

2001 Hog and Cattle Enterprise Summaries

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 that are available to researchers and educators. Every attempt has been made to select a set of farms for these research studies, which are “typical” for farrow-to-finish hog operations, as well as calves sold and backgrounding cattle operations. These farms have complete financial information available for analysis. The data is verified by the farm management specialists before being included in the analysis. It should be noted that farms in this study are representative of commercial operations producing major commodities and livestock but not representative of all farms in Kentucky.

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KENTUCKY FARM BUSINESS MANAGEMENT PROGRAM

2001 HOG AND CATTLE ENTERPRISE SUMMARY

Craig Gibson, Suzy Martin, and Rick Costin

Introduction

Hog producers in 2001 saw positive net returns while cattle producers (both backgrounding and calves sold operations) saw negative net returns. Although the net returns for farrow-to-finish operations were positive, they were not as high as in 2000. In fact, net returns over all costs for farrow-to-finish operations on a per litter and per CWT basis were down 67.10% and 65.35%, respectively. The calves sold and backgrounding operations also saw a decrease from 2000 to 2001. The calves sold decreased \$44.00 per cow and \$7.48 per CWT. The backgrounding decreased \$36.00 per cow and \$0.65 per CWT.

Description of Hog and Cattle Enterprises

This report summarizes 2001 hog enterprise data from 13 farms that participate in the Kentucky Farm Business Management Program¹. Data from farrow-to-finish hog operations have been averaged and grouped on a statewide basis as well as by area (Western and Central Kentucky).

Two types of cow/calf enterprises are represented in this summary: those in which calves are sold at weaning and those in which calves are retained for at least 45 days after weaning (backgrounding). There were 37 farms included in the calves sold analysis and 47 farms included in the backgrounding data. As with the hog data, these farms are participants in the Kentucky Farm Business Management Program.

Methodology and Definitions

Production and financial data were calculated as a component of the complete farm business records of Kentucky Farm Business Management (KFBM) program members. From these data, "size-type" averages were determined for hog and beef farms. Hog farms were defined as farms on which the value of feed fed was more than 40 percent of the crop returns and the hog enterprise utilized more than one-half of the value of feed fed. Beef farms were defined as farms on which the value of feed fed was more than 40 percent of the crop returns and the beef enterprise utilized more than one-half of the value of feed fed. Three size-type standards were determined for hog farms and three for beef farms based on geographic regions (i.e., Central Kentucky, Western Kentucky, and state-wide). Non-feed and resource costs were then allocated to each respective livestock enterprise based upon 2000 and 2001 cost data. To refine the allocations, each cost was adjusted proportionately across all livestock activities and any cropping activities.

¹ The Kentucky Farm Business Management Program is a cooperative effort between the Department of Agricultural Economics at the University of Kentucky College of Agriculture and incorporated Farm Analysis Groups (made up of and run by farmers). These farmers are located in 75 counties in Central and Western Kentucky. Ten Extension Farm Analysis Specialists work with these farmers on a regularly scheduled basis to ensure accurate and complete record keeping. At year's end, they provide each farmer with a complete summary of the farm business.

In providing data that are not influenced by source of labor (i.e., hired vs. unpaid) and level of indebtedness (debt interest payments), data were standardized. This was achieved through including imputed charges on unpaid labor and capital investments. Performance was measured through the calculation of residual returns to management or management returns. The standardization of data between farms with varying quantities of unpaid labor and equity contributions provide an effective measure for comparing performance. Thus, the importance of reviewing the data based upon some unit of production (i.e., per hundred weight, per litter, per cow, etc.).

Upon determination of per unit non-feed and resource costs, livestock enterprise production averages were used to complete the respective hog and beef analyses. Production efficiency averages for various types of livestock enterprise are determined each year from KFBM member data. The averages include total returns, feed costs, and other production variables (i.e., feed efficiency, death loss, etc.). By merging the data sets together, a complete livestock enterprise summary is achieved. However, due to data limitations, there is no reporting of high return and low return farms based on management returns per acre.

The following definitions used within the farm analysis program are important to the proper interpretation of the material presented:

Total Returns - - This is the total return attributable to the livestock enterprise for the year. It includes the value of all animals sold (including market and capital), the value of livestock slaughtered for family consumption, and an inventory adjustment (positive or negative) for the difference in the value of livestock on the farm at the beginning and ending of the year.

