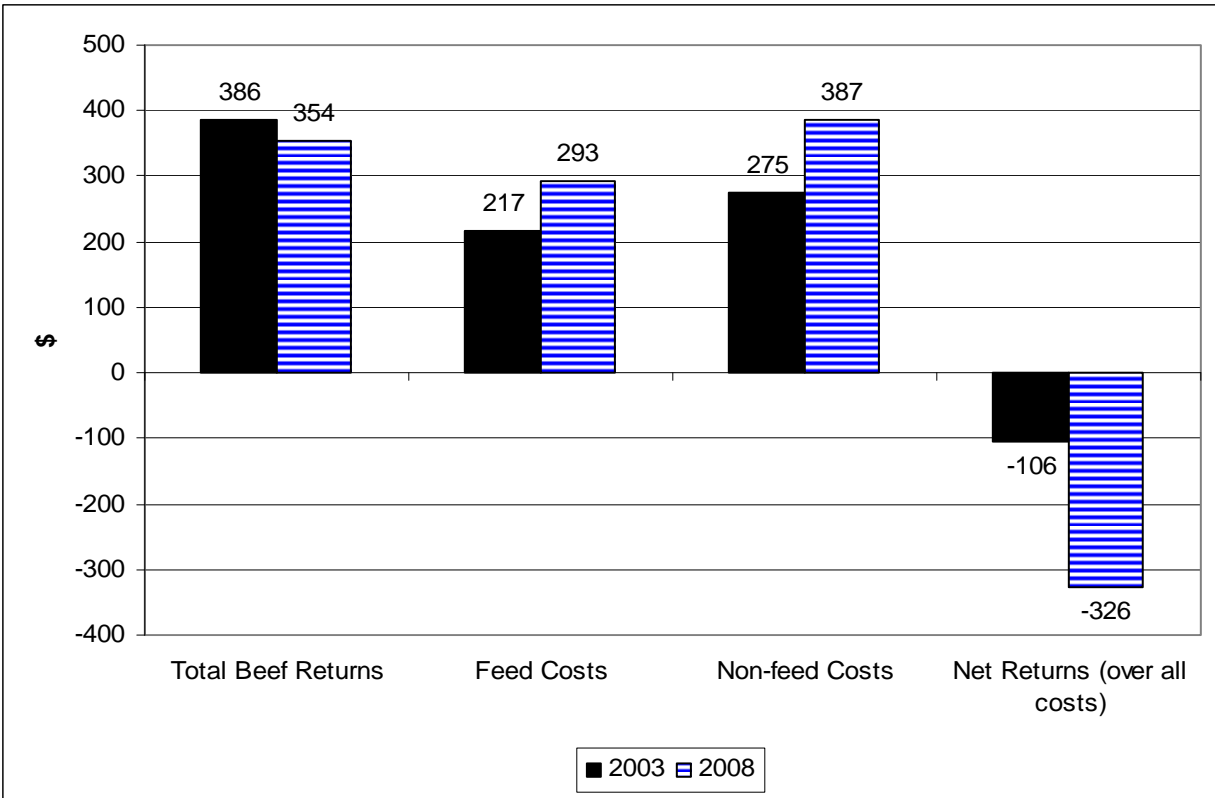
**Figure 13. 2008 Feed Costs \$/Cow**



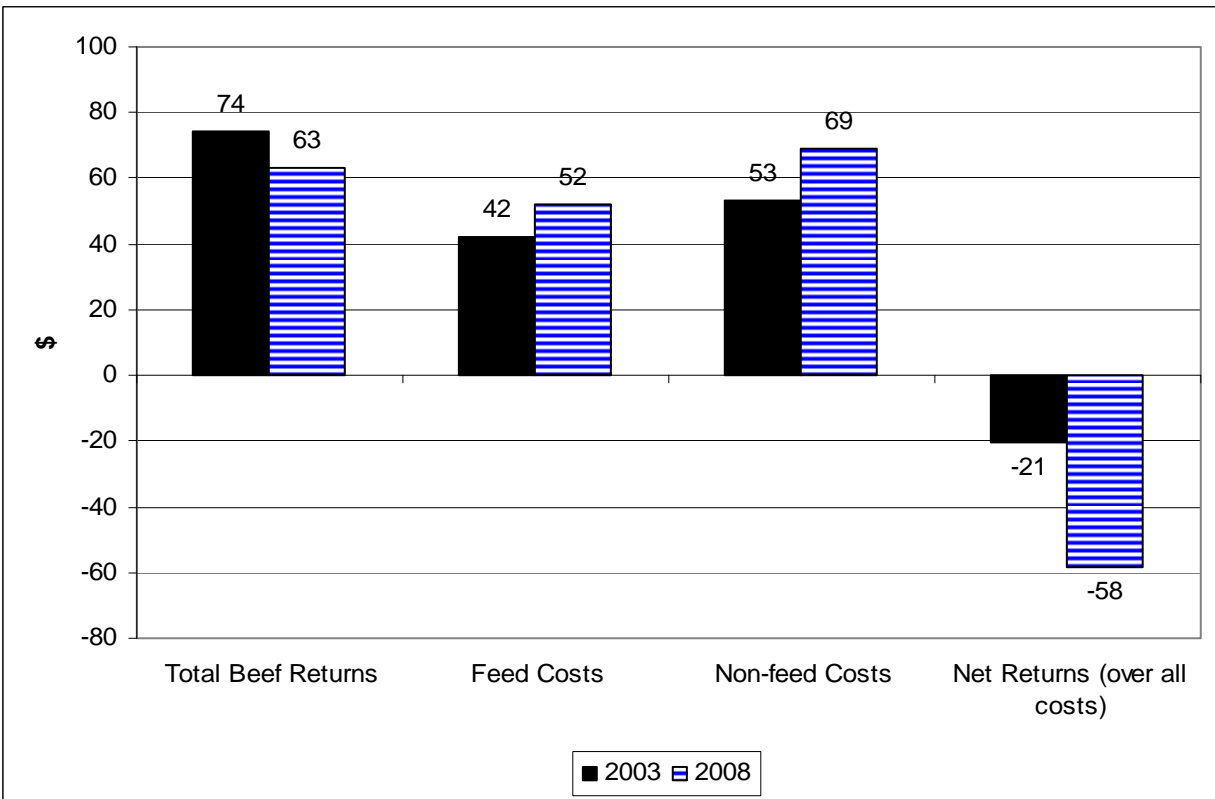
