Kentucky Farm Business Management Program

Annual Summary Data

Pennyroyal Area Farms - 2010

Agricultural Economics - Extension No. 2011-12

June 2011

By:
Rush H. Midkiff

University of Kentucky
Department of Agricultural Economics
400 Charles E. Barnhart Building
Lexington, Kentucky 40546-0276

Phone: 859-257-5762
Fax: 859-323-1913
http://www.uky.edu/Ag/AgEcon/
Contents

Acknowledgements ................................................................................................................................................. 3

Source of Data ......................................................................................................................................................... 4

Definitions of Terms and Accounting Methods ........................................................................................................ 5
  Sampling Technique
  Type of Farm
  Expense/Cost Items
  Revenue Items
  Other Terms Used in This Report

Management Returns and Net Farm Income ............................................................................................................. 7

Farm Land Resources ................................................................................................................................................... 8

Production ................................................................................................................................................................... 9

Crop Returns .............................................................................................................................................................. 9

Farm Costs .................................................................................................................................................................. 10

Description of Tables
  Table 1.  Historical Data: Operator-Only Management Returns by Area ......................................................... 12
  Table 2.  Historical Data: Operator-Only Net Farm Income by Area ................................................................. 12
  Table 3.  Summary of Pennyroyal Grain Farms by Size .................................................................................... 13
  Table 4.  Economic Management Analysis per Operator Acre-2010 ................................................................. 14
  Table 5.  Summary of Pennyroyal Grain Farms by Size and Management-2010 ............................................. 15
  Table 6.  Summary of All Farms by Type-2010 ................................................................................................. 16
  Table 7.  Pennyroyal Area Crop Yield Data ......................................................................................................... 17
  Table 8.  Pennyroyal Area Crop Price History .................................................................................................. 17
Acknowledgements

Special credit should be given to the farm business management specialists who supplied data used in this report. Their attention to details and accuracy of records are what make these results so valuable to farmers and to those working with farmers throughout the state. Specialists who served in 2010 and provided summary data are:

<table>
<thead>
<tr>
<th>Name</th>
<th>Farm Analysis Group</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonathan D. Shepherd</td>
<td>Lincoln Trail Farm Analysis Group, Inc.</td>
<td>(270) 737-4799</td>
<td><a href="mailto:JDSHEPHERD@uky.edu">JDSHEPHERD@uky.edu</a></td>
</tr>
<tr>
<td>Lauren E. Omer</td>
<td>Ohio Valley Farm Analysis Group, Inc.</td>
<td>(270) 827-1395</td>
<td><a href="mailto:lauren.omer@uky.edu">lauren.omer@uky.edu</a></td>
</tr>
<tr>
<td>Suzy L. Martin</td>
<td>Ohio Valley Farm Analysis Group, Inc.</td>
<td>(270) 685-8480</td>
<td><a href="mailto:slmartin@uky.edu">slmartin@uky.edu</a></td>
</tr>
<tr>
<td>D. Bart Peters</td>
<td>Pennyroyal Farm Analysis Group, Inc.</td>
<td>(270) 886-5281</td>
<td><a href="mailto:BartPeters@uky.edu">BartPeters@uky.edu</a></td>
</tr>
<tr>
<td>Evan M. Conrad</td>
<td>Pennyroyal Farm Analysis Group, Inc.</td>
<td>(270) 886-5281</td>
<td><a href="mailto:Evan.Conrad@uky.edu">Evan.Conrad@uky.edu</a></td>
</tr>
<tr>
<td>Rush H. Midkiff</td>
<td>Pennyroyal Farm Analysis Group, Inc.</td>
<td>(270) 842-5823</td>
<td><a href="mailto:rmidkiff@uky.edu">rmidkiff@uky.edu</a></td>
</tr>
<tr>
<td>Michael C. Forsythe</td>
<td>Pennyroyal Farm Analysis Group, Inc.</td>
<td>(270) 886-5281</td>
<td><a href="mailto:Michael.Forsythe@uky.edu">Michael.Forsythe@uky.edu</a></td>
</tr>
<tr>
<td>Jennifer L. Rogers</td>
<td>Purchase Farm Analysis Group, Inc.</td>
<td>(270) 562-2022</td>
<td><a href="mailto:Jennifer.Rogers@uky.edu">Jennifer.Rogers@uky.edu</a></td>
</tr>
<tr>
<td>Jerry S. Pierce</td>
<td>KFBM State Coordinator</td>
<td>(270) 737-4799</td>
<td><a href="mailto:Jerry.Pierce@uky.edu">Jerry.Pierce@uky.edu</a></td>
</tr>
<tr>
<td>KFBM Website</td>
<td></td>
<td><a href="http://www.uky.edu/Ag/KFBM/">http://www.uky.edu/Ag/KFBM/</a></td>
<td></td>
</tr>
</tbody>
</table>