Feed Costs - - This is the value of purchased and homegrown feed fed. The purchased feed cost is determined from a producer's actual cost and is adjusted for inventory amounts at the beginning and ending of the year. The cost of homegrown feed is determined by charging a twelve-month average "on-farm" per unit market value (what producers would receive if the feed was sold and marketing costs deducted) on the amounts fed.

Non-Feed Cash Costs - - This is the actual cash expenditure, with accrual adjustments, for selected operating expenses of farm operators included in the 2001 sample. It does not include cash expenditures for purchased concentrates or grains fed to livestock.

Non-Feed Non Cash Costs - - Unpaid labor, depreciation and interest on equity capital are considered non-cash costs. Homegrown feed is a non-cash cost, but is included in feed cost in these analyses.

Total Cost of Production - - This is the total charge (cash and non-cash) for all factors of production, except management, use by the livestock enterprise during the year.

Unpaid Labor - - Is the imputed charge for any operator labor contribution toward livestock production. The 2001 imputed rate charged for unpaid labor is \$27,000 per 12 month equivalent or \$2,250 per month.

Machinery and Building Depreciation - - Taken from depreciation schedules designed to reflect economic depreciation as maintained by the KFBM Program, equipment is generally depreciated over a ten-year period. Most farm buildings, except for single purpose structures, are depreciated over a twenty-five-year period.

Non-Cash Interest Charge - - Represents the imputed equity interest charge for the average annual capital investment for machinery, buildings, land and an imputed interest charge on cash operating expenses. The 2001 imputed rate is 8 percent.

Net Returns or Management Returns - - Is the net return remaining to reward management after charges are made for all other factors of production. It is calculated by deducting the total of all production costs from total revenue.

Returns per \$100 Feed Fed - - A gauge to examine the effectiveness of feed usage. The returns from feeding \$100 of feed is calculated by dividing total returns by total feed costs and multiplying 100.

It is important to emphasize that standardized producer data is used in this study. Where labor and capital resources vary among producers, these variations are muted through imputed cost determinations. Table 1 reflects historical rates used in the past and the current study.

Table 1. Yearly Rates for Labor, Interest and Feed Corn.

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Fed Corn Produced on Farm (\$/Bu)	2.49	2.40	2.51	2.75	3.75	2.78	2.39	2.11	2.09	2.08
Unpaid Labor Rate (\$/Year)	16,200	17,400	18,000	19,200	19,800	21,600	22,800	24,000	25,200	27,000
Interest Rate: Non Land	10%	8.5%	9%	9.5%	9%	9%	9%	8.5%	9%	8%
Interest Rate: Land	5%	5%	5%	5%	5%	5%	5%	5%	4.5%	4.5%

SUMMARY OF HOG DATA

Gross Returns

Gross returns for 2001 Kentucky farrow-to-finish operations were down 7.4% on a per CWT basis from the previous year, \$43.69 in 2000 and \$40.46 in 2001. On a per litter basis the total returns were down to \$833 versus \$912 the year before.

Feed Costs

Feed costs are generally the largest portion of expenses for pork producers and will usually be over half of the total expenses. That generalization was no different in 2001. In fact, total costs per hundredweight were \$38.12. Total feed costs were \$20.42, which is 53% of total costs. Furthermore, feed costs did not change significantly from 2000 to 2001.

Non-Feed Cash Costs

Non-feed cash costs increased roughly 6% on a per litter and per CWT basis. The largest increase occurred with livestock supplies, veterinary bills, building repair, utilities and paid labor. The notable decreases were with fuel, insurance and cash interest costs. The non-feed cash costs were higher in Central Kentucky than in Western Kentucky (\$8.47/CWT versus \$7.63/CWT). The largest difference being the paid labor in Central Kentucky of \$3.04/CWT compared to \$1.98/CWT in Western Kentucky.

Non-Feed Non-Cash Costs

Non-feed non-cash costs increased 5.97% per litter and 8.72% per CWT. Unpaid labor and non-cash interest increased while the building and machinery depreciation decreased. The non-feed non-cash costs were slightly higher for Central Kentucky compared to Western Kentucky.

Net Returns (over all costs)

The net returns over all costs decreased from 2000 to 2001. The returns decreased and the total cost of production increased resulting in a 67.1% decrease per litter and 65.35% decrease on a CWT basis for net returns over all costs. The net returns over all costs were actually higher for Central Kentucky (\$6.63/CWT) than for Western Kentucky (\$4.71/CWT).

