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1999 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 which are available to researchers and educators. Every attempt has been made to select a set of farms for these research studies which are Atypical@ farrow to finish hog 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

Hog producers in 1999 saw a strong increase in net returns from 1998. On a total return basis, producers averaged $21,032 in net returns for 1999 compared to an average loss of -$121,504 in 1998. On a per CWT basis, producers in 1999 earned net returns over all cash and non-cash costs of $0.71 per CWT. In 1998, producers' net returns over all costs was -$10.80. On a per litter basis, the $23 net return over all costs for 1999 compares favorably to 1998's value of -$225.

An increase in hog returns and lower feed costs were the two main reasons for some producers earning a profit in 1999. One must realize that for 1998 and 1999, the yearly average prices received for market hogs were basically the same, but inventory prices were up considerably at the end of 1999 which adds value to the hog returns.

Description of Hog Enterprises

This report summarizes 1999 hog enterprise data from 17 farms that participate in the Kentucky Farm Business Management Program[1]. 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 includes 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 difference in the value of hogs on the farm at the start and the end of the year.

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.

[1]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 record keeping. At year's end, they provide each farmer with a complete summary and analysis of the farm business.

Non-Cash Costs - Unpaid labor, depreciation and interest on investments are considered non-cash costs. Home-grown 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 Aon-farm@ market value (what farmers would receive if the feed was sold and marketing costs were deducted). 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 the following table:

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

	1990	1991	1992	1993	1994	1995	1996	1997	1998	**1999**
Fed Corn Produced on Farm ($/Bu)	2.62	2.54	2.49	2.40	2.51	2.75	3.75	2.78	2.39	**2.11**
Unpaid Labor Rate ($/Year)	16200	16200	16200	17400	18000	19200	19800	21600	22800	**24000**
Interest Rate: Non Land	11%	11%	10%	8.5%	9%	9.5%	9%	9%	9%	**8.5%**
Interest Rate: Land	5%	5%	5%	5%	5%	5%	5%	5%	5%	**5%**

Returns per $100 Feed Fed - A gauge to examine the effectiveness of feed usage. These returns from feeding $100 of feed are 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 equity capital are also returns to these 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 payment, investment, etc.

High-Third and Low-Third - These classifications are determined by the net enterprise returns per litter and per CWT. Tables 7 and 8A 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 8B is similar except net income per litter is used to determine high and low third groups.

Gross Returns

A large part of the improvement in net returns for 1999 can be attributed to higher returns (a good portion due to higher prices on inventory at the end of the year.) The $36.37 per cwt in 1999 is $10 higher than the $26.38 per cwt return in 1998. However, the 1999 per cwt returns are still below the five year average of $41.08. On a per litter basis, producers received $769 per litter compared to $561 per litter in 1998. Again, the 1999 per litter returns are below the five year average of $866 per litter.

Total returns for the high and low third producers show very little differences when compared on a per cwt basis. Low third producers received $1.61 per cwt more than the high third producers. However, on a per litter basis, high third producers grossed 21 percent more per litter than low third producers. This difference in per litter is attributed to the high third group weaning more pigs per litter and selling leaner market hogs. Table 1A shows that the high third of farms produced 2,278 pounds of pork per litter while the low third of farms produced 1,810 pounds of pork per litter.

Feed Costs

Feed costs are the largest expense item for most hog producers. This feed expense typically amounts to over half of the total expenses. The top producers tend to have lower feed costs than the less profitable producers. In previous years, the difference in feed costs between high and low profitability producers has been up to $8 per cwt. In 1999, the difference in feed costs of high and low third producers per cwt is $5.

Feed costs in 1999 averaged close to $20 per cwt. This is below the $22 per cwt in 1998 and below the five year average of $26 per cwt. There are probably two reasons for the lower feed costs in 1999. First, grain prices were lower in 1999 which correlates to cheaper feed prices. Next, producers are becoming more efficient at producing pork and realizing better feed efficiency. Producers in 1999 used 274 pounds of grain to produce 100 pounds of pork. This use of grain is below the five year average of 277 pounds.

Feed costs in 1999 on a per litter basis were $415 per litter. This is $58 per litter below 1998 and $120 per litter below the five year average. Like the per cwt costs, feed was relatively cheap and producers are becoming more efficient.

Non-Feed Cash Costs

The three largest non-feed cash costs per cwt for 1999 are paid labor, utilities, and cash interest. In 1999, utilities became more expensive than veterinary costs. This increase in

utilities is probably due to higher oil prices. The non-feed cash costs averaged $8.61 per cwt and $179 per litter in 1999. In 1998, these non-feed cash costs were $8.45 per cwt and $179 per litter. On a per cwt basis, the largest increase was in paid labor which went from $1.79 to $2.19, a 22 percent increase.

Non-Feed Non-Cash Costs

These costs include unpaid labor, depreciation, and non-cash interest. Unpaid labor is typically the largest non-feed non-cash cost. Non-feed non-cash costs averaged $7.12 per cwt in 1999, a 12 percent increase from 1998.

(over all costs)

Net returns averaged $0.71 per cwt and $23.24 per litter in 1999. In 1998, these net returns were -$10.80 per cwt and -$225 per litter. 1999 net returns were also above the five year average.

There is also a large difference in net returns between high third and low third producers. High third producers earned net returns of $4.95 per cwt compared to the low third producer=s net returns of -$4.24 per cwt. On a per litter basis, high third producers earned $113 while low producers earned -$78.

Other Production Variables

The average 1999 farm produced 1.93 litters per sow which is nearly identical to 1998. Pigs weaned per sow per year also held steady at 17.47 pigs. Pounds of pork per sow was 4,088 pounds in 1999 compared to 4,139 pounds in 1998. Death loss rates were up slightly in 1999. The death loss for percent of pounds of pork produced was 2.62 percent in 1999 compared to 2.16 percent in 1998.

Major Production Differences Between High and Low Third Producers

Feed Costs Per CWT - From 1990 to 1998, the average difference in feed costs per cwt of pork between the high and low third producers was $4.46. In 1999, this difference was $5.12 per cwt. If one assumes a market weight of 250 pounds, this translates to a difference of $12.80 per pig in feed costs. One has to understand that the breeding herd feed costs are 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 $206 per $100 of feed while low return farms earned $166.

Pigs Weaned Per Litter - From 1990 to 1998, sows from the high third producers weaned 0.61 more pigs per litter on average than the low third producers. In 1999, the high third producers weaned 0.95 more pigs per litter despite only farrowing 0.64 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 0.95 pigs weaned per litter would equate to 380 additional pigs.

Pounds of Pork Per Sow - From 1990 to 1998, sows from the high third producers produced 749 more pounds of pork on average than those from the low third producers. In 1999, high third farmers produced 823 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 1998, death loss for the high third producers averaged 3.06 percentage units lower than death loss for the low third producers. In 1999, this difference was 4.58. On a farm that farrows 400 litters per year and weans 9 pigs per litter, this translates into a decreased death loss of 165 pigs per year.

Pounds of Pork per Litter - In 1999, the high third of producers produced 2,278 pounds of pork per litter while the low third produced 1,810 pounds per litter. On a farm farrowing 400 litters per year, this 468 additional pounds per litter amounts to an additional 187,200 pounds per year. Because the average hog farm netted $7.82 per cwt over all cash costs, this additional production could amount to an extra $14,639 in cash.

