

2000 Hog Enterprise Summary

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" farrow to finish hog operations and have complete financial information available for analysis. These data are carefully crosschecked 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.

TABLE OF CONTENTS

Introduction.....	1
Description of Hog Enterprises.....	1
Methods and Definitions.....	1
Gross Returns.....	3
Feed Costs.....	3
Non-Feed Cash Costs.....	3
Non-Feed Non-Cash Costs.....	4
Net Returns (over all costs).....	4
Other Production Variables.....	4
Major Production Differences Between High and Low-third Producers.....	5
Historical Swine Industry Statistics.....	6
Summary.....	9

LIST OF TABLES

Table 1. Yearly Rates for Labor Interest, and Fed Corn.....	2
Table 2. Differences Between High and Low-third Producers ¹	6
Table 3. Number of Swine Operations in Kentucky by Size of Operation.....	7
Table 4. Percentage of Swine Operations by Size in Kentucky.....	7
Table 5. Productivity Measures of the U.S. Pig Herd.....	8
Table 6. Productivity Measures of the Kentucky Pig Herd.....	8
Table 7. Production Summary 2000.....	10
Table 8. Costs and Returns (Per CWT) 2000.....	11
Table 9. Costs and Returns (Per Litter) 2000.....	12
Table 10. Five Year Production Summary.....	13
Table 11. Costs and Returns (Per CWT) Five Year Summary.....	14
Table 12. Costs and Returns (Per Litter) Five Year Summary.....	15

¹ Kentucky Farm Business Management Program

LIST OF FIGURES

Figure 1. Returns Per \$100 Feed Fed	16
Figure 2. Gross Returns per CWT	16
Figure 3. Gross Returns per Litter	17
Figure 4. Feed Costs per CWT	17
Figure 5. Feed Costs per Litter	18
Figure 6. Non-Feed Costs per CWT	18
Figure 7. Non-Feed Costs per Litter	19
Figure 8. Net Returns per CWT	19
Figure 9. Net Returns per Litter	20
Figure 10. Costs and Returns per CWT	20
Figure 11. Costs and Returns per Litter	21

KENTUCKY FARM BUSINESS MANAGEMENT PROGRAM
2000 HOG ENTERPRISE SUMMARY
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Introduction

Hog production in 2000 saw an increase in net returns from 1999. On a total return basis, producers averaged \$73,886 in net returns in 2000 compared to \$21,032 in the previous year. On a per hundredweight (cwt) basis, producers in 2000 earned net returns over all cash and non-cash costs of \$6.47. In 1999, producers net return over all costs was \$0.71 cwt. On a per litter basis, the net returns for 2000 were \$143, while in 1999 the net returns per litter were only \$23.

The average price received for 2000 was \$43.69 per cwt, which was a \$10.37 per cwt increase over the previous year. At the same time, feed costs were only \$0.73 per cwt higher for the year. Furthermore, there was an increase in the number of sows and number of litters per average operation.

Description of Hog Enterprises

This report summarizes 2000 hog enterprise data from 17 farms that participate in the Kentucky Farm Business Management Program². Data from farrow-to-finish hog operations have been analyzed and divided into average, high-third, and low-third groups based on net returns per hundredweight produced and per litter.

Methods and Definitions

Most of the production and financial data in this report were calculated as a regular part of the complete farm business records kept by participants in the Kentucky Farm Business Management Program. For inputs used by more than one enterprise, the cooperating farmers and their Farm Business Analysis Specialists allocated the proportion of costs to the hog enterprise. The following definitions and explanations are used:

Total Swine Returns - This is the total returns attributable to the hog enterprise for the year. It included the value of all animals sold (including market and capital), the value of pork slaughtered for family consumption, and an inventory adjustment (positive or negative) for the differences in the value of hogs on the farm at the start and the end of the year.

² The Kentucky Farm Business Management Program is a cooperative effort between the Department of Agricultural Economics of 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 recordkeeping. At year's end, they provide each farmer with a complete summary and analysis of the farm business.

Cash Costs - The cash or out-of-pocket expenses such as purchased feed, supplies, and services used in the production year are considered cash costs.

Non-Cash Costs - Unpaid labor, depreciation and interest on investments are considered non-cash costs. Depreciation on buildings, machinery and equipment used in the hog enterprise was taken from the farmer's depreciation schedule, with adjustments to straight-line when farms used expense election for new purchases. Homegrown feed is a non-cash cost but a charge is placed on all raised feed fed to the hogs.

Total Enterprise Cost – This is the total charge (cash and non-cash) for all factors of production, except management, used by the hog enterprise during the year. Purchased inputs were charged at the price actually paid. Non-cash inputs were charged using the procedures and rates employed in the Farm Business Management Program. Feed raised on the farm was charged at its yearly average “on-farm” market value (what farmers would receive if the feed was sold and marketing costs deducted). The rates charged for operator and family labor, interest on both borrowed and equity capital, and fed corn produced on the farm can be found in Table 1.

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

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Fed Corn Produced on Farm (\$/Bu)	2.54	2.49	2.40	2.51	2.75	3.75	2.78	2.39	2.11	2.09
Unpaid Labor Rate (\$/Year)	16200	16200	17400	18000	19200	19800	21600	22800	24000	25200
Interest Rate: Non Land	11%	10%	8.5%	9%	9.5%	9%	9%	9%	8.5%	9%
Interest Rate: Land	5%	5%	5%	5%	5%	5%	5%	5%	5%	4.5%

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 feed costs into total swine returns and multiplying by 100.

Net Enterprise Returns - This is what is left after Total Enterprise Cost is deducted from Total Enterprise Returns. Because all cash and non-cash costs, except a charge for management, are deducted, Net Enterprise Returns represent the financial reward attributable to management of the swine enterprise.

Charges must be made for all inputs to correctly determine enterprise profitability. One must recognize, however, that to the individual farmer, the non-cash charges for his or her labor and interest on his or her equity capital are also returns to the factors of production (to the extent that returns are high enough to reward these inputs). Since these are the farmer's resources, the returns can be used for whatever purposes he or she wishes: family living, principal repayment, investment, etc.

High-Third and Low-Third – These classifications are determined by the net enterprise returns per litter and per cwt. Tables 7 and 8 develop high and low-thirds by first sorting the farms in order of net returns per cwt. The one-third of farms with the largest net return make up the high-third group, while the one-third of farms with the smallest net return comprise the low-third group. Table 9 is similar except net income per litter is used to determine high and low-third groups.

Gross Returns

A large part of the improvement for net returns for 2000 can be attributed to an increase in returns. Total swine returns on a hundredweight basis for 2000 was \$43.69, while in 1999 it was \$36.37. Clearly, this \$7.32 improvement from 1999 to 2000 was a significant factor in the net returns for the farrow to finish operations.

There was a bit of a difference in returns per litter between the high and low-third performers. The high-third had returns of \$1016 and the low-third \$802 for a \$214 difference. This is a 21% advantage to the high-third group. This can be attributed to a combination of higher prices received and higher performing sow numbers. Specifically, the high-third group weaned 3.74 more pigs per sow per year than the low-third group (19.63 versus 15.89 pigs per sow per year respectively). Also, the pounds of pork produced per litter were 2288 for the high-third group while it was only 1859 for the low-third group.

Feed Costs

Feed costs are generally the largest portion of expense in hog operations. Feed expenses are likely to be over half of all costs involved. Furthermore, the difference in feed costs between the high and low performing producers is usually significant with the high performing group being able to capture a much lower cost of feed. In previous years this difference in cost has been upwards of \$8 per hundredweight. In 2000 the feed costs for the high-third was \$18.38 per cwt and the low-third was \$22.57 per cwt for \$4.19 per cwt difference.