Other Production Variables

Nearly all of the production variables declined from 2000 to 2001. The number of sows and number of litters decreased 9.55% and 16.92% respectively. The pigs weaned per sow per year decreased and the pigs weaned and farrowed per litter also decreased, reducing the total pounds of pork produced by 17.9%. Additionally, the death loss increased both as a percent of pigs weaned (up 18.19%) and as a percent of pounds produced (up 16.41%). The feed variables (grain fed per cwt. pork, protein fed per cwt. pork, and total concentrates fed) remained fairly constant.

Summary

In summary, the average farrow-to-finish operations in the KFBM program showed positive net returns for 2001 although not as high as in 2000. This was a result of lower prices received, lower inventory values and increased non-feed cash and non-feed non-cash costs. Furthermore, it is interesting to note that Central Kentucky had a higher net return over all costs compared to Western Kentucky even though the costs of production (non-feed cash and non-feed non-cash costs) were higher. In other words, the returns above feed costs for Central Kentucky (\$23.16/CWT) were better than for Western Kentucky (\$19.67).

SUMMARY OF CATTLE DATA

Calves Sold

Once again beef operations in which calves were sold at weaning, on the average did not cover all costs. KFBM data from prior years indicate that, on average, beef producers selling calves do not cover total cost of production. The high and low-third performance groups are not available for 2001 data. Past data would assure us that a sizeable dollar difference occurs between these two groups in cost of production and profitability.

The economic environment for cow/calf producers maintained the up trend that has been realized since 1996. Calf prices have increased in each of the past six years from a low of \$49.34 in 1996 to a high of \$87.07 in 2001.

On average, producers covered all their out-of-pocket expenses (i.e., purchased feed and cash costs). These cash costs were the same for 2000 and 2001 totaling \$33.48. Subtracting \$33.48 cash costs from beef returns of \$71.74 for 2001 leaves the average producer \$38.26 to pay for home raised feed and all other non-feed non-cash costs. This seems like a sufficient amount to cover the remaining costs, but after subtracting \$31.60 for home-grown feed, only \$6.66 per cwt. is left for unpaid labor, depreciation, and non-cash interest.

Total cost of production per cow was only \$5.00 higher in 2001 than in 2000, but the net returns showed a \$44.00 difference. The \$39.00 difference is due to the fact that in 2000, average beef returns were \$39.00 higher than in 2001.

The reader needs to keep in mind the definition of beef returns. Not only is the value of animals sold included, but cattle inventory dollars and value of livestock slaughtered are figured in the calculation of total returns.

Calves Backgrounded

Average net returns to backgrounding for 2001 were negative. As with producers selling calves off the cows, those retaining the calves, on the average, did not cover all costs. In 2001, net returns per cwt. came up \$23.62 short of covering all costs. This was lower than the negative \$22.97 per cwt. realized in 2000.

In spite of negative returns, these operations did generate sufficient revenue to maintain a positive cash flow. All cash costs for 2000 totaled \$31.58 per cwt., while 2001 cash costs increased a few dollars to \$34.28 per cwt. By adding home-grown feed costs to all cash costs, both years had dollars left to apply toward the other non-cash costs. By not covering all costs, particularly in "good" price years as 2000 and 2001, concern does raise over the long run viability of the beef operations in the KFBM data.

Summary

The beef enterprise involves a complex production process with a number of factors affecting costs and returns. In the short run, producers must cover cash costs and the value of home-grown feed or they would be better off to sell the cattle and feed. The value a farmer places on the home-grown feed and other non-cash costs will have a great bearing on whether he feels that his beef enterprise is making a profit. Farms that consistently fail to cover all or most non-cash costs will have difficulty surviving in the long run.