Non-Feed Cash Costs - High third producers paid 32 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 much higher utility and paid labor expenses than did high third producers. On a per cwt basis, the utilities were 138 percent higher while the paid labor was 61 percent higher for the low third producers.

Table 2. Differences Between High and Low Third Producers (Kentucky Farm Business Management Program)

	Feed Costs/CWT Pork		Litters/Sow		Pigs Weaned/Litter		Pounds of Pork/Sow		Death Loss (% of Pigs Weaned)	
Year	**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	8.51	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%
Average	$23.46	$27.99	2.02	1.88	9.04	8.40	4,323	3,566	4.14%	7.36%
Difference	-$4.53		0.14		0.64		757		-3.21%	

Historical Swine Industry Statistics

Tables 3 and 4 show the structural changes to the Kentucky swine industry since 1990. From 1990 to 1999, the number of swine operations in Kentucky dropped from 6,500 to 1,400 (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].

		Number of Operations by Size			
Year	Operations	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				

[a]SOURCE: USDA National Agricultural Statistics Service.
[b]Operations not broken out by size prior to 1992.
[c]Number of operations by size not available for 1999.

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

		Percentage of Operations by Size			
Year	Total No Operations.	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				

[a]SOURCE: USDA National Agricultural Statistics Service.
[b]Percentage of operations by size not available for 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 6 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, 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	Pigs per Litter	Per Breeding Animal			
		Litters	Slaughter Pigs (hd)	Average Slaughter Weight (lbs)	Pork Production (lbs)
1990	7.87	1.67	12.41	249	2,230
1991	7.90	1.76	12.83	252	2,322
1992	8.08	1.69	13.08	252	2,369
1993	8.13	1.68	13.06	254	2,389
1994	8.19	1.73	13.36	255	2,465
1995	8.32	1.68	13.64	256	2,523
1996	8.50	1.64	13.51	257	2,498
1997	8.66	1.75	13.98	260	2,622
1998	8.71	1.73	14.52	260	2,728
1999	8.79	1.75	15.20	261	2,885

[a]SOURCE: University of Missouri.

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

[a]SOURCE: 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 disappointing year in 1998, some hog producers realized a profit in 1999. The comparison between top third and bottom third points out that although in general, hog producers had a better year in 1999 there were producers still realizing negative returns.

In the general categories of feed costs, non-feed cash costs, and non-feed non-cash

costs, the top third producers had fewer costs than the bottom third of producers. The bottom third in 1999 realized a return of $1.61 per hundredweight more than the top third, but the most important figure of all, *Net Returns Over All Costs* allowed the better producers to realize a profit of $4.95 CWT. The bottom third of producers lost $4.24 CWT, a $9.19 per hundredweight of pork produced difference between the two groups.

The following tables and figures included in this publication provide data and information for 1999 and historical data back to 1990.

Table 7. Production Summary - 1999

	Average	High-Third	Low-Third
NUMBER OF ENTERPRISES	17	6	6
SUMMARY			
Total Swine Returns	290,803	468,885	196,349
Total Feed Cost	152,223	227,735	119,488
Returns Above Feed Cost	138,579	241,150	76,862
Total Non-Feed Costs	117,548	168,308	97,802
Net Returns (over all costs)	**21,032**	**72,842**	**-20,941**
OTHER ECONOMIC VARIABLES			
Returns per $100 Feed Fed	186	206	166
Feed Costs per cwt Pork	19.94	17.77	22.89
CAPITAL INVESTMENT PER SOW			
Livestock	383	354	423
Non-Livestock	914	888	832
Total	**1297**	**1242**	**1255**
OTHER PRODUCTION VARIABLES			
Number of Sows	193	290	155
Number of Litters	378	586	292
Litters per Sow	1.93	1.95	1.95
Pigs Weaned per Sow/Year	17.47	18.00	16.14
Pigs Weaned per Litter	9.04	9.24	8.29
Pigs Farrowed per Litter	10.47	10.68	10.04
Total Pork Produced (LB)	800,117	1,298,992	519,167
Pounds of Pork per Sow	4,088	4,364	3,541
Pounds of Pork per Litter	2,124	2,278	1,810
Death Loss: % of Pigs Weaned	7.33	5.21	9.79
Death Loss: % of LB Produced	2.62	2.15	3.02
Grain per cwt Pork(LB)	274	251	312
Protein per cwt Pork(LB)	78	73	86
Total Concentrates (LB)	351	324	398
LABOR SUMMARY			
Cost per Sow	224	205	255
Cost per Litter	117	110	132

Table 8A. Costs and Returns (Per CWT) - 1999

	Average	High-Third	Low-Third
TOTAL SWINE RETURNS	36.37	36.02	37.63
FEED COSTS			
Protein and Minerals -			
Purchased Concentrates	9.70	8.35	11.17
Grains (Purchased or Farm Grown)	10.24	9.43	11.72
Total Feed Costs	**19.94**	**17.77**	**22.89**
Returns Above Feed	**16.43**	**18.25**	**14.74**
NON-FEED CASH COSTS			
Livestock Supplies	0.68	0.61	0.54
Veterinary	0.93	1.17	0.89
Fuel & Oil	0.38	0.23	0.47
Machinery Repair	0.57	0.42	0.62
Bldg/Fence Repair	0.65	0.45	0.95
Machinery Hire	0.30	0.13	0.45
Utilities	0.99	0.66	1.57
Auto-Farm Share	0.01	0.00	0.02
Paid Labor	2.19	2.07	3.33
Insurance	0.35	0.34	0.40
Property Taxes	0.06	0.04	0.06
Miscellaneous	0.30	0.20	0.34
Cash Interest	1.21	1.16	1.45
Total Non-Feed Cash Costs	**8.61**	**7.49**	**11.11**
NON-FEED NON-CASH COSTS			
Unpaid Labor	3.49	2.74	4.04
Machinery Depreciation	0.75	0.60	0.85
Building/Fence Depreciation	1.28	1.27	1.13
Non-Cash Interest	1.60	1.20	1.86
Total Non-Feed Non-Cash Costs	**7.12**	**5.80**	**7.88**
Total Costs of Production	**35.67**	**31.07**	**41.87**
Net Returns (over all costs)	**0.71**	**4.95**	**-4.24**
SUMMARY: $/CWT			
Total Returns	36.37	36.02	37.63
Feed Costs	19.94	17.77	22.89
Non-Feed Costs (Total)	15.73	13.29	18.98
- Non-Feed Cash Costs	8.61	7.49	11.11
- Non-Feed Non-Cash Costs	7.12	5.80	7.88
Total Costs of Production	35.67	31.07	41.87
Net Returns (over all costs)	**0.71**	**4.95**	**-4.24**