A Special Note to Our Readers

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

This report presents the summarized 2010 performance data (financial and physical) on 255 Kentucky farm businesses. Some data are presented for previous years so that trends and changes can be studied. This is the 44th annual summary of records obtained from farmers participating in the Kentucky Farm Business Management Program. The program is a cooperative effort between the Department of Agricultural Economics of the University of Kentucky and four incorporated Farm Analysis Groups. This program was initiated to improve Kentucky farm management in general and specifically to:

- Provide farmers with an individual farm analysis and comparative analysis of farm business records emphasizing information necessary for sound decision making and wise financial planning;

- Provide farmers with objective counseling in developing priorities and alternative plans;

- Provide the public with basic information about business conditions as well as costs and returns on Kentucky farms under current conditions. Provide Kentucky farmers, teachers, researchers and lending agencies actual on-farm information about Kentucky farm businesses.

In 2010, 311 farming operations were members of the Farm Business Management Program keeping records under the direction of 8 Farm Business Management Specialists. The program serves farmers in 57 counties.
Definition of Terms and Accounting Methods

Sampling Technique

Data from all farm business records certified to be usable for comparative analysis by field staff was aggregated by size (i.e., tillable acres, number of animal production units, etc.), type of farm, and area. Illinois Farm Business Farm Management Association's Farm Business Farm Management Software was used to compile and summarize the data.

Type of Farm

Farm type is based on the percent feed fed. To determine percent feed fed, the total value of feed fed to all livestock enterprises is divided by the value of crop returns. However, tobacco revenue is excluded from crop returns for this calculation. Values for percent feed fed can range from zero to infinity. Large values are possible if a farm has limited grain production and thus purchases much of its feed.

*Grain farms* are defined as farms on which the value of feed fed was less than 40 percent of the crop returns and the value of feed fed to dairy was less than one-sixth of the crop returns.

*Beef farms* are 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.

*Hog farms* are 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.

*Dairy farms* are defined as farms on which the value of feed fed was more than 40 percent of the crop returns and the dairy enterprise utilized more than one-third of the value of feed fed.

Expense/Cost Items

*Total operating expenses* include cash operating expenses plus depreciation plus the net effect on expenses when accounting for the accrual change in accounts payable and prepaid expenses. Cash operating expenses include cash outlays for the following non-depreciable items:

- Fertilizer
- Pesticides
- Seed (including homegrown seed)
- Machinery repairs
- Machinery hire and leases
- Fuel and oil (lubricants)
- Farm share of utilities and light vehicle expenses
- Building repairs
- Drying and storage
- Hired labor
- Livestock expense
- Taxes
- Insurance
- Miscellaneous expenses

Purchased feed, grain and livestock are not included because they are deducted from Gross Revenue to calculate the Value of Farm Production.
**Total interest expense** includes cash interest paid on operating and term debt plus the net change in accrued interest on farm business debt.

**Interest on equity capital** is a charge of 3.75 percent on the current value of land and 5.4 percent on non-land items less total interest expense. It is the opportunity cost of investing in the farm business. The non-land charge was calculated by multiplying 5.4 percent times: 1) the average of the beginning and ending of year value of livestock, machinery and building investment; 2) one-half of the average of the beginning and ending of year balance of inventory items; and 3) one-half of the total year's cash operating expense.

**Unpaid family and operator labor** is the opportunity cost of using the operator's own and unpaid family labor in the farm business. A charge of $2,755 per month for unpaid operator and family labor is made for each farm. This labor charge is per labor month and is based on unpaid labor of 2,500 hours per year. Part-time family labor is therefore prorated. (Like any other resource, unpaid labor must be accounted for when studying profitability of a farm business)

**Revenue Items**

**Value of farm production** is the summation of cash and accrued value of sales of farm products and services, government payments and other farm-related revenue less the cost of purchased feed and livestock, plus the change in inventory value for grain and livestock, plus the value of farm products used. Farm products used are products used by the farm business and not sold.