**Table 2. Production Summary
Kentucky Farrow-to-Finish 2001 Enterprise Summary**

	2000 Average	2001 Average	% Change
Summary			
Total Swine Returns	409,712	315,462	-23.00%
Total Feed Costs	188,162	159,135	-15.43%
Returns Above Feed Cost	221,550	156,328	-29.44%
Total Non feed Costs	147,664	138,777	-6.02%
Net Returns (over all costs)	73,886	17,551	-76.25%
Other Economic Variables			
Returns per \$100 Feed Fed	216.75	198.24	-8.54%
Feed Costs per cwt Pork	20.56	20.41	-0.73%
Capital Investment per Sow			
Livestock	553	598	8.06%
Non Livestock	906	797	-11.99%
Total	1459	1395	-4.39%
Other Production Variables			
Number of Sows	230.4	208.4	-9.55%
Number of Litters	456.1	378.9	-16.92%
Litters per Sow	1.98	1.82	-8.15%
Pigs weaned per Sow/Year	17.73	15.59	-12.07%
Pigs weaned per Litter	8.86	8.62	-2.71%
Pigs farrowed per Litter	10.46	10.26	-1.91%
Total Pork Produced (LB)	949,732	779,689	-17.90%
Pounds of Pork per Sow	4,160	3,741	-10.06%
Pounds of Pork per Litter	2,086	2,058	-1.36%
Death Loss: % of Pigs Weaned	7.07	8.36	18.19%
Death Loss: % of Lbs Produced	2.78	3.24	16.41%
Grain per cwt. Pork (lbs)	276	271	-1.81%
Protein per cwt. Pork	76	77	1.32%
Total Concentrates	352	348	-1.14%
Labor Summary			
Cost per Sow	228	244	6.89%
Cost per Litter	116	134	15.55%

**Table 3. Costs and Returns (per Litter)
Kentucky Farrow-to-Finish 2001 Enterprise Summary**

	2000	2001	% Change
	Average	Average	
Number of Litters	456.1	378.9	-16.92%
Total Swine Returns	912	833	-8.66%
Purchased Concentrates	213	213	0.00%
Grains	210	207	-1.43%
Total Feed Costs	423	420	-0.78%
Returns above Feed Costs	489	413	-15.48%
Non Feed Costs			
Livestock Supplies	14	16	11.86%
Veterinary	22	24	11.33%
Fuel & Oil	9	8	-12.87%
Machinery Repair	14	14	0.00%
Bldg/Fence Repair	25	30	20.55%
Machinery Hire	4	5	15.00%
Utilities	19	21	11.49%
Paid Labor	47	57	21.61%
Insurance	6	5	-22.46%
R.E. Tax	1	1	0.00%
Miscellaneous	7	7	0.00%
Cash Interest	18	11	-39.86%
Total Non Feed Cash Costs	187	199	6.32%
Non Feed Non Cash Costs			
Unpaid Labor	69	77	11.41%
Machinery Depreciation	16	15	-3.65%
Bldg/Fence Depreciation	26	24	-6.79%
Non Cash Interest	47	51	8.31%
Total Non Feed Non Cash Costs	158	167	5.97%
Total Cost of Production	769	786	2.21%
Net Returns (over all costs)	143	47	-67.10%
Enterprise Summary: \$/Litter			
Total Swine Returns	912	833	-8.66%
Value Feed Fed	423	420	-0.78%
Non Feed Cash Costs	187	199	6.32%
Non Feed Non Cash Costs	158	167	5.97%
Total Cost of Production	769	786	2.21%
Net Returns (over all costs)	143	47	-67.10%

**Table 4. Costs and Returns (per CWT)
Kentucky Farrow-to-Finish 2001 Enterprise Summary**

	2000	2001	% Change
	Average	Average	
Pounds Produced	949,732	779,689	-17.90%
Total Swine Returns	43.69	40.46	-7.40%
Purchased Concentrates	6.40	10.34	61.51%
Grains	14.27	10.08	-29.38%
Total Feed Costs	20.67	20.42	-1.23%
Returns above Feed Costs	23.02	20.04	-12.93%
Non Feed Costs			
Livestock Supplies	0.64	0.76	19.57%
Veterinary	1.00	1.19	18.49%
Fuel & Oil	0.45	0.38	-15.03%
Machinery Repair	0.70	0.70	0.00%
Bldg/Fence Repair	1.21	1.46	21.50%
Machinery Hire	0.20	0.22	9.20%
Utilities	0.92	1.03	11.76%
Paid Labor	2.36	2.78	17.90%
Insurance	0.29	0.23	-21.96%
R.E. Tax	0.06	0.06	0.00%
Miscellaneous	0.36	0.32	-10.35%
Cash Interest	0.88	0.53	-39.99%
Total Non Feed Cash Costs	9.07	9.66	6.58%
Non Feed Non Cash Costs			
Unpaid Labor	3.26	3.74	14.73%
Machinery Depreciation	0.76	0.75	-1.03%
Bldg/Fence Depreciation	1.21	1.18	-2.96%
Non Cash Interest	2.26	2.47	9.61%
Total Non Feed Non Cash Costs	7.48	8.14	8.72%
Total Cost of Production	37.22	38.22	2.67%
Net Returns (over all costs)	6.47	2.24	-65.35%
Enterprise Summary: \$/Cwt.			
Total Swine Returns	43.69	40.46	-7.40%
Value Feed Fed	20.67	20.42	-1.23%
Non Feed Cash Costs	9.07	9.66	6.58%
Non Feed Non Cash Costs	7.48	8.14	8.72%
Total Cost of Production	37.22	38.22	2.67%
Net Returns (over all costs)	6.47	2.24	-65.35%