Table 8B. Costs and Returns (Per Litter) – 1999

	Average	High-Third	Low-Third
TOTAL SWINE RETURNS	769.04	819.77	678.08
FEED COSTS			
Protein & Minerals -			
Purchased Concentrates	203.00	183.40	203.00
Grains (Purchased or Farm Grown)	212.35	215.54	208.78
Total Feed Costs	**415.26**	**398.96**	**411.70**
Returns above Feed	**353.78**	**420.81**	**266.38**
NON-FEED CASH COSTS			
Livestock Supplies	15.00	14.00	10.00
Veterinary	20.00	28.00	17.00
Fuel & Oil	8.00	5.00	8.00
Machinery Repair	12.00	10.00	11.00
Bldg/Fence Repair	14.00	10.00	18.00
Machinery Hire	7.00	3.00	10.00
Utilities	20.00	15.00	28.00
Auto-Farm Share	0.00	0.00	0.00
Paid Labor	44.00	48.00	58.00
Insurance	7.00	8.00	7.00
Property Taxes	1.00	1.00	1.00
Miscellaneous	6.00	5.00	6.00
Cash Interest	25.00	28.00	24.00
Total Non-Feed Cash Costs	**179.00**	**176.00**	**198.00**
NON-FEED NON-CASH COSTS			
Unpaid Labor	73.00	62.00	74.00
Machinery Depreciation	16.00	14.00	16.00
Building/Fence Depreciation	28.00	29.00	21.00
Non-Cash Interest	34.00	26.00	34.00
Total Non-Feed Non-Cash Costs	**151.00**	**131.00**	**146.00**
Total Costs of Production	**745.80**	**706.07**	**755.59**
Net Returns (over all costs)	**23.24**	**113.70**	**-77.52**
SUMMARY: $/LITTER			
Total Returns	769.00	820.00	678.00
Feed Costs	415.00	399.00	412.00
Non-Feed Costs (total)	330.54	307.11	343.89
- Non-Feed Cash Costs	179.00	176.00	198.00
- Non-Feed Non-Cash Costs	151.11	131.08	145.79
Total Costs of Production	745.80	706.07	745.80
Net Returns (over all costs)	**23.24**	**113.70**	**-77.52**

Table 9. Five Year Production Summary

	1995	1996	1997	1998	1999	5 YR AVG
NUMBER OF ENTERPRISES	11	10	13	16	17	13
SUMMARY						
Total Swine Returns	280,560	403,493	347,707	303,543	290,803	325,221
Total Feed Cost	153,144	250,329	215,403	249,537	152,223	204,127
Returns Above Feed Cost	127,417	153,164	132,304	54,006	138,579	121,094
Total Non-Feed Costs	91,946	110,348	133,849	175,510	117,548	125,840
Net Returns (over all costs)	**$35,471**	**$42,816**	**-$1,545**	**-$121,504**	**$21,032**	**-$4,746**
OTHER ECONOMIC VARIABLES						
Returns per $100 Feed Fed	181	165	164	117	186	163
Price Rec'd per CWT - All Hogs	42.47	52.49	51.52	33.31	33.32	42.62
Feed Costs per cwt Pork	25.04	32.32	28.00	22.37	19.94	25.53
CAPITAL INVESTMENT PER SOW						
Livestock	551	702	571	392	383	520
Non-Livestock	857	828	917	973	914	898
Total	**$1,407**	**$1,530**	**$1,488**	**$1,365**	**$1,297**	**$1,417**
OTHER PRODUCTION VARIABLES - avg per operation						
Number of Sows	150	191	201	274	193	202
Number of Litters	297	376	367	538	378	391
Litters per Sow	2.04	2.10	1.91	1.95	1.93	2
Pigs Weaned per Sow/Year	18.44	18.57	17.48	17.30	17.47	18
Pigs Weaned per Litter	9.05	8.87	9.18	8.85	9.04	9
Pigs Farrowed per Litter	10.34	10.10	10.42	10.36	10.47	10
Total Pork Produced (LB)	614,524	762,388	784,672	1,131,363	800,117	818,613
Pounds of Pork per Sow	4,349	4,348	4,067	4,139	4,088	4,198
Pounds of Pork per Litter	2,119	2,067	2,130	2,123	2,124	2,113
Death Loss: % of Pigs Weaned	5.92	7.06	5.78	6.03	7.33	6.42
Death Loss: % of LB Produced	1.96	2.37	2.28	2.16	2.62	2.28
Selling Weight All Hogs	264	244	246			251
Grain per cwt Pork(LB)	291	278	278	266	274	277
Protein per cwt Pork(LB)	74	75	78	77	78	76
Total Concentrates (LB)	365	353	355	343	351	353
LABOR SUMMARY						
Cost per Sow	210	208	222	191	224	211
Cost per Litter	104	98	117	99	117	107

Table 10A. Costs and Returns (Per CWT) - Five Year Summary

	1995	1996	1997	1998	1999	5 YR AVG
TOTAL SWINE RETURNS	44.75	53.06	44.86	26.38	36.37	41.09
FEED COSTS						
Protein and Minerals -						
Purchased Concentrates	10.73	14.17	14.53	10.93	9.70	12.01
Grains (Purchased or Farm Grown)	14.31	18.16	13.47	11.43	10.24	13.52
Total Feed Costs	**25.04**	**32.32**	**28.00**	**22.36**	**19.94**	**25.53**
Returns Above Feed	**$19.72**	**$20.73**	**$16.86**	**$4.02**	**$16.43**	**$15.55**
NON-FEED CASH COSTS						
Livestock Supplies	0.82	0.55	0.90	0.62	0.68	0.71
Veterinary	1.18	1.30	1.40	0.92	0.93	1.14
Fuel & Oil	0.37	0.34	0.31	0.27	0.38	0.34
Machinery Repair	0.73	0.75	0.79	0.71	0.57	0.71
Bldg/Fence Repair	0.76	1.02	1.35	0.71	0.65	0.90
Machinery Hire	0.11	0.21	0.19	0.47	0.30	0.26
Utilities	1.02	1.07	0.96	0.88	0.99	0.98
Auto-Farm Share	0.13	0.00	0.00	0.03	0.01	0.03
Paid Labor	2.55	2.37	2.28	1.79	2.19	2.24
Insurance	0.30	0.27	0.34	0.32	0.35	0.32
Property Taxes	0.09	0.05	0.04	0.05	0.06	0.06
Miscellaneous	0.23	0.22	0.33	0.18	0.30	0.25
Cash Interest	0.99	1.14	1.29	1.51	1.21	1.23
Total Non-Feed Cash Costs	**9.29**	**9.29**	**10.20**	**8.45**	**8.61**	**9.17**
NON-FEED NON-CASH COSTS						
Unpaid Labor	2.41	2.39	3.25	2.86	3.49	2.88
Machinery Depreciation	0.75	0.64	0.70	0.67	0.75	0.70
Building/Fence Depreciation	0.95	0.95	1.78	1.38	1.28	1.27
Non-Cash Interest	2.00	1.99	2.00	1.43	1.60	1.80
Total Non-Feed Non-Cash Costs	**6.10**	**5.96**	**7.72**	**6.34**	**7.12**	**6.65**
Total Costs of Production	**$40.43**	**$47.57**	**$45.93**	**$37.16**	**35.67**	**41.35**
Net Returns (over all costs)	**$4.33**	**$5.48**	**-$1.06**	**-$10.80**	**$0.71**	**-$0.27**
SUMMARY: $/CWT						
Total Returns	44.75	53.06	44.86	26.38	36.37	41.09
Feed Costs	25.04	32.33	28.00	22.36	19.94	25.53
Non-Feed Costs (Total)	15.39	15.25	17.93	14.81	15.73	15.82
- Non-Feed Cash Costs	9.29	9.29	10.20	8.45	8.61	9.17
- Non-Feed Non-Cash Costs	6.10	5.96	7.72	6.34	7.12	6.65
Total Costs of Production	40.43	47.57	45.93	37.16	35.67	41.35
Net Returns (over all costs)	**$4.33**	**$5.48**	**-$1.06**	**-$10.80**	**$0.71**	**-$0.27**

