

# **1999 Burley Tobacco Costs and Returns**

## **KENTUCKY FARM BUSINESS MANAGEMENT PROGRAM**

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### Acknowledgments

Special recognition is extended to the Farm Business Analysis Specialists and farmers of the Kentucky Farm Business Management Program. Without their involvement, this study would not have been possible. Considerable time and effort were invested allocating costs of inputs used by more than one enterprise, and making other judgments necessary to ensure the accuracy of data.

The Area Farm Business Analysis Specialists are:

Colby Blair	Bluegrass Association
Rick Costin	Lincoln Trail Association
Darwin V. Foley	Louisville Association
Craig D. Gibson	Ohio Valley Association
David L. Heisterberg	Pennyroyal Association
Suzy Martin	Ohio Valley Association
Rush Midkiff	Pennyroyal Association
Russell Morgan	Purchase Association
Terry W. Moss	Pennyroyal Association
Bart Peters	Pennyroyal Association
William M. Snell	State Coordinator
Gregg Ibendahl	State Farm Management Specialist

### 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 information available and represent the closest approximation to "real world" 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" and have complete financial information available for analysis. These data are carefully cross-checked by our farm management specialists before inclusion in this analysis. Bear in mind that farms included in this study are representative of large, commercial farms producing major commodities and livestock but not of all farms in Kentucky.

## Overview

An analysis of a number of burley tobacco enterprises collected from the Kentucky Farm Business Management Program (KFBM) in 1999 indicate that management is becoming a more important input in tobacco. The previous year, the average return to management for the enterprises studies was positive. However, in 1999, the average return was negative. It should also be noted that the weather conditions in 1999 led not only to a poor yielding crop, but also to a poor quality crop.

Complete input cost, production, and sales information was collected from twenty-one cooperating KFBM farms from the Bluegrass, Louisville, Lincoln Trail and the Pennyroyal Farm Business Analysis Associations. The enterprises ranged from five to 126 acres, and were a mix of owner operator, cash leased, and share crop arrangements. Average yield per acre was 2,212 pounds and ranged from 814 pounds to 2,981 pounds. Hours of labor, paid and unpaid combined, averaged 224 hours per acre and ranged from 145 to 343 hours per acre.

Costs and returns were reported on a per acre and a per pound basis. Operator and landlord data were combined to calculate returns for burley tobacco as a whole. Returns included actual new crop sales, the value of unsold inventory and the warehouse hauling rebate. The average gross returns was \$3,917 per acre (\$1.77 per pound), ranging from \$1,510 to \$5,358 per acre. It should also be noted that marketing charges were deducted out of gross sales (as reported by warehouses) in order to calculate gross returns.

Variable costs included items such as transplants, fertilizer and lime, chemicals, fuel and oil, utilities, light vehicle, machinery repairs, machinery hire, crop insurance, cash labor, and interest on operating costs and crop inventory. Quota was not included in the variable cost section, however it was included as a fixed cost. Total variable costs averaged \$2,062 per acre (\$1.00 per pound). Thus, the average return above variable costs was \$1,855 per acre and \$0.77 per pound. Return above variable costs ranged from -\$249 to \$3,566 per acre.

Fixed costs included machinery and building depreciation, interest on machinery and building investment, property and liability insurance, and property taxes. Interest on crop inventory, machinery, buildings, and operating expenses were charged at 8.5% per year. These were standard interest on investment values that were charged to owned assets for KFBM participating farms in 1999. Fixed costs averaged \$405 per acre (\$0.20 per pound) and ranged from \$40 to \$861 per acre.

Fixed costs were subtracted from the returns above variable costs to calculate the return to operator labor, land, quota and management. The return to operator labor, land, quota and management averaged \$1,450 per acre (\$0.58 per pound) across the twenty-one farms, and ranged from -\$649 to \$3,358 per acre.

To find the return to management, value of unpaid operator and family labor, value of land, and value of quota was subtracted. Operator labor was valued at \$24,000 per person per year (\$9.60 per hour). This was the standard charge for labor furnished by operators participating in KFBM in 1999. Quota was charged at \$0.40 per pound, the state average lease price for 1999, reflecting the average market value of quota in Kentucky for 1999. The average values paid for quota by farms in this study was not used due to the variability that exists in lease prices throughout the commonwealth. Interest on the land used for tobacco production was charged at 5% per year. Again, this was the standard interest on investment value charged to owned assets for those in the KFBM program.

Table 1 is a summary of these results. More detailed information can be found in the Appendix tables. Return to management is the amount left over after all inputs and resources except for the operator's management and risk have been paid. Return to management averaged -\$27 per acre and ranged from -\$1,852 to \$1,608 per acre and -\$1.98 to \$0.54 per pound.

<b>Table 1. Summary of 1999 burley tobacco costs and returns. Kentucky Farm Business Management Program. Average of 21 participating farms.</b>		
	\$/ Acre	\$/ Pound
<b>GROSS RETURNS</b>	<b>\$3,917</b>	<b>\$1.77</b>
Total Variable Costs	\$2,062	\$1.00
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$1,855</b>	<b>\$0.77</b>
Fixed Costs	\$405	\$0.20
Value of Operator Labor	\$491	\$0.24
Value of Land	\$101	\$0.05
Value of Quota	\$885	\$0.40
<b>RETURN TO MANAGEMENT</b>	<b>\$(27)</b>	<b>\$(0.11)</b>

### High-Low Comparison

Negative average profitability does not mean that every farm failed to show a profit. There was a wide variability in returns across the twenty-one farms. These farms were sorted into three groups according to per acre net returns to management: top third, bottom third, and average of all farms. Table 2 is a summary of results from this sorting. More detailed information is found in Tables A1 and A2 in the Appendix.