**Net Farm Income** is the value of farm production less total operating expenses, less total interest expense plus gain or loss on machinery and buildings sold. Net Farm Income includes the return to the farm for unpaid family and operator labor, the interest on invested capital, and the returns to management. It is the net total earnings to the farm family for resources they own.

**Operator(s) labor and management income** is Net Farm Income less the interest charge on equity capital, less the opportunity cost of unpaid family labor. It represents the operators' return to their labor and management.

**Management return** is the residual after a charge for unpaid operator labor is deducted from operator(s) labor and management income.

**Other Terms Used in this Report**

**Crop return** is the sum of the feed and grain sold, value of all feed fed (except milk), government crop subsidy program payments, and the change in value of feed and grain inventories less the value of crops and feed purchased.

**Livestock returns above feed** is the sum of the sale of livestock and livestock products, value of livestock products consumed, and value of the livestock on hand at the end of the year minus livestock purchases and the value of the livestock on hand at the beginning of the year minus the cost of all feed fed, whether purchased or raised.
The Pennyroyal area of Kentucky consists of 17 counties in south central Kentucky: Livingston, Crittenden, Lyon, Caldwell, Trigg, Christian, Todd, Muhlenberg, Butler, Logan, Simpson, Warren, Edmonson, Barren, Allen, Monroe, and Metcalfe. The Pennyroyal Farm Analysis Group, Inc. serviced 176 farms in this area during 2010. These farms consisted of mostly grain production (corn, wheat, and soybeans). Other farm types include contract broiler production, contract hog production, dairy, beef and tobacco farms. Due to current Kentucky Farm Business Management (KFBM) Program data standards, only 140 of these farms were included in the average data. Contract broiler and hog production farms are not included in the data, unless the farm also qualifies as a grain farm, where broiler and hog returns are represented as livestock returns above feed costs. Limited data numbers prevents there from being average farm data for only the Pennyroyal area for dairy and beef farms.

Management Returns and Net Farm Income

Pennyroyal area farms experienced lower Management Returns and Net Farm Incomes (NFI) in 2010 than the previous two years. Management Returns were $116,979, down 24% from 2009 and falling below the five-year average (Table 1). However, even with this dramatic decrease it still ranked third highest in the recent history of the KFBM program in the area. The average Pennyroyal NFI in 2010 was $292,370, down 8.4% from $316,750 in 2009 and greater than the five-year average of $284,991 (Table 2). Pennyroyal area farms were blessed in both 2008 and 2009. If 2010 had not followed such good years, we would not be speaking of low returns.

Pennyroyal Management Returns

Pennyroyal area grain farms had an average NFI of $357,704 and average Management Returns of $161,043 or $62.64 per acre in 2010 (Table 3 & 5). Smaller farms fared the worst. The Management Returns per acre were $17.06 compared to larger farms at $87.82 (Table 5). Large farms were able to make significantly more NFI at $1,106,623 than smaller farms at $96,914 (Table 3).

When looking at historical data, it is apparent that some operations are managing the volatility of the market a lot better than others. Since 2007, the top third of the Pennyroyal producers have
made an average of almost $250 per acre more than the low third of the producers. In 2002, the difference was only $100 per acre.

Farm Land Resources

The average Pennyroyal area farm in 2010 was 2,431 acres. This consisted of 2,194 tillable acres, 2,068 of those being operator tillable acres. Land was split between 39.5% owned, 18.5% crop share, and 42.0% cash rented (Table 4). Compared to a Kentucky average, the Pennyroyal area does less crop share rent and more on a cash rent basis. When looking at only grain farms in the Pennyroyal area, the larger farms rent a greater percentage of the ground than the smaller acreage farms. In fact, as shown in Table 5, the 0-999 acre farms own as much ground (40.6%) as they cash rent (40.3%).
Production

Pennyroyal area average production data is on Table 7. Weather conditions in 2010 caused yields for all grain crops to fall below the five-year average. The spring was plagued with heavy rains which delayed planting, and then a summer drought starved plants of much needed water. Corn yield in 2010 was 126 bu/acre, the lowest since 2007. In 2009 the yield was 182 bu/acre, which represents a 30.7% drop in yield from 2009 to 2010 (Table 7).

Soybeans also suffered from the lack of moisture in 2010, yielding 32 bu/acre for full season and 27 bu/acre for double crop. Yields experienced in the tough year of 2007 were lower at 21 bu/acre for full season and 11 bu/acre for double crop. The 2010 yields were below the five-year average by 17.9% for full season and 13.5% for double-crop (Table 7).