**Table 5. Western and Central Kentucky
Hog Enterprise Summary 2001 Averages (per CWT)**

	Western	Central
Number of Enterprises	5	6
Pounds Produced	943,037	722,567
Returns above Feed Costs	19.67	23.16
Non Feed Costs		
Livestock Supplies	0.26	0.29
Veterinary	0.41	0.45
Fuel & Oil	0.31	0.40
Machinery Repair	0.44	0.87
Bldg/Fence Repair	1.66	1.25
Machinery Hire	0.20	0.22
Utilities	1.17	0.88
Light Vehicle-Farm Share	0.00	0.00
Paid Labor	1.98	3.04
Insurance	0.17	0.29
R.E. Tax	0.07	0.05
Miscellaneous	0.35	0.29
Cash Interest	0.61	0.44
Total Non Feed Cash Costs	<hr/> 7.63	<hr/> 8.47
Non Feed Non Cash Costs		
Unpaid Labor	3.84	3.10
Machinery Depreciation	0.58	0.86
Bldg/Fence Depreciation	0.77	1.32
Non Cash Interest	2.14	2.77
Total Non Feed Non Cash Costs	<hr/> 7.33	<hr/> 8.06
Total Non feed Costs	14.96	16.52
Net Returns (over all costs)	4.71	6.63

**Table 6. Production Summary
Kentucky Calves Sold 2001 Enterprise Summary**

	2000 Average	2001 Average	% Change
Number of Enterprises	13	37	
Total Beef Returns	34,136	28,174	-17.47%
Total Feed Costs	15,634	14,931	-4.50%
Returns Above Feed Cost	18,502	13,243	-28.43%
Total Non feed Costs	24,578	22,050	-10.29%
Net Returns (over all costs)	-6,076	-8,807	-44.95%
Other Economic Variables			
Returns per \$100 Feed Fed	218	189	-13.58%
Price Rec'd per CWT.: Market	86.38	87.07	0.80%
Price Rec'd per CWT.: Breeding	40.47	51.40	27.01%
Capital Investment per Cow			
Livestock	786	775	-1.45%
Non Livestock	412	353	-14.35%
Total	1,198	1,127	-5.89%
Other Production Variables			
Number of Cows	81	74	-8.88%
Animal Units in Herd	108	104	-3.36%
Total Beef Produced (LB)	43,105	39,272	-8.89%
Pounds of Beef per Cow	532	532	0.00%
Death Loss: % of Lbs Produced	4.46%	6.22%	39.43%
Total Concentrates	78	72	-7.69%
Hay & Dry Roughage	724	839	15.88%
Corn Silage	254	359	41.34%
Other Silage	0	0	0.00%
Pasture Days per Animal Unit	201	222	10.45%
Hay Equivalents – Tons	5.8	6.3	8.62%
Labor Summary			
Months per Cow	0.05	0.05	0.00%
Hours per Cow	10.2	10.3	0.74%
Beef Production/Worker/Year	168,507	129,453	-23.18%