The top third farms had higher yields, higher prices, and lower variable costs than the average of the farms. While many of the variable costs of the top third and the bottom third are similar, the biggest difference is in cash labor. The farms that ranked in the top third spent nearly \$150 per acre less in cash labor than the average farms. However, since the farms ranked in the top third had the highest yield per acre, their cash labor expense was almost \$0.20 per pound lower than the average farms. Because of their higher yields and lower variable costs per acre, the farms that ranked in the top third more than doubled the return to management per acre when compared to the farms that ranked in the bottom third.

A comparison was also made on the hourly rate paid for cash labor. The average hourly rate paid for cash labor was \$6.57 per hour. However, there was only an \$0.08 difference between the average hourly rate paid by those farms in the top third and those in the bottom third. The top third paid an average of \$6.51 per hour while the bottom third paid an average rate of \$6.59 per hour. The minimum hourly rate paid was \$4.53 while the highest rate paid was \$8.35. Both of these farms were in the top third of all farms.

Across the three groups of farms, there was less than a \$70 spread in fixed costs per acre; fixed costs were not a major determinant of profit differences. After deducting both fixed and variable costs from gross returns, the top third farms had a return to operator labor, land, quota

and management of \$2,438 per acre, while the bottom third farms had only a \$469 return per acre. After deducting the values of operator labor, land, and quota, the top third farms had a \$739 return to management per acre, while the bottom third had a -\$937 per acre return to management.

Total costs varied only \$40 between the top third of the farms and the bottom third of the farms. However, there was a substantial difference in returns to management per acre. Thus, yields played a major role in returns to management.

<b>Table 2. Summary of 1999 burley tobacco costs and returns. Farms sorted by net returns per acre.</b>			
	Average	Top Third	Bottom Third
Yield in pounds per acre	2,212	2,655	1,718
<b>GROSS RETURNS</b>	<b>\$3,917</b>	<b>\$4,724</b>	<b>\$3,013</b>
Total Variable Costs	\$2,062	\$1,872	\$2,070
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$1,855</b>	<b>\$2,852</b>	<b>\$942</b>
Fixed Costs	\$405	\$415	\$474
<b>RETURN TO OPERATOR LABOR, LAND, QUOTA, AND MANAGEMENT</b>	<b>\$1,450</b>	<b>\$2,438</b>	<b>\$469</b>
Value of Operator Labor	\$491	\$536	\$608
Value of Land	\$101	\$101	\$110
Value of Quota	\$885	\$1,062	\$687
Total Costs Per Acre	\$3,944	\$3,986	\$3,949
<b>RETURN TO MANAGEMENT</b>	<b>\$(27)</b>	<b>\$739</b>	<b>\$(937)</b>

## Size Comparison

Farms were also sorted by size categories: farms over 50 acres, farms producing between 10 and 50 acres, and those farms producing less than 10 acres of tobacco. This was done to examine the effects that scale of production had on profitability. Table 3 is a summary of the size comparison results. More detailed information is included in Appendix Tables A3 and A4.

Yields were relatively consistent across categories, ranging from 2,114 to 2,339 pounds per acre. Comparisons of variable costs suggest that some differences exist across farm size. Farms that raised over 50 acres of tobacco spent \$2,259 per acre on variable costs, medium sized farms spent \$1,935 per acre, and small farms spent \$2,018 per acre on variable costs. The larger farms tended to spend more on chemicals, machinery repair, and crop insurance than the smaller farms.

There was some difference in the hourly rate paid for cash labor in the farms as sorted by farm size. Those farms with over 50 acres of production paid a rate of \$7.22 per hour, while that rate was \$6.34 of the farms with 10 to 50 acres and \$6.40 for those farms with less than 10 acres.

Large farms also had higher fixed costs per acre primarily due to greater building depreciation and investment. The large farms had fixed costs of \$515 per acre, nearly double that of the farms with less than 10 acres of production. After deducting for operator labor, land, and quota, the large farms were the most profitable on a per acre basis. Their returns to management were \$113 per acre. The mid size group had a -\$48 per acre return to management, while the small group had a -\$109 per acre.

<b>Table 3. Summary of 1999 burley tobacco costs and returns. Farms sorted by number of acres produced.</b>			
	Over 50 acres	10 to 50 acres	Under 10 acres
Yield in pounds per acre	2,339	2,208	2,114
<b>GROSS RETURNS</b>	<b>\$4,182</b>	<b>\$3,903</b>	<b>\$3,719</b>
Total Variable Costs	\$2,260	\$1,935	\$2,108
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$1,922</b>	<b>\$1,969</b>	<b>\$1,610</b>
Fixed Costs	\$515	\$437	\$261
<b>RETURN TO OPERATOR LABOR, LAND, QUOTA, AND MANAGEMENT</b>	<b>\$1,407</b>	<b>\$1,531</b>	<b>\$1,350</b>
Value of Operator Labor	\$243	\$604	\$510
Value of Land	\$116	\$92	\$103
Value of Quota	\$936	\$883	\$846
Total Costs Per Acre	\$4,070	\$3,951	\$3,828
<b>RETURN TO MANAGEMENT</b>	<b>\$113</b>	<b>\$(48)</b>	<b>\$(109)</b>

### **Tobacco Settlement Income**

Tobacco settlement income was not included in the primary analysis, mainly because the payments received through the settlement were based on previous years' production, rather than the 1999 crop. However, this income deserves to be mentioned due to its impact on the tobacco economy and individual operations.