Table 10B. Costs and Returns (Per Litter) - Five Year Summary

	1995	1996	1997	1998	1999	5 YR AVG
TOTAL SWINE RETURNS	947	1,099	956	561	769	866
FEED COSTS						
Protein and Minerals -						
Purchased Concentrates	227	289	290	231	203	248
Grains (Purchased or Farm Grown)	300	379	302	242	212	287
Total Feed Costs	**527**	**668**	**592**	**473**	**415**	**535**
Returns Above Feed	**$420**	**$431**	**$364**	**$88**	**$354**	**$331**
NON-FEED CASH COSTS						
Livestock Supplies	18	11	20	13	15	15
Veterinary	26	27	30	20	20	25
Fuel & Oil	8	7	7	6	8	7
Machinery Repair	15	16	17	15	12	15
Bldg/Fence Repair	16	21	29	15	14	19
Machinery Hire	2	4	4	10	7	5
Utilities	22	22	20	19	20	21
Auto-Farm Share	3	0	0	1	0	1
Paid Labor	52	48	48	37	44	46
Insurance	6	5	7	7	7	7
Property Taxes	2	1	1	1	1	1
Miscellaneous	5	4	7	4	6	5
Cash Interest	21	23	26	32	25	25
Total Non-Feed Cash Costs	**195**	**191**	**216**	**179**	**179**	**192**
NON-FEED NON-CASH COSTS						
Unpaid Labor	52	50	69	61	73	61
Machinery Depreciation	17	13	15	14	16	15
Building/Fence Depreciation	20	20	38	29	28	27
Non-Cash Interest	43	41	44	30	34	38
Total Non-Feed Non-Cash Costs	**131**	**202**	**165**	**134**	**151**	**157**
Total Costs of Production	**$854**	**$983**	**$973**	**$786**	**$746**	**$868**
Net Returns (over all costs)	**$94**	**$115**	**-$17**	**-$225**	**$23**	**-$2**
SUMMARY: $/LITTER						
Total Returns	947	1,099	956	561	769	866
Feed Costs	527	668	592	473	415	535
Non-Feed Costs (Total)	326	316	381	313	331	333
- Non-Feed Cash Costs	195	191	216	179	23	161
- Non-Feed Non-Cash Costs	131	124	165	134	151	141
Total Costs of Production	854	983	973	786	746	868
Net Returns (over all costs)	**$94**	**$115**	**-$17**	**-$225**	**$23**	**-$2**