Feed costs for 2000 averaged \$20.67 per cwt over all operations. This is slightly above 1999's cost but still below the five year average of \$24.66 per cwt. Obviously grain prices were low over the year, which correlates to cheap feed prices for livestock producers.

Non-Feed Cash Costs

The non-feed cash costs increased \$0.46 per cwt from 1999 to 2000. The biggest changes occurred in building/fence repair, machinery repair and paid labor. It is logical to assume that while prices were low and money was tight in the previous two years (1998 and 1999), producers held off making repairs and hiring any new labor. It is also interesting to note that cash interest was at a five-year low in 2000. The five-year average for cash interest cost was 1.20 per cwt and in 2000 it was only \$0.88 per cwt.

Non-Feed Non-Cash Costs

Non-feed non-cash costs include unpaid labor, machinery depreciation, building/fence depreciation and non-cash interest. Unpaid labor was the greatest portion of these costs with non-cash interest being the second most expensive portion. The non-feed cash costs for 2000 were \$7.48 per cwt, which was above the five-year average of \$6.92 per cwt.

Net Returns (over all costs)

Net returns over all costs for 2000 were \$6.47 per cwt. This is considerably higher than the 1999 return of \$0.71 per cwt. It is also much higher than the five-year average of \$0.16 net returns per hundredweight.

There is also a significant difference in the net returns over all costs between the high and low-third groups. The high-third had net returns of \$11.40 per cwt, while the low-third had \$1.60 per cwt. The majority of this difference is in the total costs of production, which were \$32.99 for the high-third group and \$41.11 for the low-third group.

Other Production Variables

The number of sows per average operation increased 37 head from 1999 to 2000. In turn, the number of litters also increased. The pigs weaned per sow per year were nearly the same as 1999 and was also very close to the five-year average. Furthermore, the total concentrates (LB) were constant from 1999 and also similar to the five-year average.

Major Production Differences Between High and Low-third Producers

Feed Costs Per CWT - From 1990 to 1999, the average difference in feed costs per cwt of pork between the high and low-third producers was \$4.53. In 2000, this difference was \$3.87 per cwt. If one assumes a market weight of 250 pounds, this translates to a difference of \$9.68 per pig in feed costs. One has to understand that the breeding herd feed costs is a part of the difference in feed costs. The benefits of more efficient feed usage can be seen in the returns above feed cost and also in the return per \$100 feed fed. This latter measure shows that high-third farms earned \$243 per \$100 of feed while low return farms earned \$194.

Pigs Weaned Per Litter – From 1990 to 1999, sows from the high-third producers weaned 0.64 more pigs per litter on average than the low-third producers. In 2000, the high-third producers weaned 1.33 more pigs per litter while farrowing only 1.01 more pigs per litter. If one assumes a farm has 200 sows that will farrow two times each year (400 litters per year), an improvement of 1.33 pigs weaned per litter would equate to 532 additional pigs.

Pounds of Pork Per Sow – From 1990 to 1999, sows from the high-third producers produced 757 more pounds of pork on average than those from the low-third producers. In 2000, high-third farmers produced 1068 more pounds of pork per sow than the low-third producers. This difference likely resulted from weaning more pigs per litter, the lower death loss (expressed as % of pigs weaned), and selling heavier market hogs.

Death Loss: % of Pigs Weaned - From 1990 to 1999, death loss for the high-third producers averaged 3.21 percentage units lower than death loss for the low-third producers. In 2000, this difference was 3.99. On a farm that farrows 400 litters per year and weans 9 pigs per litter, this translates into a decreased death loss of 144 pigs per year.

Pounds of Pork per Litter – In 2000, the high-third of producers produced 2,288 pounds of pork per litter while the low-third produced 1,859 pounds per litter. On a farm farrowing 400 litters per year, this 429 additional pounds per litter amount to an additional 171,600 pounds per year. Because the average hog farm netted \$13.95 per cwt over all cash costs, this additional production could amount to an extra \$23,938 in cash.

Non-Feed Cash Costs – High-third producers paid 55 percent more in veterinary bills than did low-third producers on a per cwt basis. This might help explain the lower death rates of high-third producers. Low-third producers tended to have higher machinery repair and paid labor expenses than did high-third producers. On a per cwt, basis, the machinery repair expenses were 178 percent higher while the paid labor was 73 percent higher for the low-third producers.

Table 2. Differences Between High and Low-Third Producers

Year	Feed Costs/CWT Pork		Litters/Sow		Pigs Weaned/Litter		Pounds of Pork/Sow		Death Loss (% of Pigs Weaned)	
	High 1/3	Low 1/3	High 1/3	Low 1/3	High 1/3	Low 1/3	High 1/3	Low 1/3	High 1/3	Low 1/3
1990	\$23.58	\$30.64	1.94	1.75	8.79	8.16	3,788	2,987	4.00%	8.38%
1991	\$22.39	\$28.02	1.80	1.80	8.57	8.16	3,559	3,436	4.60%	8.12%
1992	\$23.46	\$28.99	2.02	1.95	8.44	8.75	4,172	3,931	4.29%	7.94%
1993	\$23.04	\$28.61	1.98	1.71	8.88	7.98	4,111	3,099	3.62%	5.92%
1994	\$23.12	\$30.18	1.98	1.73	8.90	7.91	4,150	2,869	4.39%	5.21%
1995	\$23.69	\$25.34	2.18	2.01	9.22	8.65	4,799	4,072	3.95%	7.23%
1996	\$31.32	\$30.55	2.18	2.26	9.49	8.88	4,832	4,513	3.34%	6.26%
1997	\$25.94	\$32.23	2.19	1.60	9.52	8.27	4,898	3,146	4.44%	8.79%
1998	\$20.27	\$22.41	1.99	2.01	9.36	8.57	4,553	4,066	3.60%	5.93%
1999	\$17.77	\$22.89	1.95	1.95	9.24	8.29	4,364	3,541	5.21%	9.79%
2000	\$18.38	\$22.25	2.06	1.93	9.55	8.22	4,691	3,623	5.97%	9.96%
Average	\$22.94	\$27.15	2.03	1.90	9.12	8.37	4,413	3,630	4.34%	7.52%
Difference	-\$4.21		0.14		0.75		783		-3.17%	

Historical Swine Industry Statistics

Tables 3 and 4 show the structural changes to the Kentucky swine industry since 1990. From 1990 to 2000, the number of swine operations in Kentucky dropped from 6,500 to 1,000 (Table 3). During this time period there has also been a shift towards an increase in the size of swine operations. From 1992 to 1998 the percentage of operations with an inventory of fewer than 500 head has decreased, while the percentage of operations with greater than 500 head have increased (Table 4). The trend towards larger sized operations has been driven by economies of scale when purchasing inputs, reduced profit margins on a per animal basis, and the need of providing a larger quantity of animals to the packer to ensure chain space.

Table 3. Number of Swine Operations in Kentucky by Size of Operation^a.

Year	Total No. Operations	Number of Operations by Size			
		1-499 hd	500-999 hd	1,000-1,999 hd	>2,000 hd
1990 ^b	6,500				
1991 ^b	6,000				
1992	6,000	5,630	200	110	60
1993	5,800	5,430	200	110	60
1994	4,500	4,100	230	110	60
1995	3,800	3,420	210	120	50
1996	2,500	2,190	165	95	50
1997	2,100	1,830	130	90	50
1998	1,700	1,460	100	85	55
1999 ^c	1,400				
2000	1,000				

^aSOURCE: USDA National Agricultural Statistics Service.