Table 4 summarizes the results of including the tobacco settlement income into this enterprise study. Tobacco settlement income consisted of December 1999 Phase II Payments and averaged \$582 per acre of tobacco grown. Before considering this payment, the average return to management was -\$27 per acre, or -\$0.11 per pound. When tobacco settlement income was included in returns, the average return to management jumped to \$555 per acre, or \$0.16 per pound.

The top third farms doubled their net returns to management with Phase II payments, while the bottom third cut their losses in half.

<b>Table 4. Summary of 1999 burley tobacco costs and returns per acre, including tobacco settlement income. Farms sorted by net returns per acre.</b>			
	Average	Top Third	Bottom Third
Yield in pounds per acre	2,212	2,553	1,718
New Crop Sales & Inventory and Hauling/Rebate	\$3,917	\$4,724	\$3,012
Tobacco Settlement Income	\$582	\$788	\$483
<b>GROSS RETURNS</b>	<b>\$4,499</b>	<b>\$5,513</b>	<b>\$3,496</b>
Total Variable Costs	\$2,062	\$1,872	\$2,070
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$2,437</b>	<b>\$3,641</b>	<b>\$1,425</b>
Fixed Costs	\$405	\$415	\$474
<b>RETURN TO OPERATOR LABOR, LAND, QUOTA, AND MANAGEMENT</b>	<b>\$2,032</b>	<b>\$3,226</b>	<b>\$952</b>
Value of Operator Labor	\$491	\$536	\$608
Value of Land	\$101	\$101	\$110
Value of Quota	\$885	\$1,062	\$687
Total Costs Per Acre	\$3,944	\$3,986	\$3,943
<b>RETURN TO MANAGEMENT</b>	<b>\$555</b>	<b>\$1,527</b>	<b>(\$454)</b>

## Conclusion

Considerable variability exists across burley tobacco farms in terms of size, yields, costs, and returns. Even in this relatively small sample, profitability varied widely. Management factors and yields (affected by local weather conditions) played a major role in determining relative profitability of burley tobacco enterprises in 1999. The Appendix in this publication contains more detailed information on both a per acre and per pound basis for farms sorted by net returns and size. Much of this information is also displayed in graphs included in the Appendix.

## Appendix Tables

**Table A1. KFBM Tobacco enterprise costs and returns PER POUND for 1999. Farms sorted by net returns .**

<b>Production Information</b>	<b>Average</b>	<b>Top 1/3</b>	<b>Bottom 1/3</b>
New Crop Sales & Inventory (lbs)	69,386	67,243	32,306
Total Acres Produced	31	26	19
Yield (lbs/ac)	2,212	2,655	1,718
Unpaid Labor (hrs/ac)	52	55	65
Paid Labor (hrs/ac)	172	152	158
Total Labor Requirement (hrs/ac)	224	207	223

<b>Gross Returns</b>	<b>Average</b>	<b>Top 1/3</b>	<b>Bottom 1/3</b>
New Crop Sales & Inventory	\$1.75	\$1.75	\$1.74
Hauling/Rebate	\$0.02	\$0.03	\$0.02
<b>Total Returns</b>	<b>\$1.77</b>	<b>\$1.78</b>	<b>\$1.76</b>

<b>Variable Costs</b>			
Transplants	\$0.06	\$0.06	\$0.08
Fertilizer and Lime	\$0.08	\$0.06	\$0.12
Chemicals and Pesticides	\$0.07	\$0.04	\$0.10
Farm Fuel and Oil	\$0.03	\$0.02	\$0.04
Utilities	\$0.02	\$0.01	\$0.03
Light Vehicle	\$0.01	\$0.00	\$0.01
Machinery Repair	\$0.05	\$0.03	\$0.06
Building Repair	\$0.03	\$0.03	\$0.04
Machine Hire	\$0.01	\$0.00	\$0.02
Crop Insurance	\$0.01	\$0.01	\$0.02
Storage/Barn Rent	\$0.00	\$0.00	\$0.00
Cash Labor	\$0.55	\$0.38	\$0.68
Interest on Operating Costs	\$0.05	\$0.04	\$0.06
Interest on Crop Inventory	\$0.01	\$0.01	\$0.02
Miscellaneous	\$0.01	\$0.01	\$0.02
<b>Total Variable Costs</b>	<b>\$1.00</b>	<b>\$0.71</b>	<b>\$1.29</b>
<b>RETURN OVER VARIABLE COSTS</b>	<b>\$0.77</b>	<b>\$1.07</b>	<b>\$0.47</b>

<b>Fixed Costs</b>			
Machinery Depreciation	\$0.05	\$0.04	\$0.09
Building Depreciation	\$0.04	\$0.03	\$0.06
Interest on:			
Machinery Investment	\$0.03	\$0.02	\$0.05
Building Investment	\$0.06	\$0.05	\$0.07
Property/Liability Insurance	\$0.02	\$0.02	\$0.02
Property Taxes	\$0.01	\$0.01	\$0.01
<b>Total Fixed Costs</b>	<b>\$0.20</b>	<b>\$0.16</b>	<b>\$0.29</b>