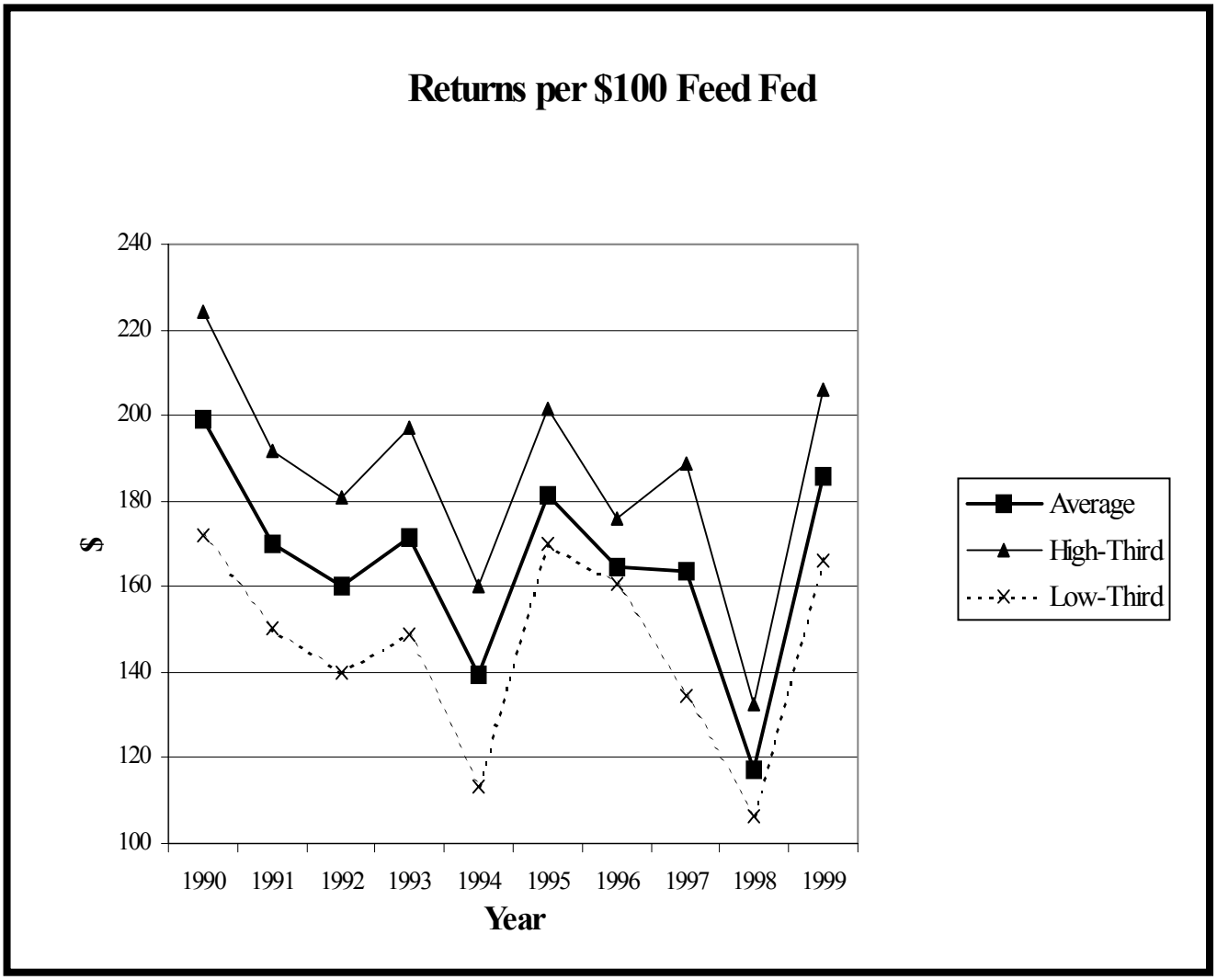

Figure 1. Returns per $100 Feed Fed

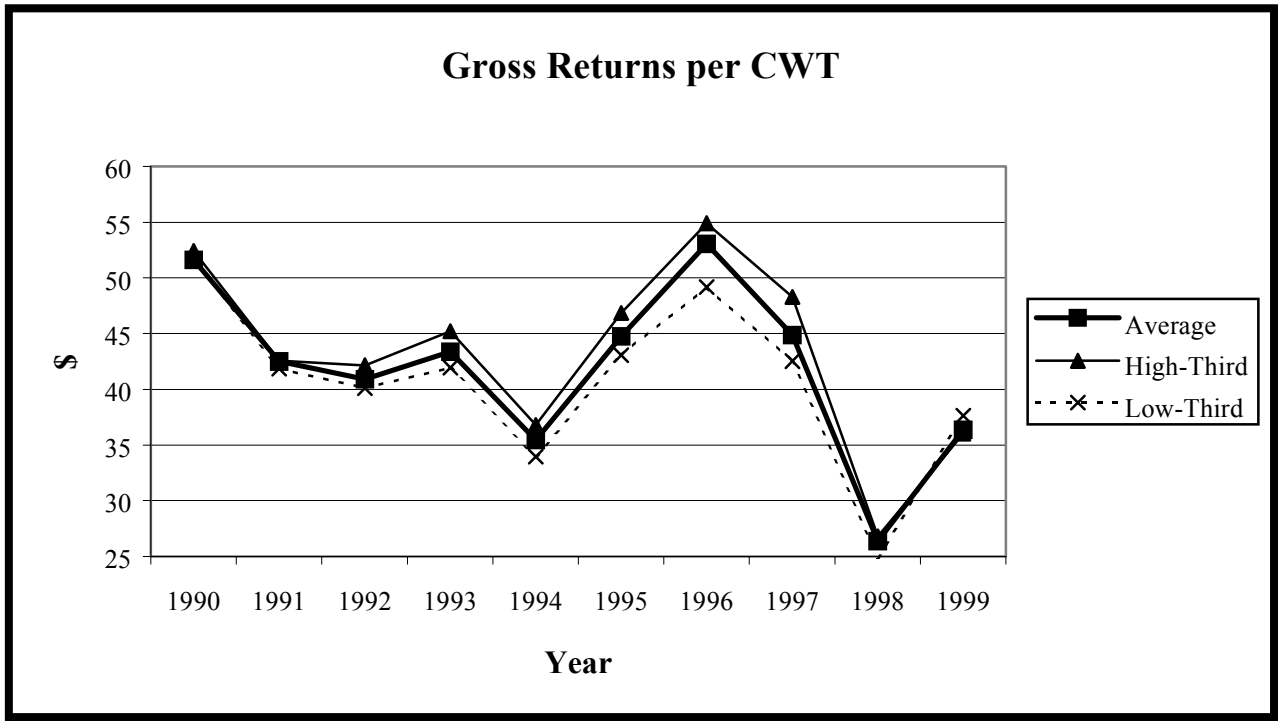

Figure 2. Gross Returns per CWT

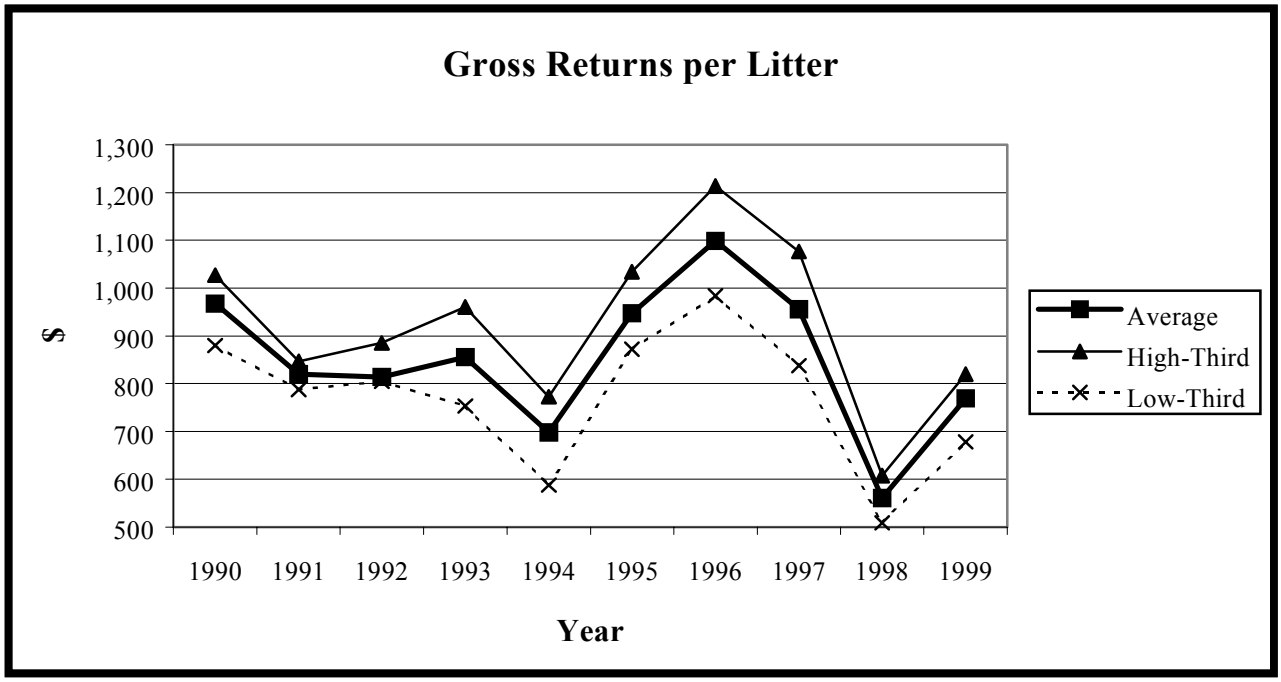