^bOperations not broken out by size prior to 1992.

^cNumber of operations by size in Kentucky not available after 1999.

Table 4. Percentage of Swine Operations by Size in Kentucky^a.

Year	Total No. Operations	Percentage of Operations by Size			
		1-499 hd	500-999 hd	1,000-1,999 hd	>2,000 hd
1992	6,000	93.8%	3.3%	1.8%	1.0%
1993	5,800	93.6%	3.5%	1.9%	1.0%
1994	4,500	91.1%	5.1%	2.4%	1.3%
1995	3,800	90.0%	5.5%	3.2%	1.3%
1996	2,500	87.6%	6.6%	3.8%	2.0%
1997	2,100	87.1%	6.2%	4.3%	2.4%
1998	1,700	85.9%	5.9%	5.0%	3.2%
1999 ^b	1,400				
2000	1,000				

^aSOURCE: USDA National Agricultural Statistics Service.

^bPercentage of operations by size in Kentucky not available after 1999.

Table 5 shows some of the changes that have occurred in productivity of the U.S. pig herd since 1990. During this time, improvements have been made in pigs per litter, and in the number of litters, slaughter pigs and pounds of pork per breeding animal. These nationwide trends have been somewhat mirrored in Kentucky's breeding herd. Table 4 shows the average pigs per litter for Kentucky, as well as the relationship between market pigs inventory and the inventory of breeding animals. Since 1993, the number of breeding animals relative to the number of market animals has declined, demonstrating a higher level of production from the breeding herd. Also, with the exception of a slight decline in 2000, pigs per litter has increased since 1993, although at a lower rate than is observed at the national level.

Table 5. Productivity Measures of the U.S. Pig Herd^a.

Year	Per Inventoried Breeding Animal				
	Pigs per Litter	Litters	Slaughter Pigs (hd)	Avg. Live Slaughter Weight (lbs)	Pork Production (lbs)
1990	7.85	1.60	12.37	249	2,239
1991	7.90	1.67	12.18	252	2,217
1992	8.08	1.69	13.05	252	2,376
1993	8.10	1.68	12.98	254	2,388
1994	8.18	1.70	13.11	255	2,426
1995	8.31	1.71	13.89	256	2,584
1996	8.50	1.68	13.93	254	2,590
1997	8.67	1.69	13.50	256	2,552
1998	8.71	1.76	14.72	257	2,782
1999	8.79	1.82	15.88	259	3,033
2000	8.83	1.83	15.69	262	3,044

^aSOURCE: USDA National Agricultural Statistics Service and USDA Economic Research Services.

Table 6. Productivity Measures of the Kentucky Pig Herd^a.

Year	All Market Pigs Inventory (1,000 hd)	Breeding Pigs Inventory (1,000 hd)	Breeding Pigs as a Percentage of Market Pigs	Pigs Per Litter
1993	730	120	16.44%	7.73
1994	680	100	14.71%	7.69
1995	690	110	15.94%	7.68
1996	515	85	16.50%	8.23
1997	500	70	14.00%	8.38
1998	455	65	14.29%	8.43
1999	405	55	13.58%	8.68
2000	380	50	13.16%	8.52

^aSOURCE: USDA National Agricultural Statistics Service.

One other factor that has helped improve sow productivity (pigs per sow per year, pounds of pork per sow per year, etc) is lowering the age at which pigs are weaned. During the last 10 to 15 years most producers have begun weaning pigs at 18 to 28 days of age. Prior to this time, most pigs were weaned at 35 to 42 days of age.

Summary

After a couple of tough years in 1998 and 1999 hog producers were relieved to see the price improvements in the market combined with the relatively cheap feed costs. In fact, producers, on average, were able to net the highest returns over all costs that they had seen in five years. Even the lowest one-third of the producers was able to net positive returns over all costs.

However, it is important to point out that there is still a large difference between the top third and bottom third of producers. While both groups were similar in their swine returns on a per cwt basis (\$44.39 versus \$43.03 respectively), the variation of costs of production and production variables made for a large difference in the net returns over all costs. In other words, the high performing group was able to generate more pounds of pork per sow and do it at a cheaper cost.

The following tables and figures included in this publication provide data and information for 2000 and historical data back to 1991.

Table 7. Production Summary - 2000

	Average	High-Third	Low-Third
NUMBER OF ENTERPRISES	17	6	6
SUMMARY			
Total Swine Returns	409,712	571,738	324,718
Total Feed Cost	188,162	234,258	171,502
Returns Above Feed Cost	<u>221,550</u>	<u>337,480</u>	<u>153,215</u>
Total Non-Feed Costs	147,664	181,121	138,524
Net Returns (over all costs)	<u>73,886</u>	<u>156,359</u>	<u>14,691</u>
OTHER ECONOMIC VARIABLES			
Returns per \$100 Feed Fed	217	243	194
Feed Costs per cwt Pork	20.67	18.38	22.57
CAPITAL INVESTMENT PER SOW			
Livestock	553	566	538
Non-Livestock	906	912	892
Total	<u>1297</u>	<u>1242</u>	<u>1255</u>
OTHER PRODUCTION VARIABLES			
Number of Sows	230	303	211
Number of Litters	456	598	403
Litters per Sow	2	2.06	1.93
Pigs Weaned per Sow/Year	17.73	19.63	15.89
Pigs Weaned per Litter	8.86	9.55	8.22
Pigs Farrowed per Litter	10.46	10.93	9.92
Total Pork Produced (LB)	949732	1334446	755782
Pounds of Pork per Sow	4160	4691	3623
Pounds of Pork per Litter	2086	2288	1859
Death Loss: % of Pigs Weaned	7.07	5.97	9.96
Death Loss: % of LB Produced	2.78	2.42	3.68
Grain per cwt Pork(LB)	276	237	313
Protein per cwt Pork(LB)	76	71	76
Total Concentrates (LB)	352	308	389
LABOR SUMMARY			
Cost per Sow	228	211	246
Cost per Litter	116	102	126

Table 8. Costs and Returns (Per CWT) - 2000

	Average	High-Third	Low-Third
TOTAL SWINE RETURNS	43.69	44.39	43.03
FEED COSTS			
Protein and Minerals -			
Purchased Concentrates	6.40	4.42	8.75
Grains (Purchased or Farm Grown)	14.27	13.96	13.82
Total Feed Costs	20.67	18.38	22.57
Returns Above Feed	23.02	26.01	20.46
NON-FEED CASH COSTS			
Livestock Supplies	0.64	0.88	0.51
Veterinary	1.00	1.10	0.71
Fuel & Oil	0.45	0.24	0.45
Machinery Repair	0.70	0.40	1.11
Bldg/Fence Repair	1.21	0.96	1.38
Machinery Hire	0.20	0.42	0.11
Utilities	0.92	0.94	1.16
Auto-Farm Share	0.00	0.00	0.00
Paid Labor	2.36	2.11	3.64
Insurance	0.29	0.19	0.45
Property Taxes	0.06	0.05	0.07
Miscellaneous	0.36	0.20	0.54
Cash Interest	0.88	0.25	1.16
Total Non-Feed Cash Costs	9.07	7.74	11.29
NON-FEED NON-CASH COSTS			
Unpaid Labor	3.26	2.34	3.20
Machinery Depreciation	0.76	0.70	0.73
Building/Fence Depreciation	1.21	1.27	1.33
Non-Cash Interest	2.26	2.57	2.31
Total Non-Feed Non-Cash Costs	7.48	6.87	7.57
Total Costs of Production	37.11	32.99	41.11
Net Returns (over all costs)	6.47	11.40	1.60
SUMMARY: \$/CWT			
Total Returns	43.69	44.39	43.03
Feed Costs	20.67	18.38	22.57
Non-Feed Costs (Total)	16.55	14.61	18.86
- Non-Feed Cash Costs	9.07	7.74	11.29
- Non-Feed Non-Cash Costs	7.48	6.87	7.57
Total Costs of Production	37.11	32.99	41.11
Net Returns (over all costs)	6.47	11.40	1.60