**Figure 14. 2008 Feed Costs \$/CWT**



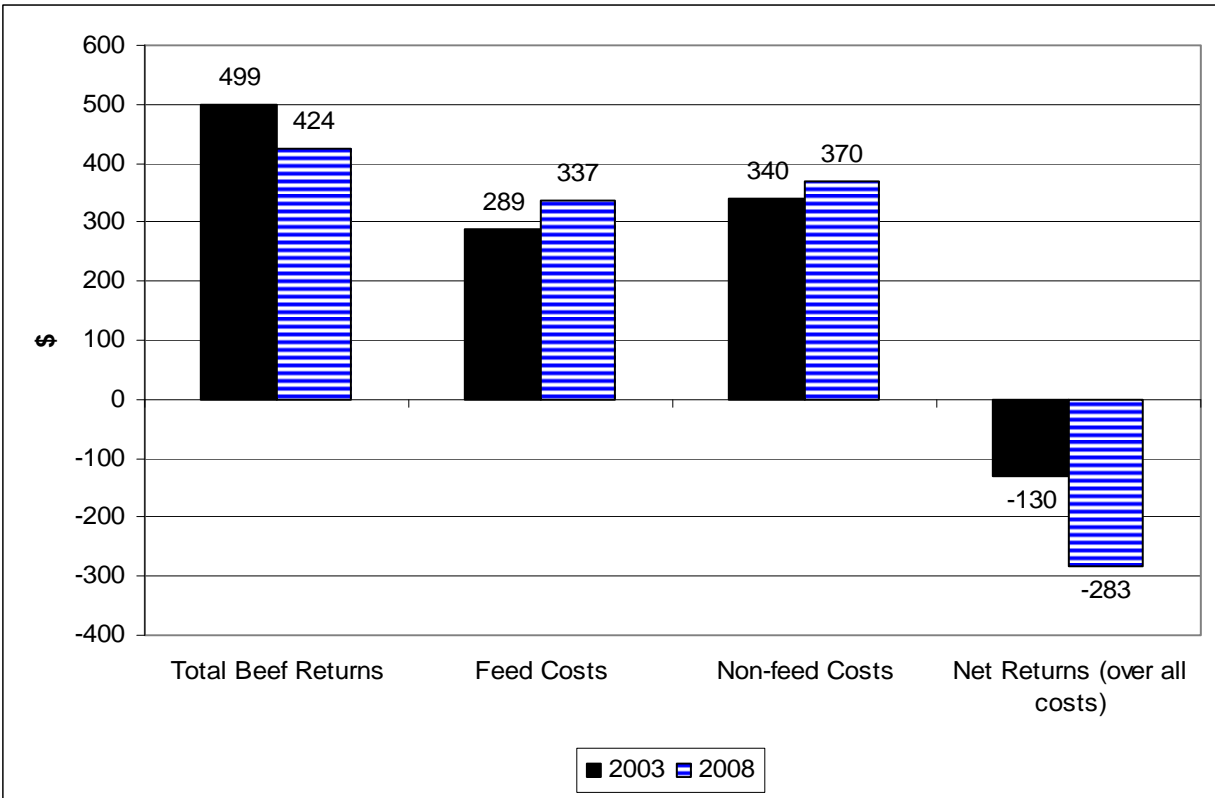
**Figure 15. Cost and Return Summary: Beef Calves Sold \$/Cow**