Figure 3. Gross Returns per Litter

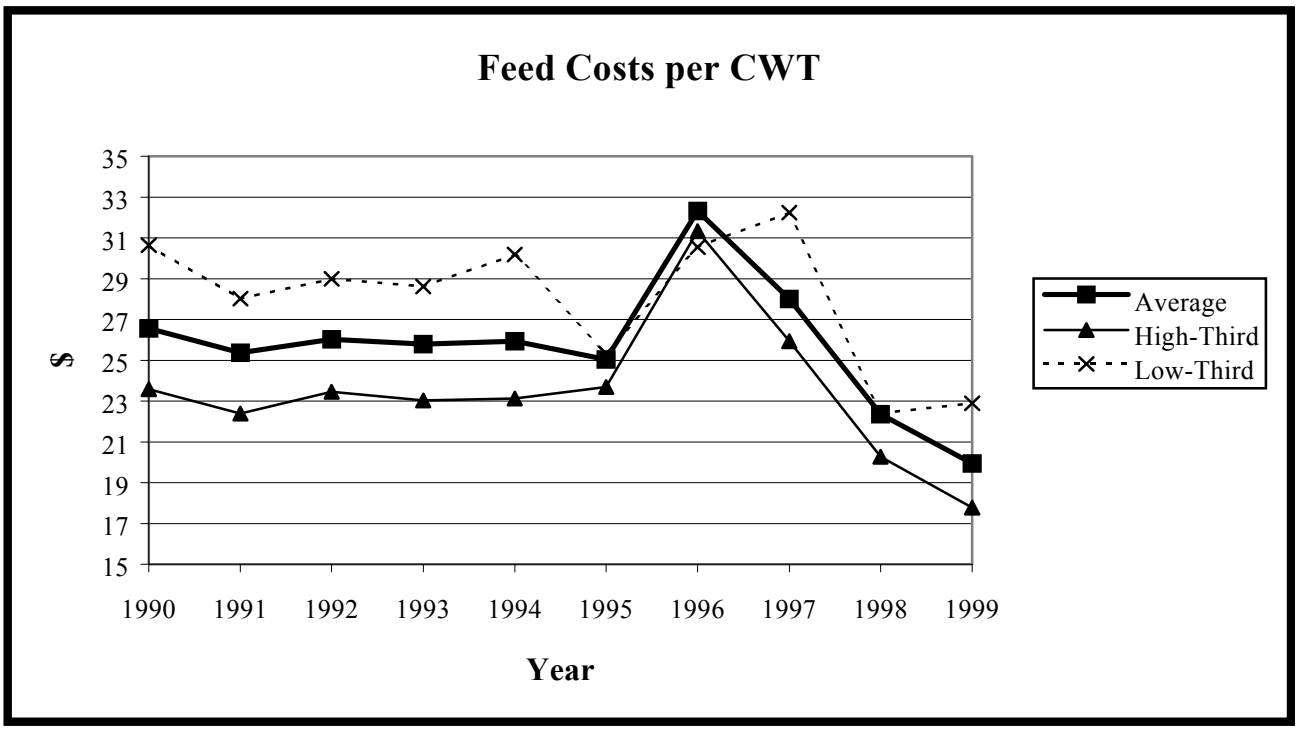

Figure 4. Feed Costs per CWT

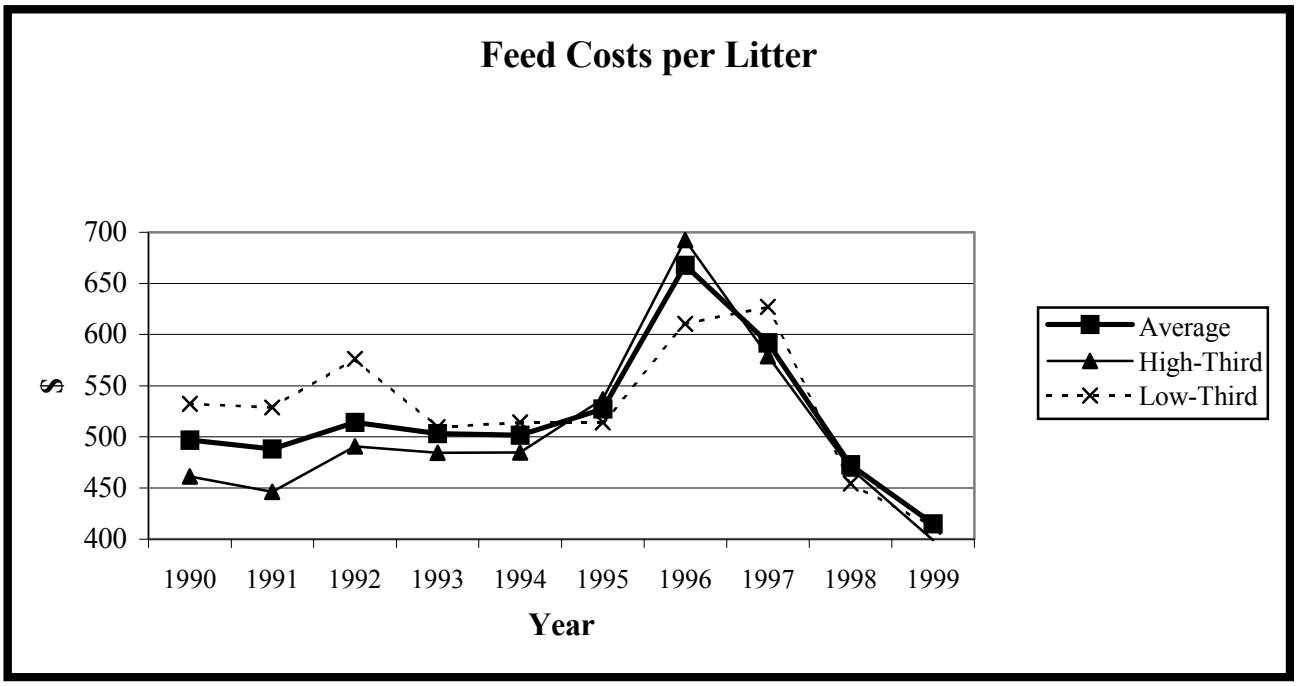

Figure 5. Feed Costs per Litter

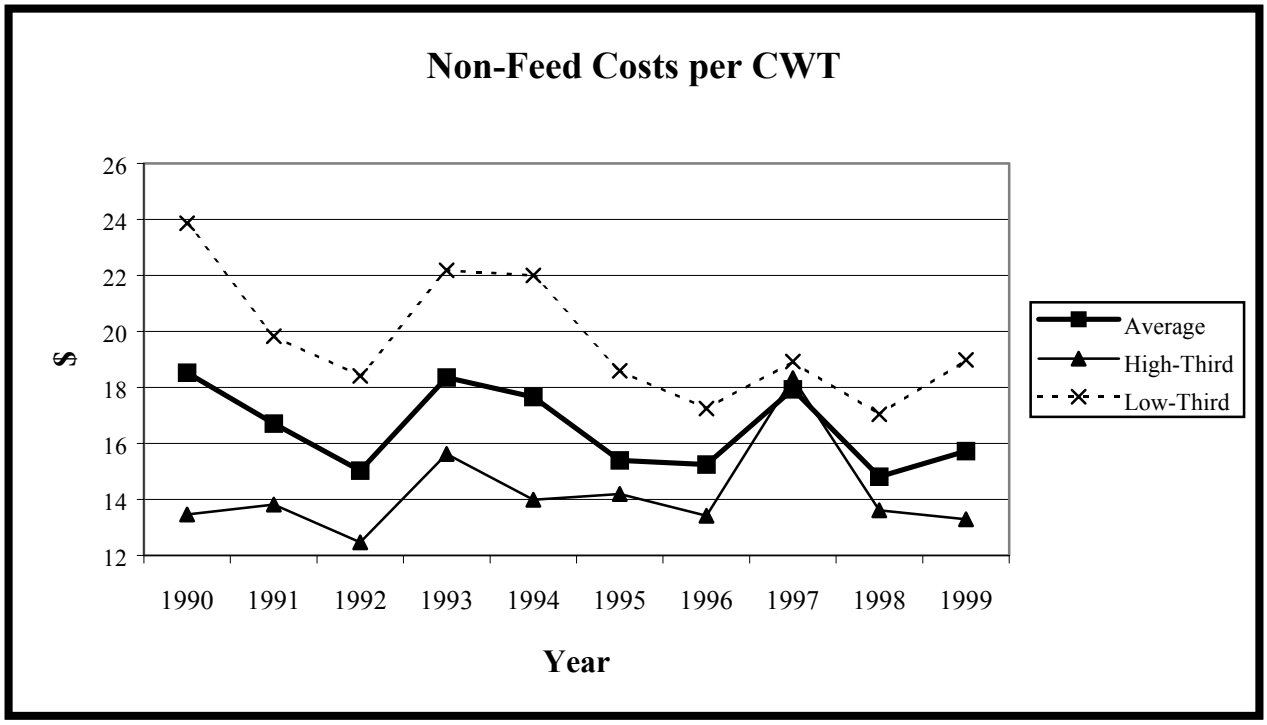