Table 9. Costs and Returns (Per Litter) – 1999

	Average	High-Third	Low-Third
TOTAL SWINE RETURNS	912	1016	802
FEED COSTS			
Protein & Minerals -			
Purchased Concentrates	213	218	202
Grains (Purchased or Farm Grown)	210	201	212
Total Feed Costs	423	420	414
Returns above Feed	489	596	388
NON-FEED CASH COSTS			
Livestock Supplies	14.00	20.00	10.00
Veterinary	22.00	26.00	13.00
Fuel & Oil	9.00	5.00	8.00
Machinery Repair	14.00	10.00	21.00
Bldg/Fence Repair	25.00	21.00	27.00
Machinery Hire	4.00	9.00	2.00
Utilities	19.00	21.00	21.00
Auto-Farm Share	0.00	0.00	0.00
Paid Labor	47.00	50.00	65.00
Insurance	6.00	5.00	8.00
Property Taxes	1.00	1.00	1.00
Miscellaneous	7.00	4.00	10.00
Cash Interest	18.00	5.00	21.00
Total Non-Feed Cash Costs	187.00	178.00	208.00
NON-FEED NON-CASH COSTS			
Unpaid Labor	69.00	53.00	61.00
Machinery Depreciation	16.00	16.00	14.00
Building/Fence Depreciation	26.00	30.00	27.00
Non-Cash Interest	47.00	59.00	44.00
Total Non-Feed Non-Cash Costs	158.00	157.00	146.00
Total Costs of Production	769.00	755.00	767.00
Net Returns (over all costs)	143.00	261.00	35.00
SUMMARY: \$/LITTER			
Total Returns	912	1016	802
Feed Costs	423	420	414
Non-Feed Costs (total)	346	335	353
- Non-Feed Cash Costs	187	178	208
- Non-Feed Non-Cash Costs	158	157	146
Total Costs of Production	769	755	769
Net Returns (over all costs)	143	261	35

Table 10. Five Year Production Summary

	1996	1997	1998	1999	2000	5 YR AVG
NUMBER OF ENTERPRISES	10	13	16	17	17	15
SUMMARY						
Total Swine Returns	403,493	347,707	303,543	290,803	409,712	351,052
Total Feed Cost	<u>250,329</u>	<u>215,403</u>	<u>249,537</u>	<u>152,223</u>	<u>188,162</u>	<u>211,131</u>
Returns Above Feed Cost	153,164	132,304	54,006	138,579	221,550	139,921
Total Non-Feed Costs	<u>110,348</u>	<u>133,849</u>	<u>175,510</u>	<u>117,548</u>	<u>147,664</u>	<u>136,984</u>
Net Returns (over all costs)	\$42,816	-\$1,545	-\$121,504	\$21,032	\$73,886	\$2,937
OTHER ECONOMIC VARIABLES						
Returns per \$100 Feed Fed	165	164	117	186	217	170
Price Rec'd per CWT All Hogs	52.49	51.52	33.31	33.32	43.69	43
Feed Costs per cwt Pork	32.32	28.00	22.37	19.94	20.67	25
CAPITAL INVESTMENT PER SOW						
Livestock	702	571	392	383	553	520
Non-Livestock	<u>828</u>	<u>917</u>	<u>973</u>	<u>914</u>	<u>906</u>	<u>908</u>
Total	\$1,530	\$1,488	\$1,365	\$1,297	\$1,459	\$1,428
OTHER PRODUCTION VARIABLES - avg per operation						
Number of Sows	191	201	274	193	230	218
Number of Litters	376	367	538	378	456	423
Litters per Sow	2.10	1.91	1.95	1.93	2	2
Pigs Weaned per Sow/Year	18.57	17.48	17.30	17.47	17.73	17.71
Pigs Weaned per Litter	8.87	9.18	8.85	9.04	8.86	8.96
Pigs Farrowed per Litter	10.10	10.42	10.36	10.47	10.46	10.34
Total Pork Produced (LB)	762,388	784,672	1,131,363	800,117	949,732	885,654
Pounds of Pork per Sow	4,348	4,067	4,139	4,088	4,160	4,160
Pounds of Pork per Litter	2,067	2,130	2,123	2,124	2,086	2,106
Death Loss: % of Pigs Weaned	7.06	5.78	6.03	7.33	7.07	6.65
Death Loss: % of LB Produced	2.37	2.28	2.16	2.62	2.78	2.44
Selling Weight All Hogs	244	246				245
Grain per cwt Pork(LB)	278	278	266	274	276	274
Protein per cwt Pork(LB)	75	78	77	78	76	77
Total Concentrates (LB)	353	355	343	351	352	351
LABOR SUMMARY						
Cost per Sow	208	222	191	224	228	215
Cost per Litter	98	117	99	117	116	109

Table 11. Costs and Returns (Per CWT) - Five Year Summary

	1996	1997	1998	1999	2000	5 YR AVG
TOTAL SWINE RETURNS	53.06	44.86	26.38	36.37	43.69	40.87
FEED COSTS						
Protein and Minerals -						
Purchased Concentrates	14.17	14.53	10.93	9.70	6.40	11.14
Grains (Purchased or Farm Grown)	18.16	13.47	11.43	10.24	14.27	13.51
Total Feed Costs	32.32	28.00	22.36	19.94	20.67	24.66
Returns Above Feed	\$20.73	\$16.86	\$4.02	\$16.43	\$23.02	\$16.21
NON-FEED CASH COSTS						
Livestock Supplies	0.55	0.90	0.62	0.68	0.64	0.68
Veterinary	1.30	1.40	0.92	0.93	1.00	1.11
Fuel & Oil	0.34	0.31	0.27	0.38	0.45	0.35
Machinery Repair	0.75	0.79	0.71	0.57	0.70	0.71
Bldg/Fence Repair	1.02	1.35	0.71	0.65	1.21	0.99
Machinery Hire	0.21	0.19	0.47	0.30	0.20	0.28
Utilities	1.07	0.96	0.88	0.99	0.92	0.96
Auto-Farm Share	0.00	0.00	0.03	0.01	0.00	0.01
Paid Labor	2.37	2.28	1.79	2.19	2.36	2.20
Insurance	0.27	0.34	0.32	0.35	0.29	0.32
Property Taxes	0.05	0.04	0.05	0.06	0.06	0.05
Miscellaneous	0.22	0.33	0.18	0.30	0.36	0.28
Cash Interest	1.14	1.29	1.51	1.21	0.88	1.20
Total Non-Feed Cash Costs	9.29	10.20	8.45	8.61	9.07	9.13
NON-FEED NON-CASH COSTS						
Unpaid Labor	2.39	3.25	2.86	3.49	3.26	3.05
Machinery Depreciation	0.64	0.70	0.67	0.75	0.76	0.70
Building/Fence Depreciation	0.95	1.78	1.38	1.28	1.21	1.32
Non-Cash Interest	1.99	2.00	1.43	1.60	2.26	1.85
Total Non-Feed Non-Cash Costs	5.96	7.72	6.34	7.12	7.48	6.92
Total Costs of Production	\$47.57	\$45.93	\$37.16	\$35.67	\$37.11	\$40.69
Net Returns (over all costs)	\$5.48	-\$1.06	-\$10.80	\$0.71	\$6.47	\$0.16
SUMMARY: \$/CWT						
Total Returns	53.06	44.86	26.38	36.37	43.69	40.87
Feed Costs	32.33	28.00	22.36	19.94	20.67	24.66
Non-Feed Costs (Total)	15.25	17.93	14.81	15.73	16.55	16.05
- Non-Feed Cash Costs	9.29	10.20	8.45	8.61	9.07	9.13
- Non-Feed Non-Cash Costs	5.96	7.72	6.34	7.12	7.48	6.92
Total Costs of Production	47.57	45.93	37.16	35.67	37.11	40.69
Net Returns (over all costs)	\$5.48	-\$1.06	-\$10.80	\$0.71	\$6.47	\$0.16