**Table 7. Costs and Returns (Per Cow)
Kentucky Calves Sold 2001 Enterprise Summary**

	2000	2001	% Change
	Average	Average	
Number of Enterprises	13	37	
Number of Cows	81	74	
Total Beef Returns	421	382	-9.26%
Feed Costs			
Purchased Concentrates	28	27	-3.57%
Purchased Hay and Other	9	8	-11.11%
Home Raised Feed	154	167	8.44%
Total Feed Costs	191	202	5.76%
Non-Feed Costs			
Veterinary & Livestock Supplies	20	30	48.21%
Fuel & Oil	14	12	-11.39%
Machinery Repair	18	17	-6.95%
Bldg/Fence Repair	15	17	14.91%
Machinery Hire	1	1	0.00%
Utilities	7	7	0.00%
Light Vehicle-Farm Share	2	2	0.00%
Paid Labor	26	26	0.00%
Insurance, Property Taxes, Misc.	13	12	-5.20%
Cash Interest	25	20	-20.97%
Total Non Feed Cash Costs	141	144	2.08%
Non-Feed Non-Cash Costs			
Unpaid Labor	59	48	-19.04%
Machinery Depreciation	16	17	4.26%
Building/Fence Depreciation	10	17	65.01%
Non-Cash Interest	79	74	-6.51%
Total Non Feed Non Cash Costs	164	155	-5.61%
Total Cost of Production	496	501	0.95%
Net Returns (over all costs)	-75	-119	-58.31%
Cost and Returns Summary: \$/Cow			
Total Returns	421	382	-9.26%
Feed Costs	191	202	5.76%
Non Feed Cash Costs	141	144	2.08%
Non Feed Non Cash Costs	164	155	-5.61%
Net Returns (over all costs)	-75	-119	-58.31%

**Table 8. Costs and Returns (Per CWT)
Kentucky Calves Sold 2001 Enterprise Summary**

	2000	2001	% Change
	Average	Average	
Number of Enterprises	13	37	
Pounds Produced	43,105	39,272	-8.89%
Total Beef Returns	80.29	71.74	-10.65%
Feed Costs			
Purchased Concentrates	5.12	5.02	-1.95%
Purchased Hay and Other	1.57	1.40	-11.11%
Home Raised Feed	29.65	31.60	6.59%
Total Feed Costs	36.34	38.02	4.62%
Non-Feed Costs			
Veterinary & Livestock Supplies	3.77	5.57	47.77%
Fuel & Oil	2.6	2.33	-10.33%
Machinery Repair	3.54	3.15	-11.08%
Bldg/Fence Repair	3.2	3.24	1.24%
Machinery Hire	0.11	0.12	8.19%
Utilities	1.24	1.32	6.50%
Light Vehicle-Farm Share	0.38	0.31	-18.11%
Paid Labor	4.8	4.98	3.76%
Insurance, Property Taxes, Misc.	2.5	2.32	-7.35%
Cash Interest	4.66	3.71	-20.32%
Total Non Feed Cash Costs	26.8	27.05	0.94%
Non-Feed Non-Cash Costs			
Unpaid Labor	11.47	8.98	-21.73%
Machinery Depreciation	3.07	3.14	2.13%
Building/Fence Depreciation	1.9	3.10	63.23%
Non-Cash Interest	15.66	13.88	-11.36%
Total Non Feed Non Cash Costs	32.1	29.10	-9.36%
Total Cost of Production	95.24	94.17	-1.13%
Net Returns (over all costs)	-14.95	-22.43	-50.01%
Cost and Returns Summary: \$/Cwt.			
Total Returns	80.29	71.74	-10.65%
Feed Costs	36.34	38.02	4.62%
Non Feed Cash Costs	26.80	27.05	0.94%
Non Feed Non Cash Costs	32.10	29.10	-9.36%
Net Returns (over all costs)	-14.95	-22.43	-50.01%

**Table 9. Cash Flow Analysis
Kentucky Calves Sold 2001 Enterprise Summary**

	Per Cwt.	Per Cow
Total Beef Returns		
Cash Sales:		
Calves (81.08%)	69.66	370.64
Culls (13.51%)	15.03	79.95
Change in Inventory & Death Loss	-12.95	-68.58
	<hr/> 71.74	<hr/> 382.00
 Cash Costs		
Purchased Concentrates	5.02	27.00
Purchased Hay and Other	1.40	8.00
Veterinary & Livestock Supplies	5.57	29.64
Fuel & Oil	2.33	12.40
Machinery Repair	3.15	16.75
Bldg/Fence Repair	3.24	17.24
Machinery Hire	0.12	0.63
Utilities	1.32	7.03
Light Vehicle-Farm Share	0.31	1.66
Paid Labor	4.98	26.50
Insurance, Property Taxes, Misc.	2.32	12.32
Cash Interest	3.71	19.76
	<hr/> 33.47	<hr/> 178.93
 Returns to Home Raised Feed, Land, Unpaid Labor, & Equity Capital	38.27	203.07
 Non Cash Costs		
Home Raised Feed	31.60	167.00
Unpaid Labor	8.98	47.77
Machinery Depreciation	3.14	16.68
Building/Fence Depreciation	3.10	16.50
Non-Cash Interest	13.88	73.86
	<hr/> 60.70	<hr/> 321.80
 Total Cost of Production	94.17	500.73
 Net Returns	-22.43	-118.73