<b>RETURN TO OPERATOR LABOR, LAND, QUOTA &amp; MGT</b>	<b>\$0.58</b>	<b>\$0.91</b>	<b>\$0.18</b>
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Value of Operator Labor	\$0.24	\$0.20	\$0.38
Value of Land	\$0.05	\$0.04	\$0.07
Value of Quota	\$0.40	\$0.40	\$0.40

<b>RETURN TO MANAGEMENT</b>	<b>(\$0.11)</b>	<b>\$0.28</b>	<b>(\$0.67)</b>
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**Table A2. KFBM Tobacco enterprise costs and returns PER ACRE for 1999. Farms sorted by net returns**

<b>Production Information</b>	<b>Average</b>	<b>Top 1/3</b>	<b>Bottom 1/3</b>
New Crop Sales & Inventory (lbs)	69,386	67,243	32,306
Total Acres Produced	31	26	19
Yield (lbs/ac)	2,212	2,655	1,718
Unpaid Labor (hrs/ac)	52	55	65
Paid Labor (hrs/ac)	172	152	158
Total Labor Requirement	224	207	223

<b>Gross Returns</b>	<b>Average</b>	<b>Top 1/3</b>	<b>Bottom 1/3</b>
New Crop Sales & Inventory	\$3,863	\$4,642	\$2,984
Hauling/Rebate	\$54	\$82	\$28
<b>Total Returns</b>	<b>\$3,917</b>	<b>\$4,724</b>	<b>\$3,013</b>

<b>Variable Costs</b>			
Transplants	\$126	\$152	\$128
Fertilizer and Lime	\$164	\$163	\$178
Chemicals and Pesticides	\$152	\$114	\$173
Farm Fuel and Oil	\$61	\$58	\$69
Utilities	\$34	\$28	\$44
Light Vehicle	\$11	\$13	\$22
Machinery Repair	\$110	\$81	\$105
Building Repair	\$65	\$87	\$71
Machine Hire	\$19	\$13	\$32
Crop Insurance	\$23	\$24	\$22
Storage/Barn Rent	\$6	\$8	\$0
Cash Labor	\$1,142	\$990	\$1,077
Interest on Operating Costs	\$99	\$98	\$89
Interest on Crop Inventory	\$23	\$21	\$32
Miscellaneous	\$26	\$23	\$30
<b>Total Variable Costs</b>	<b>\$2,062</b>	<b>\$1,872</b>	<b>\$2,070</b>
<b>RETURN OVER VARIABLE COSTS</b>	<b>\$1,855</b>	<b>\$2,852</b>	<b>\$942</b>

<b>Fixed Costs</b>			
Machinery Depreciation	\$104	\$114	\$139
Building Depreciation	\$91	\$86	\$99
Interest on:			
Machinery Investment	\$45	\$46	\$67
Building Investment	\$119	\$112	\$117
Property/Liability Insurance	\$34	\$42	\$34
Property Taxes	\$13	\$15	\$17
<b>Total Fixed Costs</b>	<b>\$405</b>	<b>\$415</b>	<b>\$474</b>

<b>RETURN TO OPERATOR LABOR, LAND, QUOTA &amp; MGT</b>	<b>\$1,450</b>	<b>\$2,438</b>	<b>\$469</b>
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Value of Operator Labor	\$491	\$536	\$608
Value of Land	\$101	\$101	\$110
Value of Quota	\$885	\$1,062	\$687

<b>RETURN TO MANAGEMENT</b>	<b>(\$27)</b>	<b>\$739</b>	<b>(\$937)</b>
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Table A3. KFBM enterprise costs and returns PER POUND for 1999. Farms sorted by number of acres produced.

<b>Production Information</b>	<b>Over 50 ac</b>	<b>10-50 ac</b>	<b>Under 10 ac</b>
New Crop Sales & Inventory (lbs)	188,340	42,239	15,501

Total Acres Produced	81	20	7
Yield (lbs/ac)	2,339	2,208	2,114
Unpaid Labor (hrs/ac)	30	62	52
Paid Labor (hrs/ac)	177	149	206
Total Labor Requirement (hrs/ac)	207	211	258

Gross Returns	Over 50 ac	10-50 ac	Under 10 ac
New Crop Sales & Inventory	\$1.76	\$1.74	\$1.74
Hauling/Rebate	\$0.03	\$0.03	\$0.01
<b>Total Returns</b>	<b>\$1.79</b>	<b>\$1.77</b>	<b>\$1.76</b>

Variable Costs			
Transplants	\$0.05	\$0.07	\$0.05
Fertilizer and Lime	\$0.07	\$0.09	\$0.08
Chemicals and Pesticides	\$0.08	\$0.08	\$0.06
Farm Fuel and Oil	\$0.02	\$0.04	\$0.02
Utilities	\$0.02	\$0.02	\$0.01
Light Vehicle	\$0.00	\$0.01	\$0.00
Machinery Repair	\$0.05	\$0.05	\$0.05
Building Repair	\$0.02	\$0.04	\$0.01
Machine Hire	\$0.00	\$0.01	\$0.01
Crop Insurance	\$0.02	\$0.01	\$0.00
Storage/Barn Rent	\$0.00	\$0.00	\$0.00
Cash Labor	\$0.54	\$0.49	\$0.66
Interest on Operating Costs	\$0.05	\$0.04	\$0.05
Interest on Crop Inventory	\$0.01	\$0.02	\$0.00
Miscellaneous	\$0.01	\$0.01	\$0.01
<b>Total Variable Costs</b>	<b>\$0.97</b>	<b>\$0.99</b>	<b>\$1.03</b>
<b>RETURN OVER VARIABLE COST</b>	<b>\$0.82</b>	<b>\$0.78</b>	<b>\$0.73</b>