Table 12. Costs and Returns (Per Litter) - Five Year Summary

	1996	1997	1998	1999	2000	5 Yr Avg
TOTAL SWINE RETURNS	1,099	956	561	769	912	859
FEED COSTS						
Protein and Minerals -						
Purchased Concentrates	289	290	231	203	213	245
Grains (Purchased or Farm Grown)	379	302	242	212	210	269
Total Feed Costs	668	592	473	415	423	514
Returns Above Feed	\$431	\$364	\$88	\$354	\$489	\$345
NON-FEED CASH COSTS						
Livestock Supplies	11	20	13	15	14	15
Veterinary	27	30	20	20	22	24
Fuel & Oil	7	7	6	8	9	7
Machinery Repair	16	17	15	12	14	15
Bldg/Fence Repair	21	29	15	14	25	21
Machinery Hire	4	4	10	7	4	6
Utilities	22	20	19	20	19	20
Auto-Farm Share	0	0	1	0	0	0
Paid Labor	48	48	37	44	47	45
Insurance	5	7	7	7	6	7
Property Taxes	1	1	1	1	1	1
Miscellaneous	4	7	4	6	7	6
Cash Interest	23	26	32	25	18	25
Total Non-Feed Cash Costs	191	216	179	179	187	190
NON-FEED NON-CASH COSTS						
Unpaid Labor	50	69	61	73	69	65
Machinery Depreciation	13	15	14	16	16	15
Building/Fence Depreciation	20	38	29	28	26	28
Non-Cash Interest	41	44	30	34	47	39
Total Non-Feed Non-Cash Costs	202	165	134	151	158	162
Total Costs of Production	\$983	\$973	\$786	\$746	\$769	\$851
Net Returns (over all costs)	\$115	-\$17	-\$225	\$23	\$143	\$8
SUMMARY: \$/LITTER						
Total Returns	1,099	956	561	769	912	859
Feed Costs	668	592	473	415	423	514
Non-Feed Costs (Total)	316	381	313	331	346	337
- Non-Feed Cash Costs	191	216	179	23	187	159
- Non-Feed Non-Cash Costs	124	165	134	151	158	147
Total Costs of Production	983	973	786	746	769	851
Net Returns (over all costs)	\$115	-\$17	-\$225	\$23	\$143	\$8