Figure 6. Non-Feed Costs per CWT

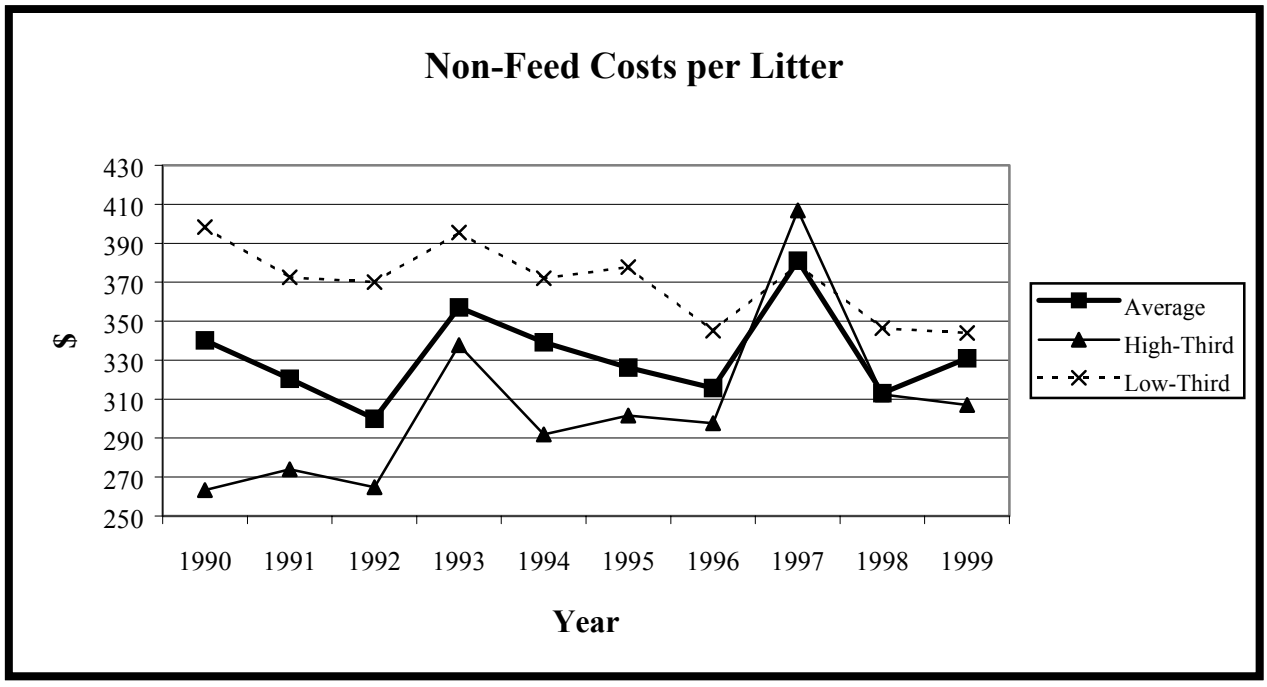

Figure 7. Non-Feed Costs per Litter

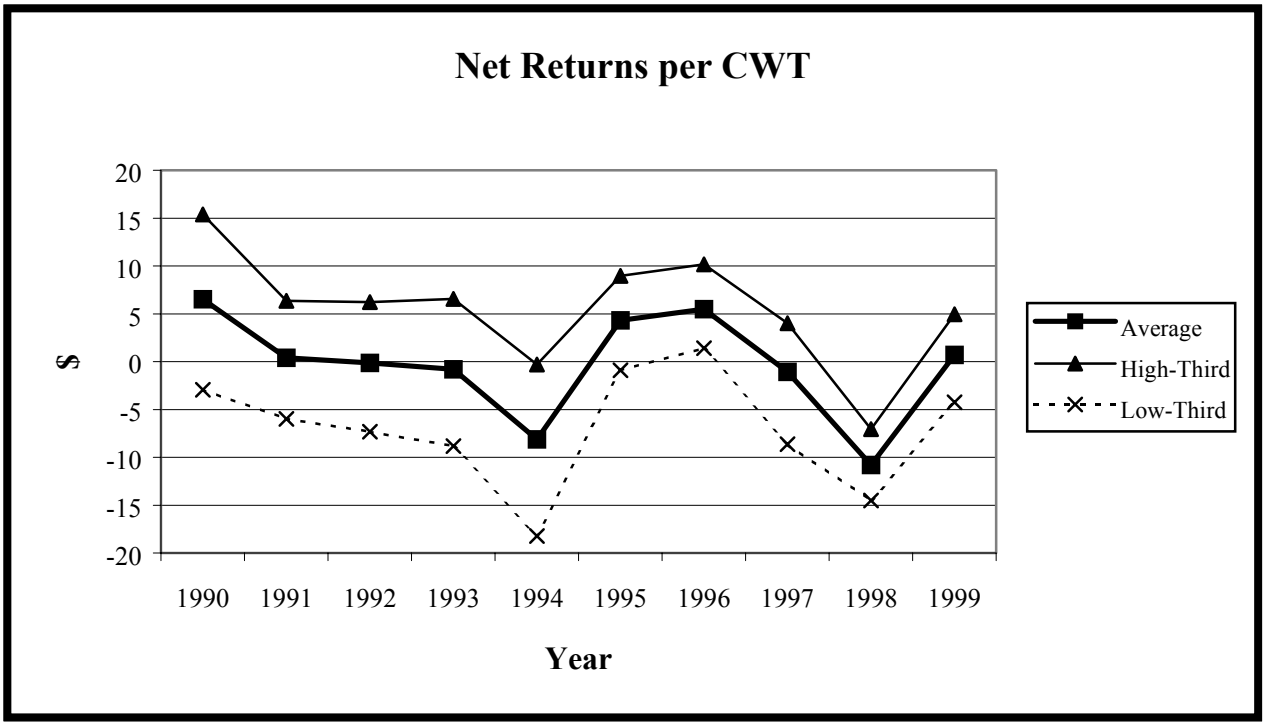

Figure 8. Net Returns per CWT

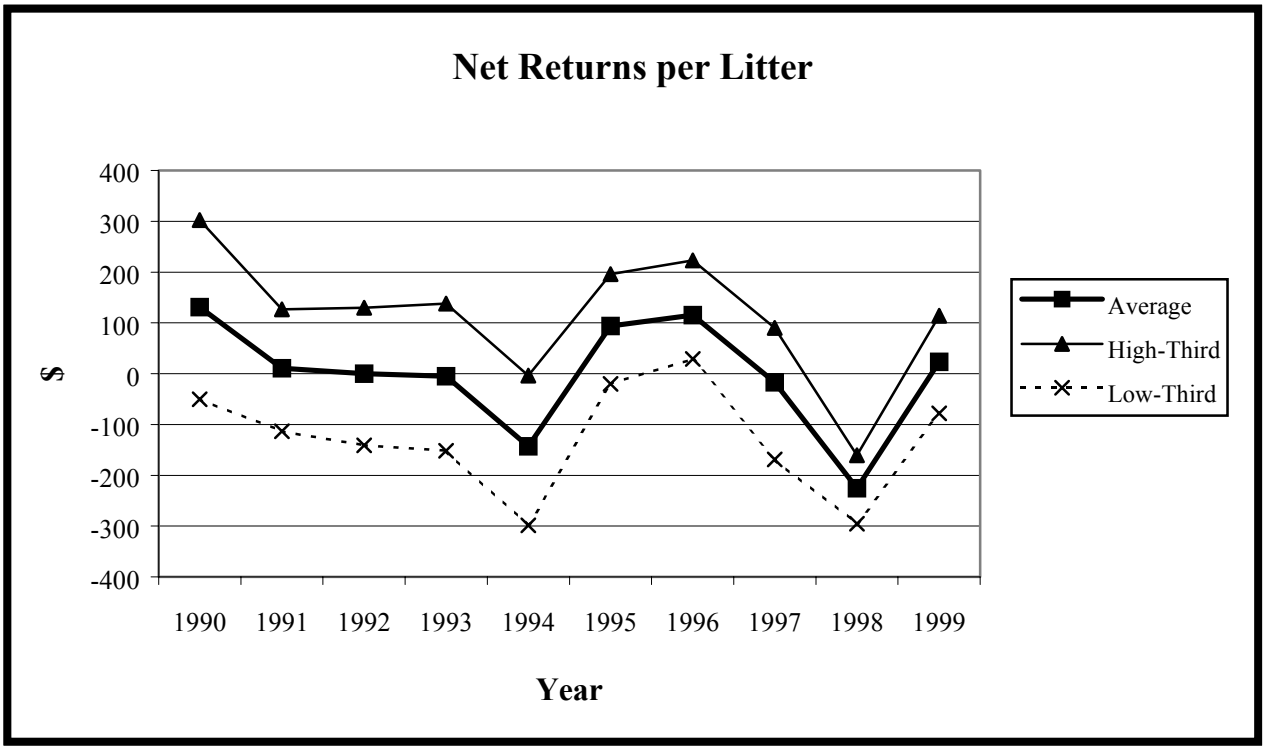