Fixed Costs			
Machinery Depreciation	\$0.04	\$0.06	\$0.05
Building Depreciation	\$0.06	\$0.05	\$0.01
Interest on:			
Machinery Investment	\$0.02	\$0.03	\$0.02
Building Investment	\$0.09	\$0.06	\$0.02
Property/Liability Insurance	\$0.02	\$0.02	\$0.01
Property Taxes	\$0.00	\$0.01	\$0.00
<b>Total Fixed Costs</b>	<b>\$0.23</b>	<b>\$0.23</b>	<b>\$0.11</b>

<b>RETURN TO OPERATOR LABOR, LAND, QUOTA &amp; MGT</b>	<b>\$0.59</b>	<b>\$0.55</b>	<b>\$0.62</b>
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Value of Operator Labor	\$0.11	\$0.31	\$0.24
Value of Land	\$0.05	\$0.05	\$0.05
Value of Quota	\$0.40	\$0.40	\$0.40

<b>RETURN TO MANAGEMENT</b>	<b>\$0.03</b>	<b>(\$0.21)</b>	<b>(\$0.07)</b>
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**Table A4. KFBM Tobacco enterprise costs and returns PER ACRE for 1999. Farms sorted by number of acres produced.**

Production Information	Over 50 ac	10-50 ac	Under 10 ac
New Crop Sales & Inventory (lbs)	188,340	42,239	15,501
Total Acres Produced	81	20	7
Yield (lbs/ac)	2,339	2,208	2,114

Unpaid Labor (hrs/ac)	30	62	52
Paid Labor (hrs/ac)	177	149	206
Total Labor Requirement (hrs/ac)	207	211	258

<b>Gross Returns</b>	<b>Over 50 ac</b>	<b>10-50 ac</b>	<b>Under 10 ac</b>
New Crop Sales & Inventory	\$4,108	\$3,846	\$3,685
Hauling/Rebate	\$74	\$57	\$33
<b>Total Returns</b>	<b>\$4,182</b>	<b>\$3,903</b>	<b>\$3,719</b>

<b>Variable Costs</b>			
Transplants	\$121	\$138	\$111
Fertilizer and Lime	\$156	\$167	\$167
Chemicals and Pesticides	\$186	\$151	\$125
Farm Fuel and Oil	\$60	\$73	\$44
Utilities	\$55	\$33	\$19
Light Vehicle	\$4	\$15	\$12
Machinery Repair	\$144	\$104	\$92
Building Repair	\$49	\$96	\$27
Machine Hire	\$3	\$28	\$16
Crop Insurance	\$40	\$22	\$8
Storage/Barn Rent	\$1	\$7	\$9
Cash Labor	\$1,280	\$952	\$1,343
Interest on Operating Costs	\$107	\$90	\$106
Interest on Crop Inventory	\$27	\$33	\$4
Miscellaneous	\$25	\$25	\$27
<b>Total Variable Costs</b>	<b>\$2,260</b>	<b>\$1,935</b>	<b>\$2,108</b>
<b>RETURN OVER VARIABLE COST</b>	<b>\$1,922</b>	<b>\$1,969</b>	<b>\$1,610</b>