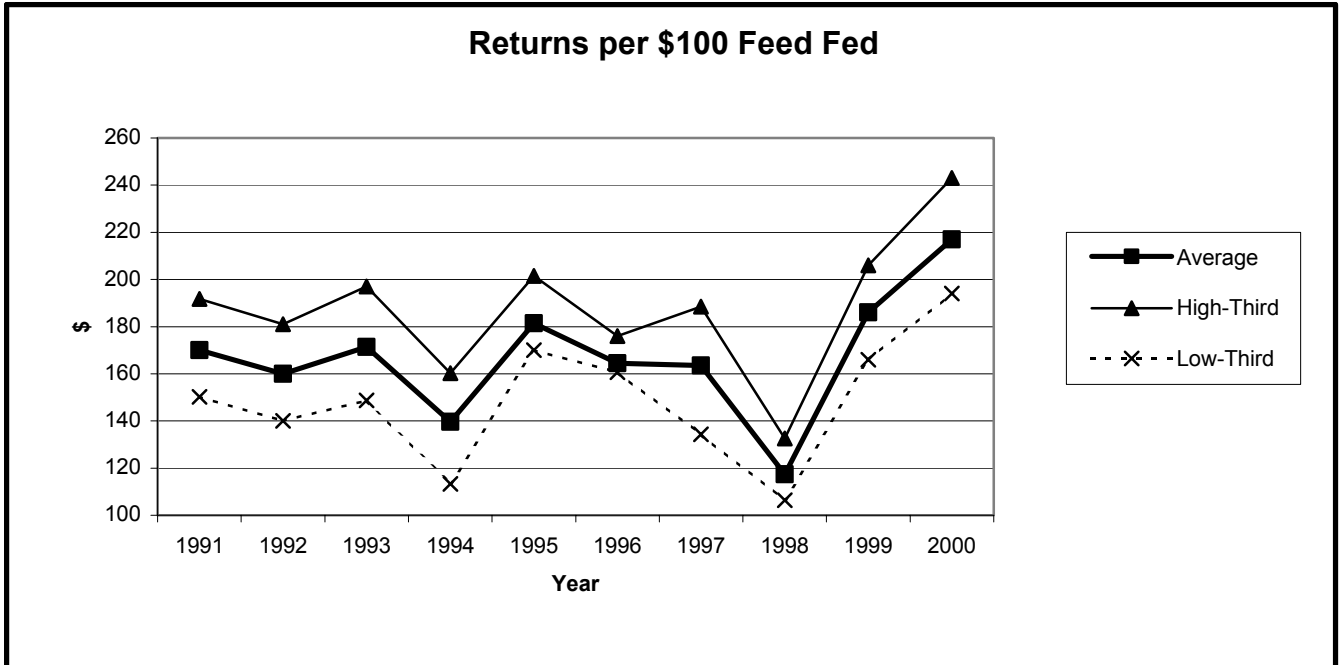


Figure 1. Returns per \$100 Feed Fed

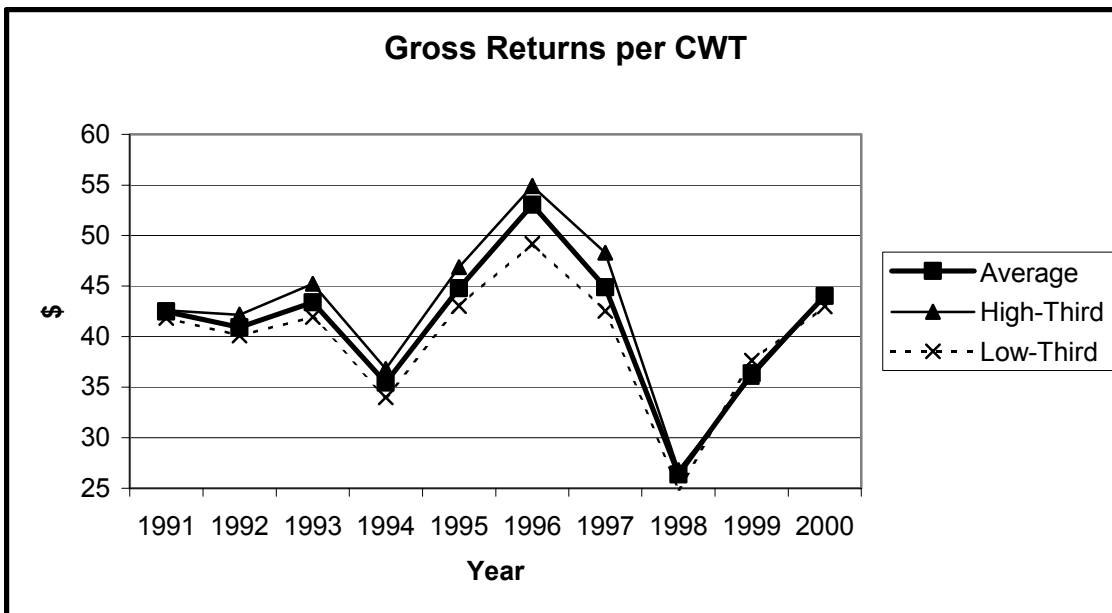


Figure 2. Gross Returns per CWT

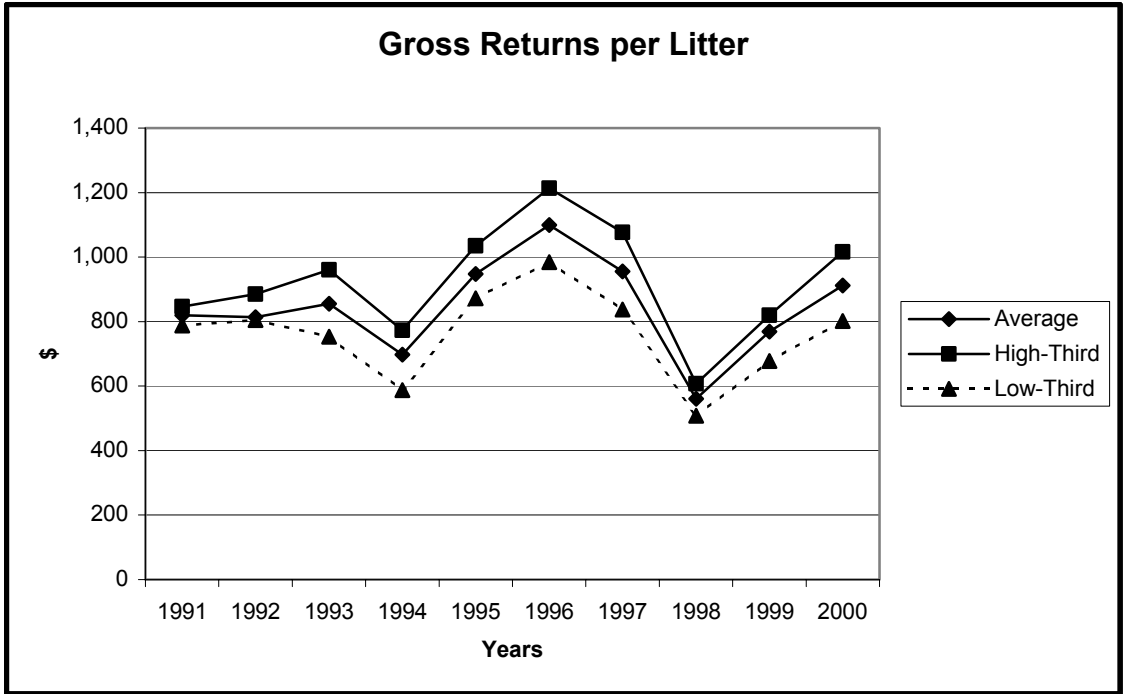


Figure 3. Gross Returns per Litter

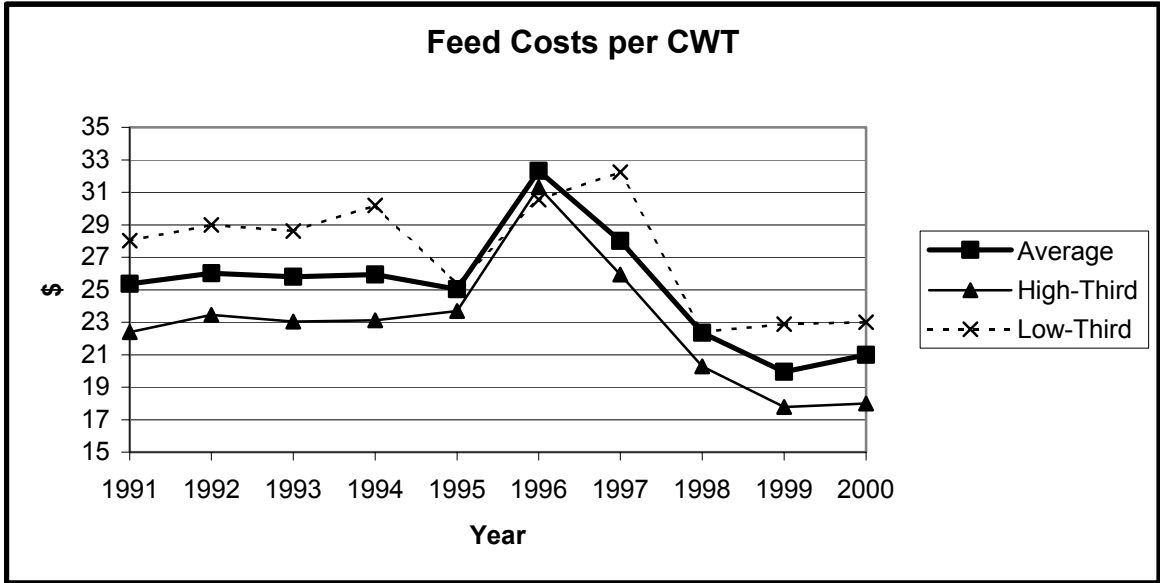


Figure 4. Feed Costs per CWT.