**Table 10. Production Summary
Kentucky Backgrounding 2001 Enterprise Summary**

	2000 Average	2001 Average	% Change
Number of Enterprises	21	47	
Total Beef Returns	32,092	49,759	55.05%
Total Feed Costs	17,499	28,597	63.42%
Returns Above Feed Cost	14,593	21,163	45.02%
Total Non feed Costs	21,361	38,292	79.26%
Net Returns (over all costs)	-6,768	-17,129	-153.10%
Other Economic Variables			
Returns per \$100 Feed Fed	183	174	-5.12%
Price Rec'd per CWT.: Market	83.65	84.03	0.45%
Price Rec'd per CWT.: Breeding	38.90	47.54	22.21%
Capital Investment per Cow			
Livestock	1,011	1,051	3.97%
Non Livestock	302	390	29.30%
	1,313	1,442	9.80%
Other Production Variables			
Number of Cows	67	110	63.89%
Animal Units in Herd	100	170	69.95%
Total Beef Produced (LB)	42,350	72,525	71.25%
Pounds of Beef per Cow	607	660	8.81%
Death Loss: % of Lbs Produced	8.54%	4.39%	-48.61%
Total Concentrates	149	192	28.86%
Hay & Dry Roughage	899	796	-11.46%
Corn Silage	100	105	5.00%
Other Silage	44	47	6.82%
Pasture Days per Animal Unit	213	225	5.63%
Hay Equivalents – Tons	6.6	7.0	6.06%
Labor Summary			
Months per Cow	0.05	0.05	0.00%
Hours per Cow	10.0	10.5	5.44%
Beef Production/Worker/Year	166,754	156,597	-6.09%

**Table 11. Costs and Returns (Per Cow)
Kentucky Backgrounding 2001 Enterprise Summary**

	2000	2001	% Change
	Average	Average	
Number of Enterprises	21	47	
Number of Cows	67	110	
Total Beef Returns	461	453	-1.74%
Feed Costs			
Purchased Concentrates	28	37	32.14%
Purchased Hay and Other	36	35	-3.04%
Home Raised Feed	194	188	-3.04%
Total Feed Costs	258	260	0.78%
Non-Feed Costs			
Veterinary & Livestock Supplies	32	49	52.20%
Fuel & Oil	12	12	0.00%
Machinery Repair	22	23	4.91%
Bldg/Fence Repair	11	18	66.18%
Machinery Hire	2	2	0.00%
Utilities	4	5	12.54%
Light Vehicle-Farm Share	2	2	0.00%
Paid Labor	14	16	11.61%
Insurance, Property Taxes, Misc.	14	15	6.91%
Cash Interest	18	15	-18.42%
Total Non Feed Cash Costs	131	156	19.38%
Non-Feed Non-Cash Costs			
Unpaid Labor	77	70	-9.30%
Machinery Depreciation	12	14	14.11%
Building/Fence Depreciation	3	7	119.22%
Non-Cash Interest	99	102	3.25%
Total Non Feed Non Cash Costs	191	192	0.70%
Total Cost of Production	581	609	4.77%
Net Returns (over all costs)	-120	-156	-29.77%
Cost and Returns Summary: \$/Cow			
Total Returns	461	453	-1.74%
Feed Costs	258	260	0.78%
Non Feed Cash Costs	131	156	19.38%
Non Feed Non Cash Costs	191	192	0.70%
Net Returns (over all costs)	-119	-156	-30.86%