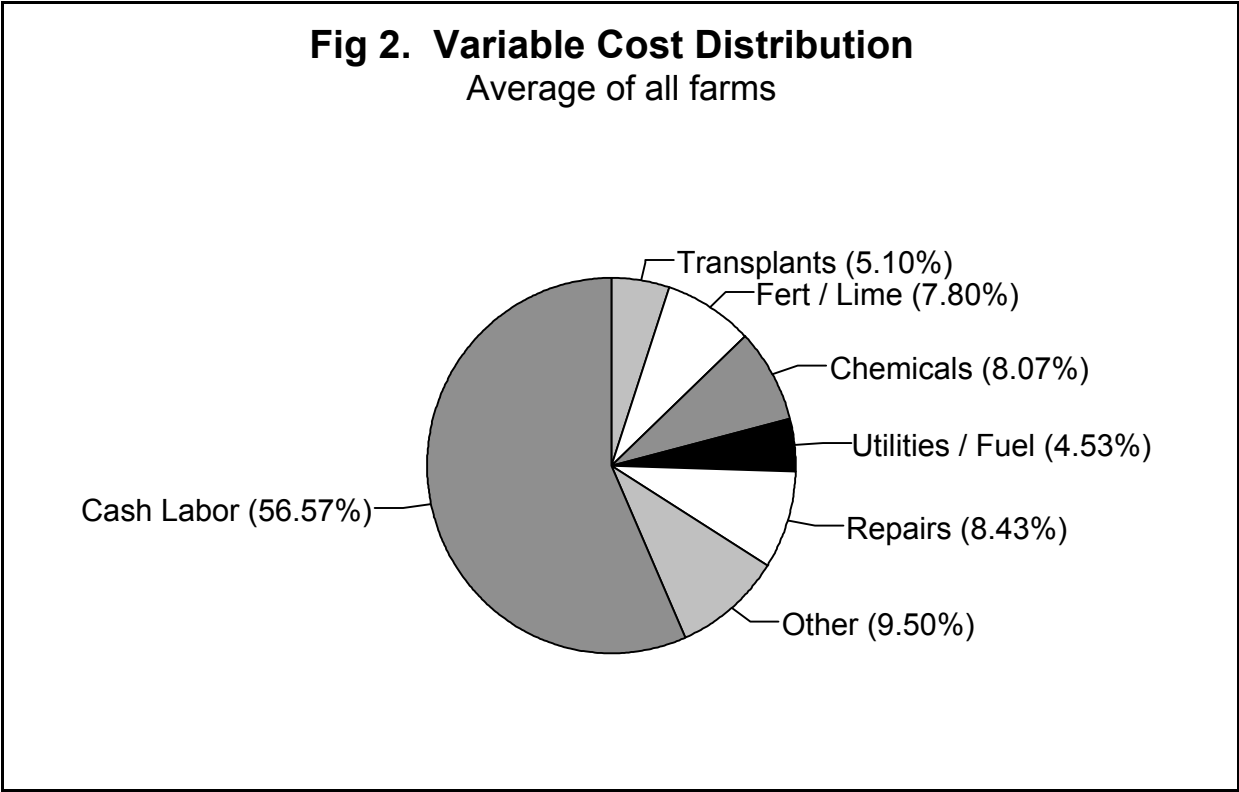
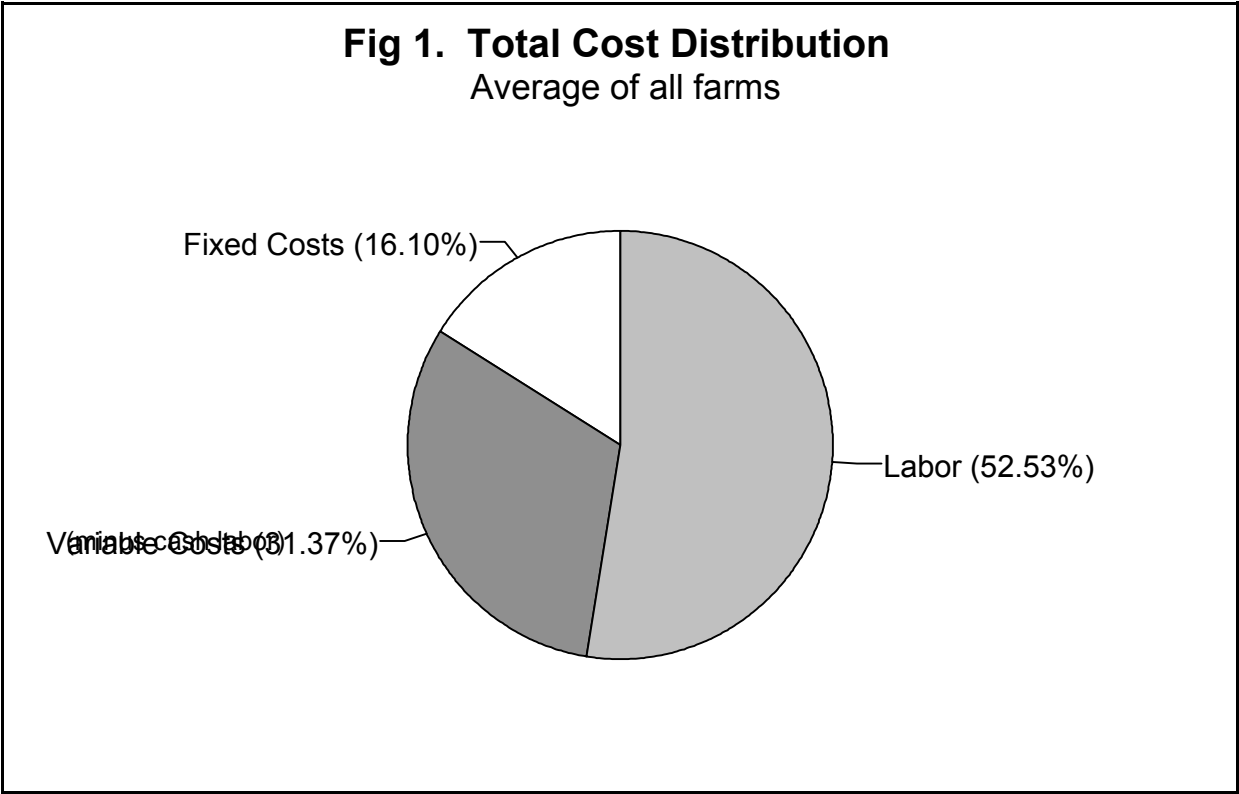
<b>Fixed Costs</b>			
Machinery Depreciation	\$85	\$106	\$115
Building Depreciation	\$146	\$99	\$31
Interest on:			
Machinery Investment	\$36	\$49	\$44
Building Investment	\$195	\$124	\$47
Property/Liability Insurance	\$43	\$41	\$15
Property Taxes	\$9	\$18	\$7
<b>Total Fixed Costs</b>	<b>\$515</b>	<b>\$437</b>	<b>\$261</b>