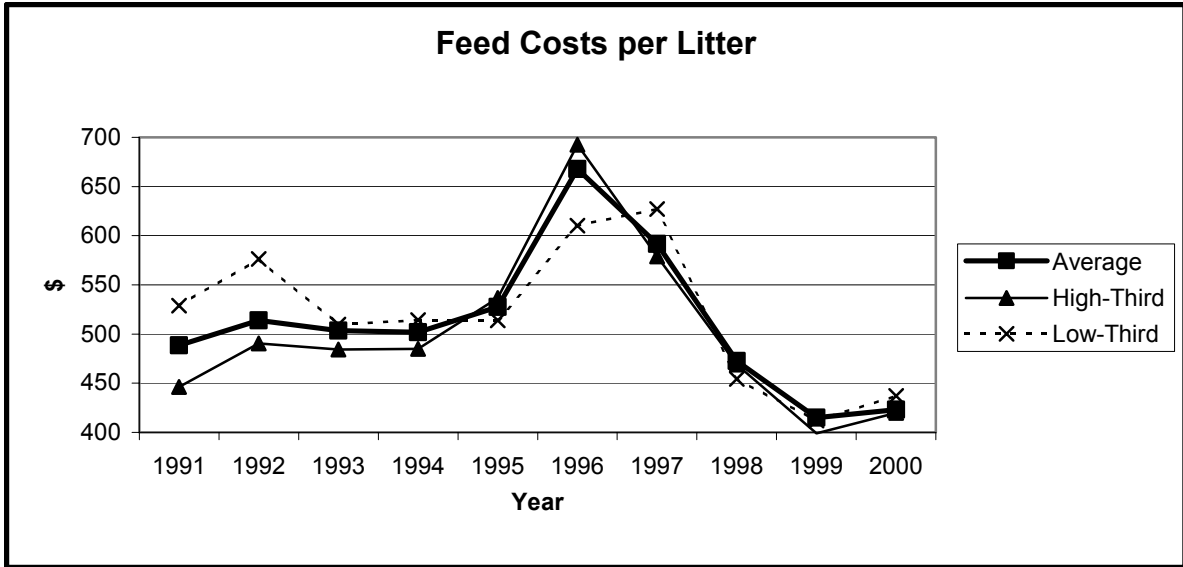


Figure 5. Feed Costs per Litter

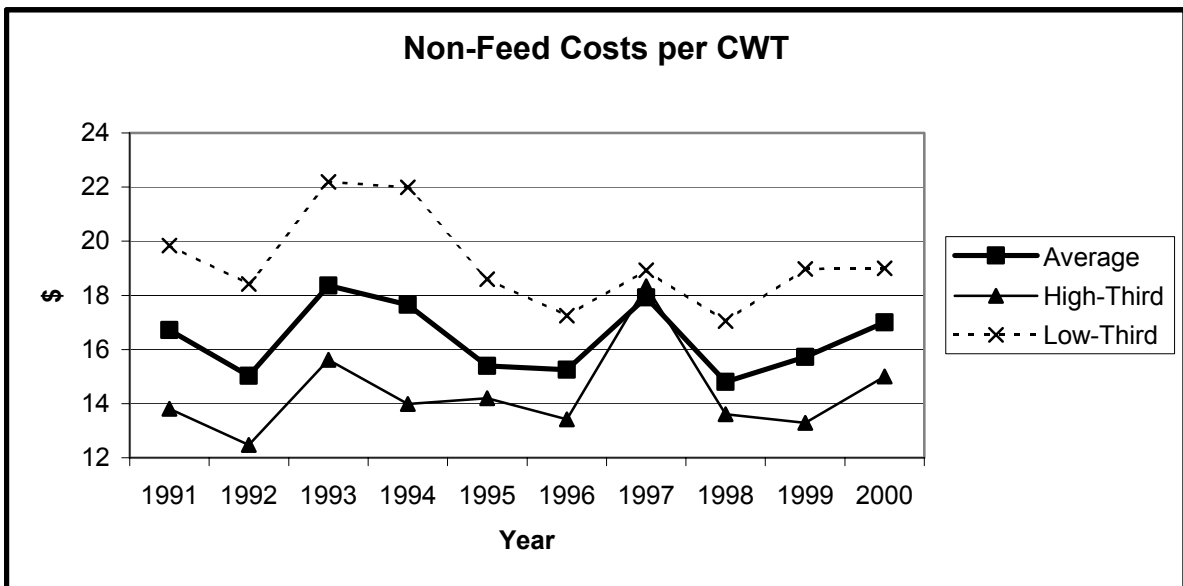


Figure 6. Non-Feed Costs per CWT

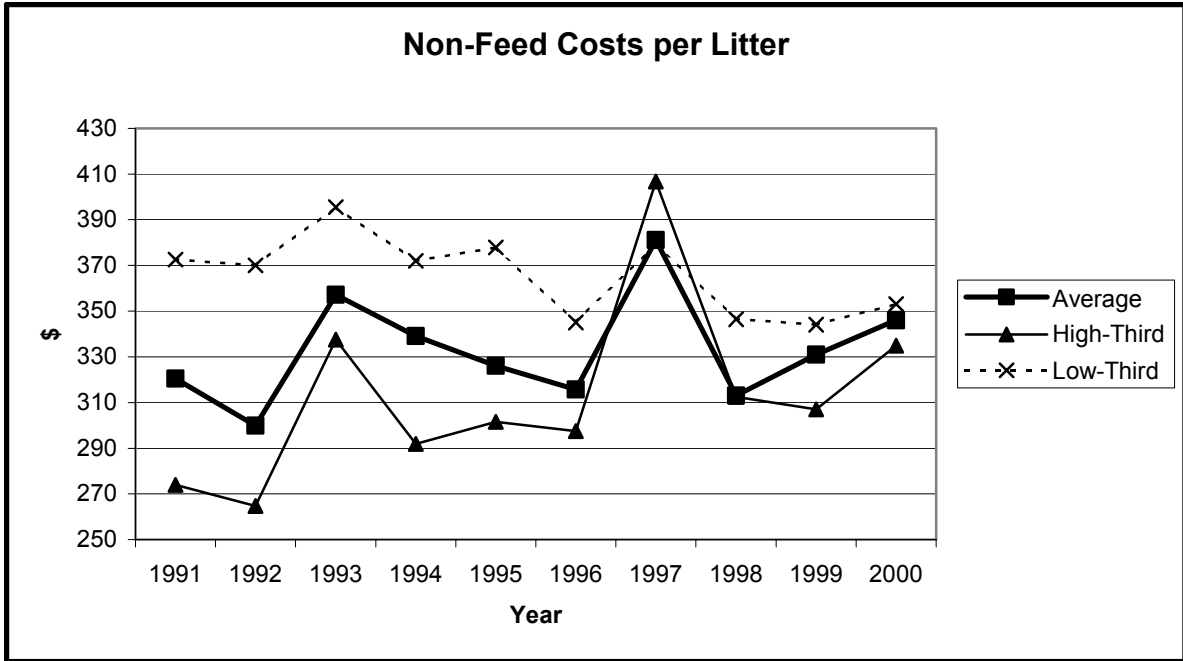


Figure 7. Non-Feed Costs per Litter

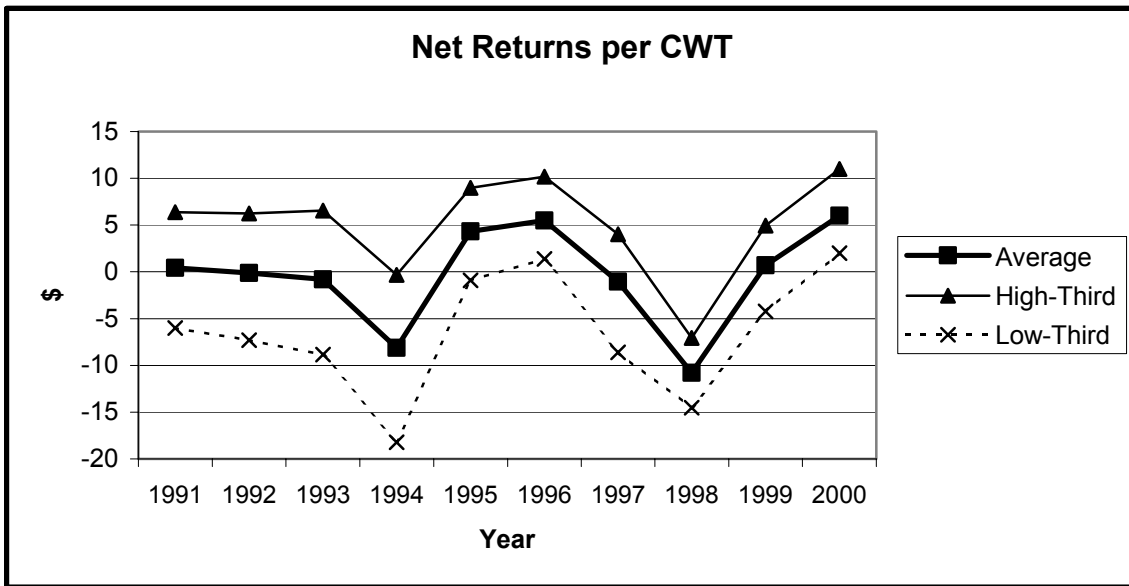