Figure 9. Net Returns per Litter

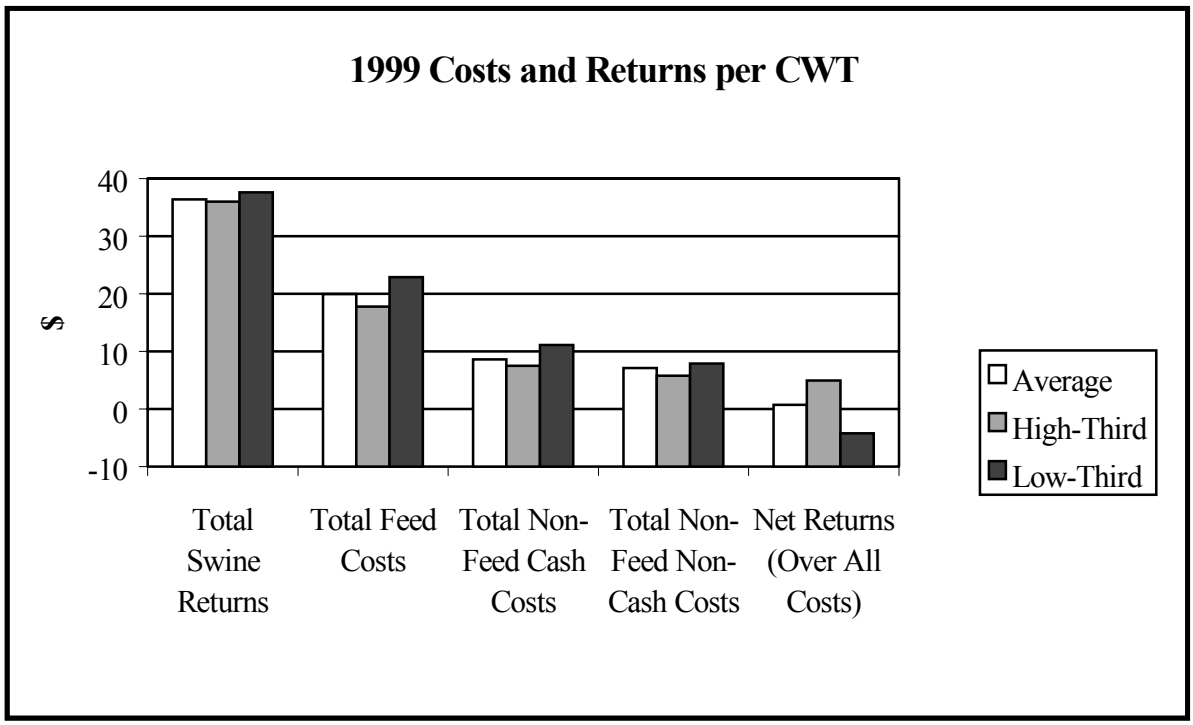

Figure 10. Costs and Returns per CWT

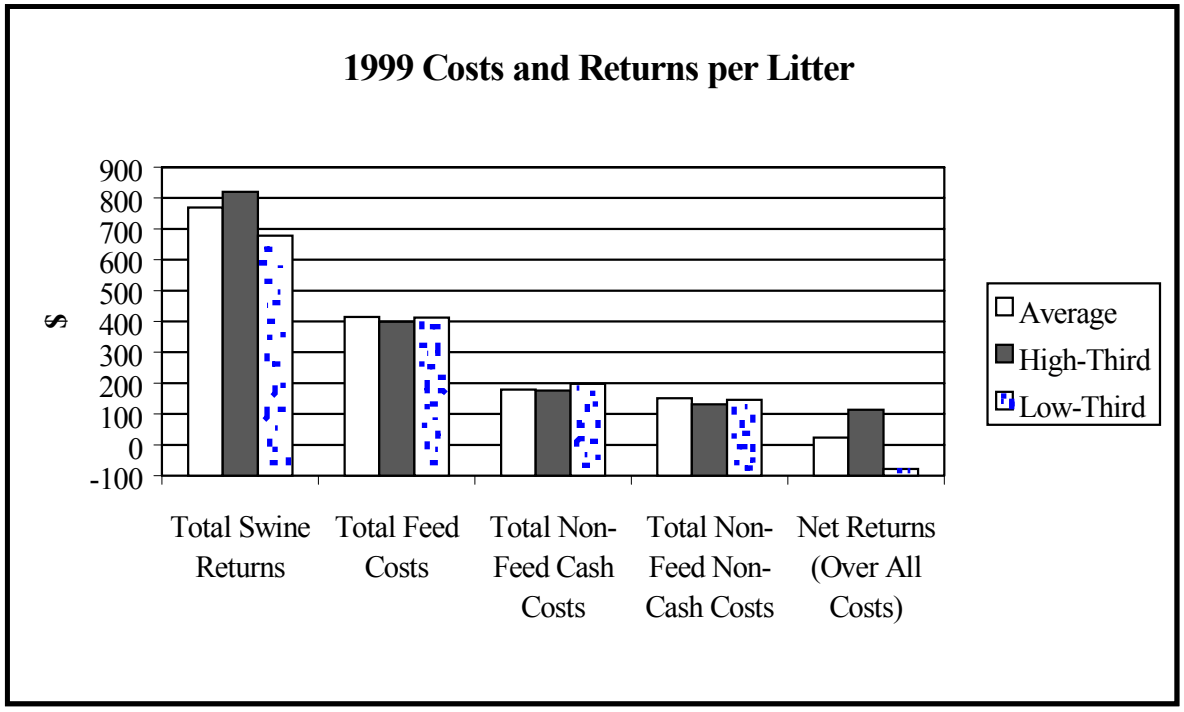

Figure 11. Costs and Returns per Litter