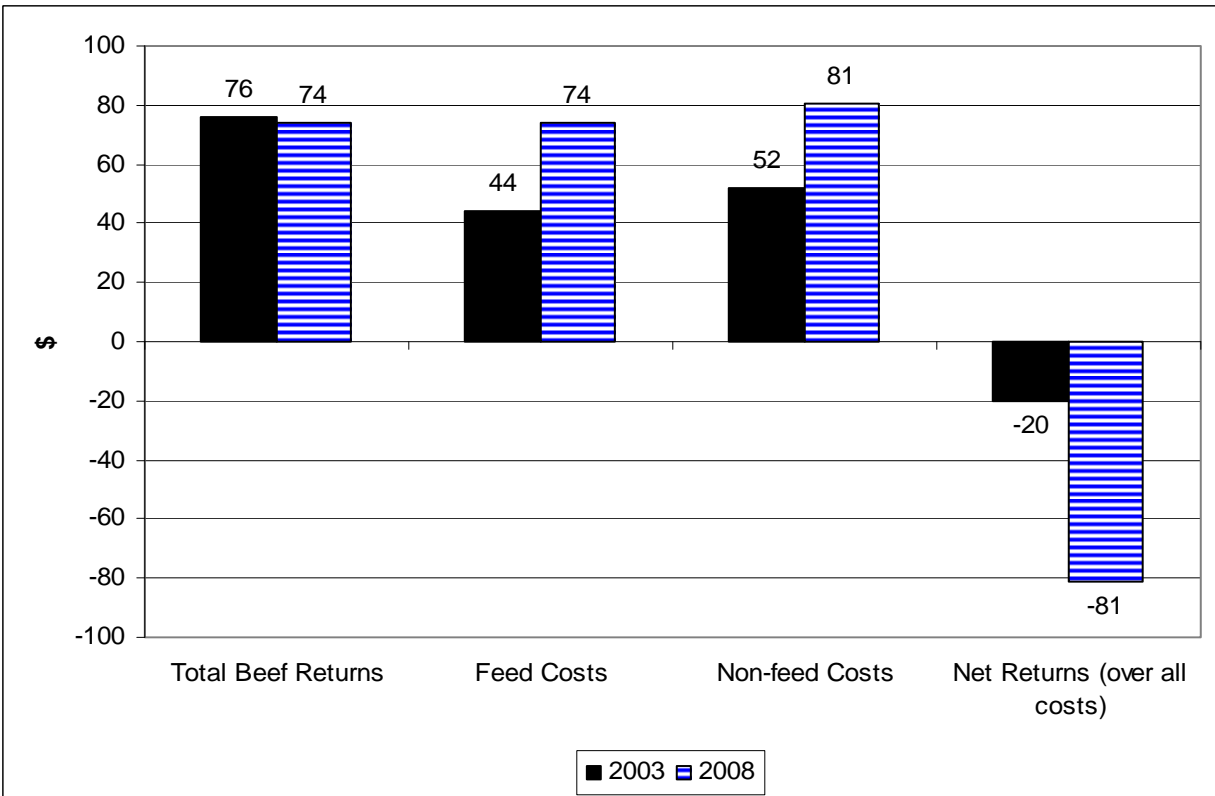
**Figure 16. Cost and Return Summary: Beef Calves Sold \$/CWT**



**Figure 17. Cost and Return Summary: Beef Calves Backgrounded \$/Cow**



**Figure 18. Cost and Return Summary: Beef Calves Backgrounded \$/CWT**



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