Figure 8. Net Returns per CWT

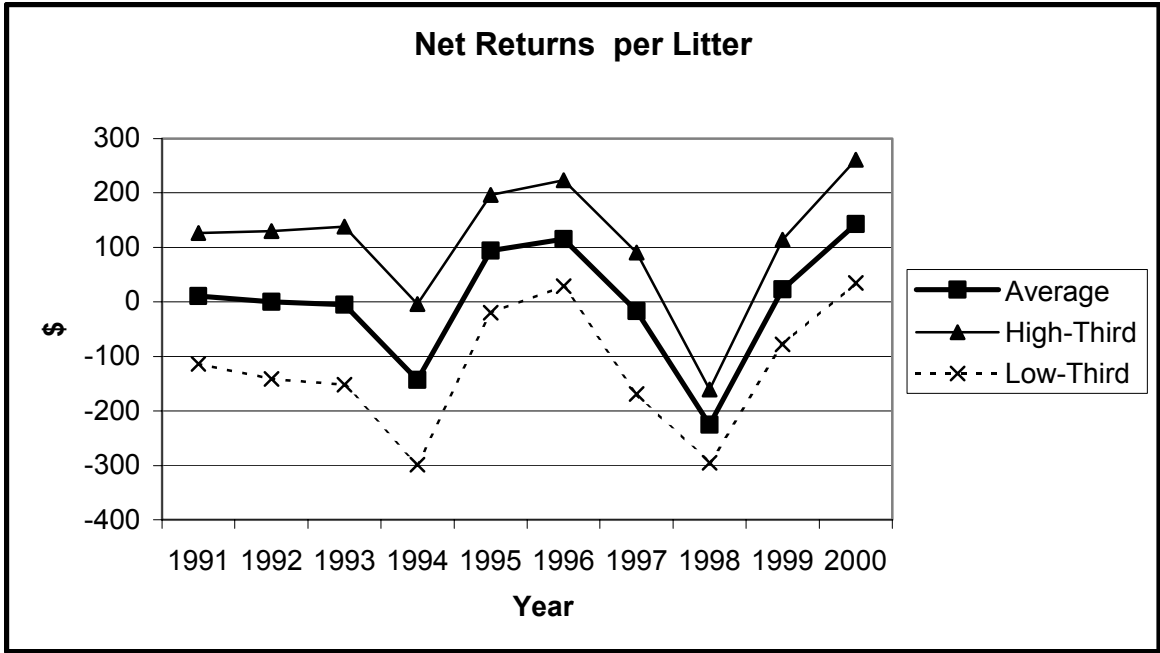


Figure 9. Net Returns per Litter

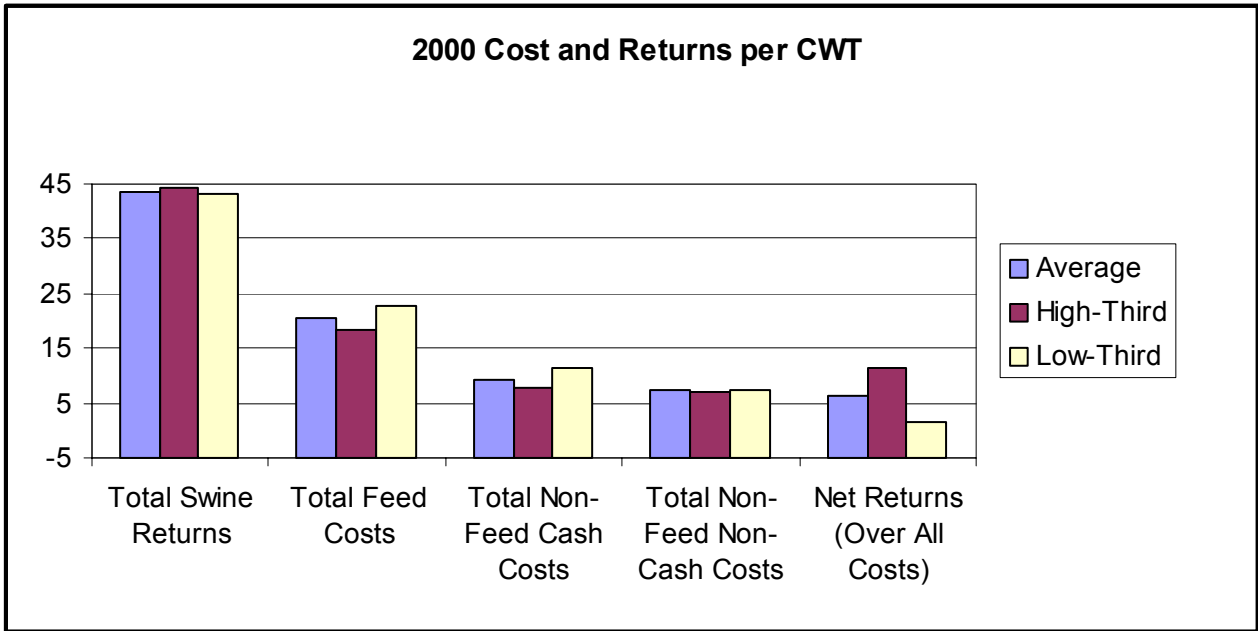


Figure 10. Costs and Returns per CWT

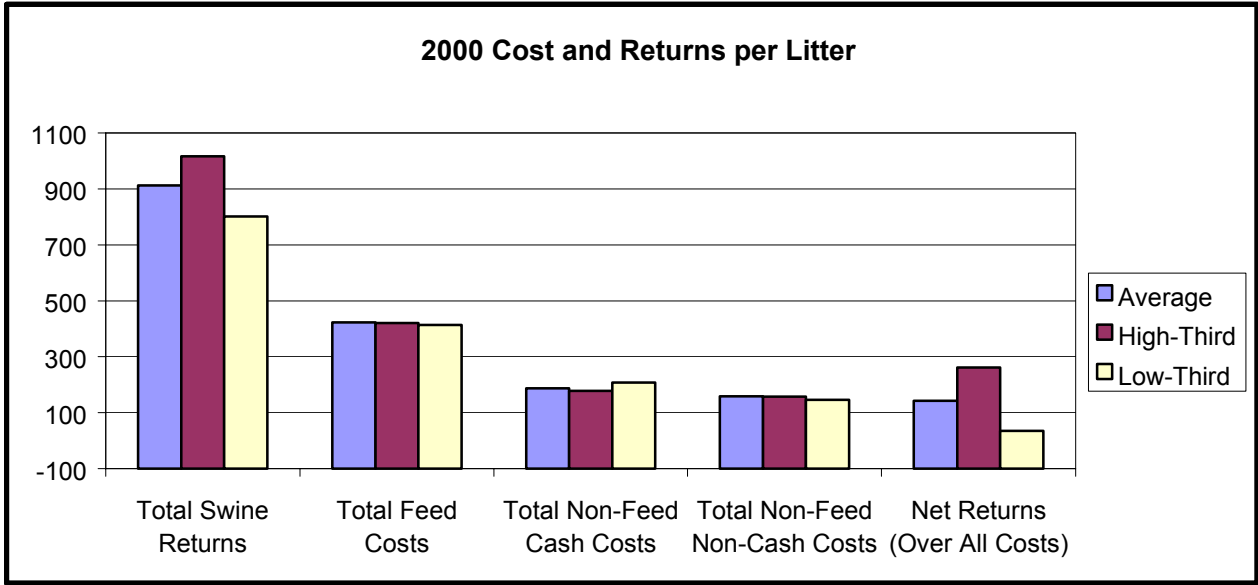


Figure 11. Costs and Returns per Litter