<b>RETURN TO OPERATOR LABOR, LAND, QUOTA &amp; MGT</b>	<b>\$1,407</b>	<b>\$1,531</b>	<b>\$1,350</b>
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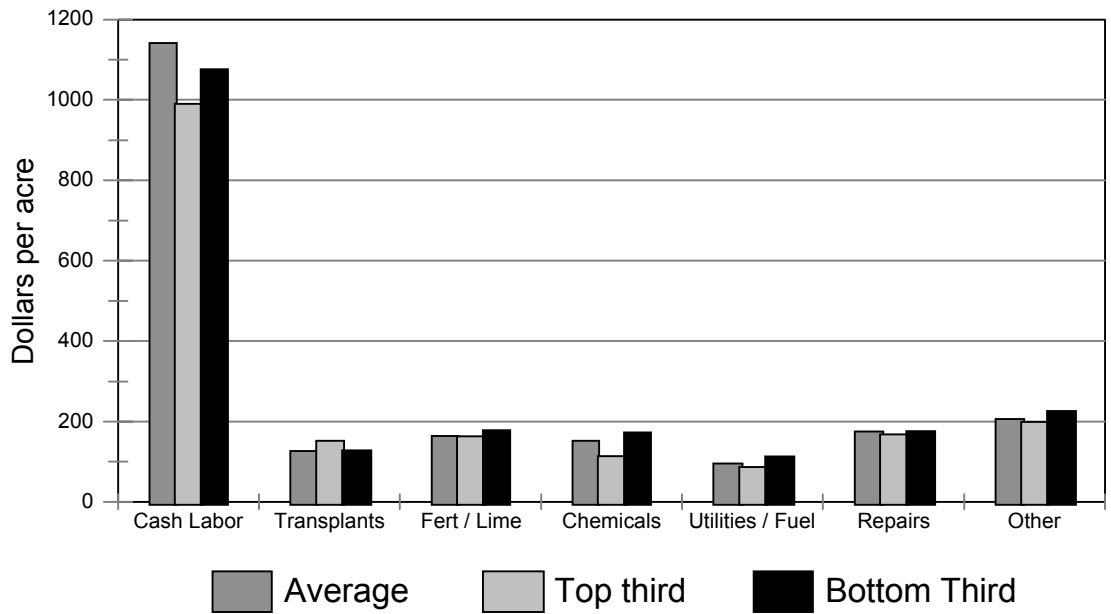
Value of Operator Labor	\$243	\$604	\$510
Value of Land	\$116	\$92	\$103
Value of Quota	\$936	\$883	\$846

<b>RETURN TO MANAGEMENT</b>	<b>\$113</b>	<b>(\$48)</b>	<b>(\$109)</b>
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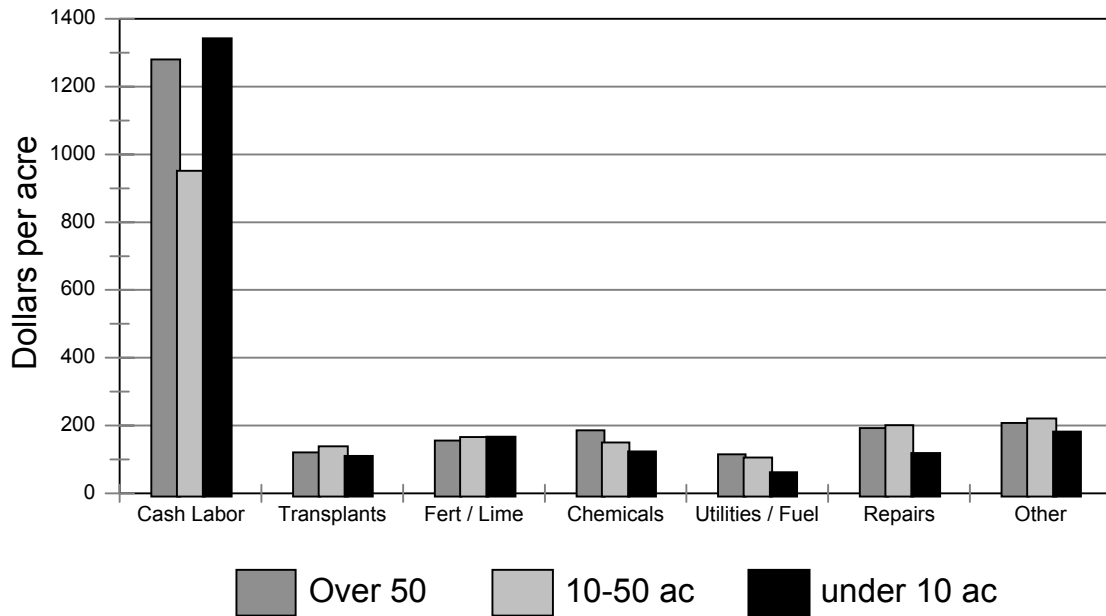
Appendix Graphs



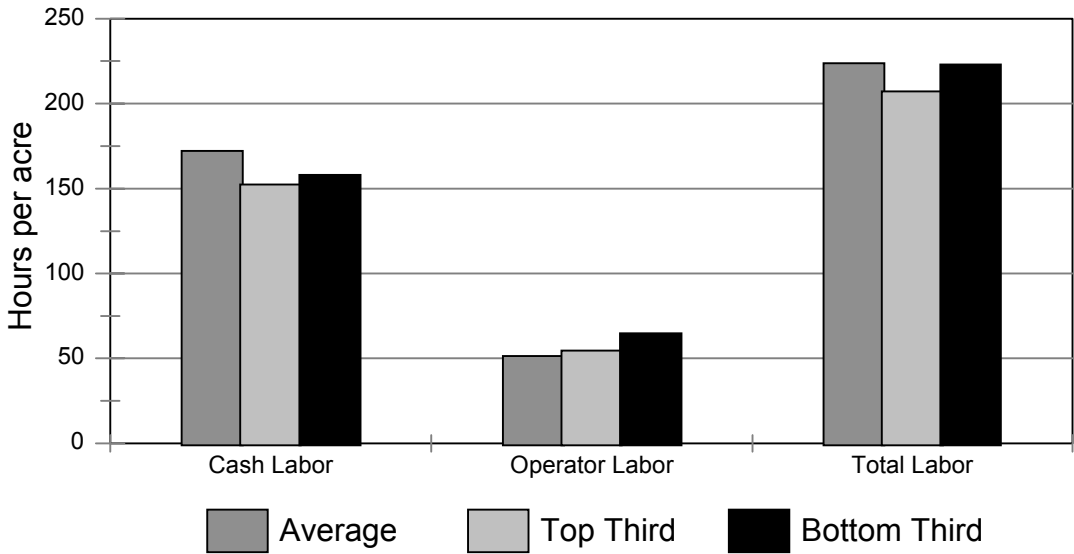
**Fig 3. Variable Cost Comparison**  
Farms sorted by net returns