**Table 12. Costs and Returns (Per CWT)
Kentucky Backgrounding 2001 Enterprise Summary**

	2000	2001	% Change
	Average	Average	
Number of Enterprises	21	47	
Pounds Produced	42,350	72,525	
Total Beef Returns	76.59	68.61	-10.42%
Feed Costs			
Purchased Concentrates	4.59	5.65	23.09%
Purchased Hay and Other	5.09	4.95	-2.78%
Home Raised Feed	34.37	28.83	-16.11%
Total Feed Costs	44.05	39.43	-10.49%
Non-Feed Cash Costs			
Veterinary & Livestock Supplies	4.99	7.37	47.77%
Fuel & Oil	2.1	1.88	-10.33%
Machinery Repair	3.93	3.49	-11.08%
Bldg/Fence Repair	2.05	2.77	35.01%
Machinery Hire	0.31	0.34	8.19%
Utilities	0.64	0.68	6.50%
Light Vehicle-Farm Share	0.35	0.29	-18.11%
Paid Labor	2.28	2.37	3.76%
Insurance, Property Taxes, Misc.	2.45	2.27	-7.50%
Cash Interest	2.79	2.22	-20.31%
Total Non Feed Cash Costs	21.9	23.68	8.12%
Non-Feed Non-Cash Costs			
Unpaid Labor	13.51	10.57	-21.73%
Machinery Depreciation	2.03	2.07	2.13%
Building/Fence Depreciation	0.61	1.00	63.23%
Non-Cash Interest	17.46	15.48	-11.36%
Total Non Feed Non Cash Costs	33.61	29.12	-13.36%
Total Cost of Production	99.56	92.23	-7.36%
Net Returns (over all costs)	-22.97	-23.62	-2.82%
Cost and Returns Summary: \$/Cwt.			
Total Returns	76.59	68.61	-10.42%
Feed Costs	44.05	39.43	-10.49%
Non Feed Cash Costs	21.90	23.68	8.12%
Non Feed Non Cash Costs	33.61	29.12	-13.36%
Net Returns (over all costs)	-22.97	-23.62	-2.82%

**Table 13. Cash Flow Analysis
Kentucky Backgrounding 2001 Enterprise Summary**

	Per Cwt.	Per Cow
Total Beef Returns		
Cash Sales:		
Calves (75.45%)	62.11	410.23
Culls (9.09%)	7.60	50.18
Change in Inventory & Death Loss	-1.10	-7.40
	<hr/>	<hr/>
	68.61	453.00
 Cash Costs		
Purchased Concentrates	5.65	37.00
Purchased Hay and Other	4.95	34.90
Veterinary & Livestock Supplies	7.37	48.70
Fuel & Oil	1.88	12.44
Machinery Repair	3.49	23.08
Bldg/Fence Repair	2.77	18.28
Machinery Hire	0.34	2.22
Utilities	0.68	4.50
Light Vehicle-Farm Share	0.29	1.89
Paid Labor	2.37	15.63
Insurance, Property Taxes, Misc.	2.27	14.97
Cash Interest	2.22	14.68
	<hr/>	<hr/>
	34.28	228.29
 Returns to Home Raised Feed, Land, Unpaid Labor, & Equity Capital	34.33	224.71
 Non Cash Costs		
Home Raised Feed	28.83	188.10
Unpaid Labor	10.57	69.84
Machinery Depreciation	2.07	13.69
Building/Fence Depreciation	1.00	6.58
Non-Cash Interest	15.48	102.22
	<hr/>	<hr/>
	57.95	380.43
 Total Cost of Production	92.23	608.72
 Net Returns	-23.62	-155.72

**Table 14. Western and Central Kentucky
Cattle Enterprise Summary
2001 Averages (per CWT)**

	Western	Central
Number of Enterprises	14	12
Pounds Produced	138,986	99,895
Returns above Feed Costs	47.83	32.17
Non Feed Costs		
Livestock Supplies	1.95	2.42
Veterinary	1.70	2.11
Fuel & Oil	2.17	2.03
Machinery Repair	3.07	3.87
Bldg/Fence Repair	2.84	3.28
Machinery Hire	0.51	0.05
Utilities	1.13	0.84
Light Vehicle-Farm Share	0.22	0.40
Paid Labor	3.58	3.08
Insurance	1.18	1.21
R.E. Tax	0.05	0.11
Miscellaneous	0.53	0.88
Cash Interest	3.66	2.76
Total Non Feed Cash Costs	<hr/> 22.60	<hr/> 23.03
Non Feed Non Cash Costs		
Unpaid Labor	9.10	8.77
Machinery Depreciation	2.87	2.20
Bldg/Fence Depreciation	2.27	1.48
Non Cash Interest	13.29	12.18
Total Non Feed Non Cash Costs	<hr/> 27.53	<hr/> 24.63
Total Non feed Costs	50.13	47.66
Net Returns (over all costs)	-2.30	-15.49

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