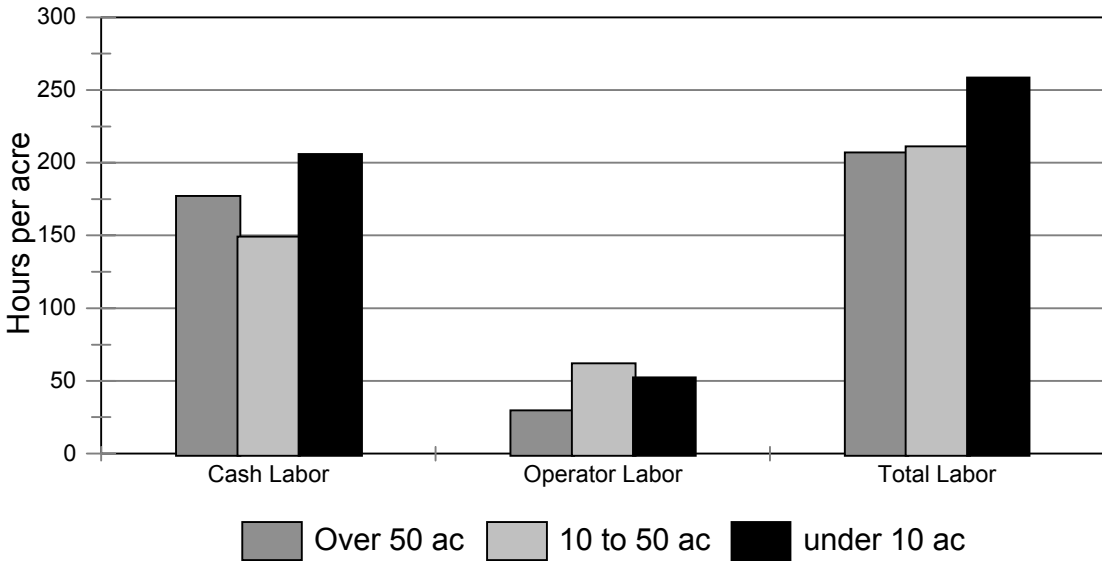
**Fig 4. Variable Cost Comparison**  
Farms sorted by size



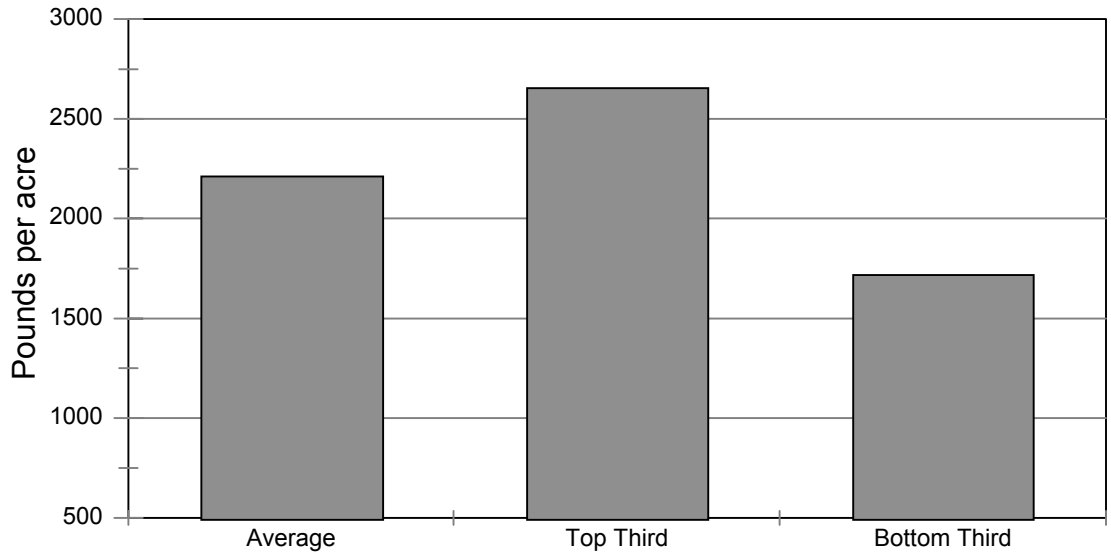
**Fig 5. Labor Distribution**  
Farms sorted by net returns



**Fig 6. Labor Distribution**  
Farms sorted by size



**Fig 7. Yield Comparison**  
Farms sorted by net returns



**Fig 8. Yield Comparison**  
Farms sorted by size