Wheat production represented the only bright spot for Pennyroyal area crop yields during 2010. The average was 69 bu/acre, 2.4 bushels above the five-year average of 66.6 bu/acre. Spring rains caused some damage to the crop; however, it was much less than the toxin that developed on wheat during 2009. Expensive fungicide treatments were required to protect the yields on the wheat crop during 2010 (Table 7).

Crop Returns

Despite the drought conditions and low yields in 2010, crop returns were reasonable. Average crop returns for Pennyroyal area grain farms were $631.07 per acre (Table 5); this was above the “all” Kentucky grain farm average of $621.90 per acre (Table 6). Crop returns for larger farms trended higher than smaller grain farms. High commodity prices, crop insurance settlements and large wheat government support payments (ACRE) all helped to offset the low yields.

Prices received for all crops during 2010 were above the five-year average and all new crop prices were higher than old crop. Old crop corn was sold for $3.78 per bushel, while new crop corn was $4.13 per bushel. Full season soybeans sold for $9.95 and 10.57 per bushel for old and new crop.
new crop respectively, while double-crop soybeans were $9.79 for old crop and $10.42 for new crop. Wheat prices for old crop were $5.85 and new crop $5.73 (Table 8).

Farm Costs

Farm costs are analyzed using six categories; crop expense, power and equipment, building, labor, other expenses, and land charges. These costs include cash and non-cash costs and are all accrual adjusted. Non-cash costs include depreciation, unpaid labor, non-land interest, and interest on owned land. For 2010, average non-feed costs were $714.47 for all farms in the Pennyroyal area (Table 4). Of this total, crop expenses made up 29%, Power and Equipment 21%, Building 4%, Labor 12%, Other Costs 14%, and Land Charge 20%.

Crop expenses are typically very important when performing a cost analysis of the farming operation as they indicate the level of inputs for the farm and can be somewhat easily changed from one year to the next to affect the cost structure of the farm. For the average Pennyroyal area grain farm the average crop cost was $208.62 per acre in 2010 (Table 5). Of this total, fertilizer was 49% of input cost followed by seed at 31%. Pesticides were 20% of input cost for 2010.

Power and equipment costs can be hard to analyze because of the different management practices of farms. Some farms continuously upgrade equipment, creating low repair costs and high depreciation. Other farms hold onto equipment for several years, most often resulting in higher repair costs and lower depreciation. The number of acres the equipment is used on can also impact the power and equipment cost incurred. For Pennyroyal area grain farms, a few of the costs under power and equipment can be skewed by the livestock enterprises included in the average. Utility cost and machine hire will both typically be higher for those grain farms that also include livestock and/or tobacco production. In 2010, the average power and equipment cost was $140.06 for all grain farms, with smaller farms averaging higher at $165.69 per acre and larger farms averaging $141.83 per acre (Table 5).

Building costs averaged $28.85 per acre for the Pennyroyal grain farms (Table 5). Building costs include drying and storage, building repairs and building depreciation. Again, livestock and/or tobacco production on some of the farms included can skew these costs.

Labor has been an issue on almost all Pennyroyal area farms in recent years. Good labor is hard to find. With high demand for qualified farm labor in the area it can be an expensive challenge to keep good employees around. The average cost for Pennyroyal area farm labor is $87.93 per acre, well above the Kentucky average of $83.72 (most likely due to the high cost of tobacco labor) (Table 4). Smaller grain farms in the Pennyroyal area spent $123.17 per acre on labor, while larger farms spent on $67.03 per acre (Table 5). The majority of the discrepancy is in unpaid labor, where 12 months of labor is charged at the same rate for small and large farm owner. The smaller farm has fewer acres to spread the labor over making it more expensive per acre.

Other costs include: vet, medicine and livestock supplies, insurance, miscellaneous expenses, and non-land interest. Non-land interest makes up the bulk of this category and is the non-cash interest charged on capital tied up by the farming operation. If this money was not being used to
farm, it is assumed that it would be used in another way to make a return. In 2010 this charge was 5.4%. For the average Pennyroyal farm in 2010, other costs were $96.38 per acre (Table 4).

Land costs include charges for rent, property taxes, and non-cash interest per tillable acre owned. The interest on land owned is meant to account for the opportunity cost of owning land for farming, assuming that the capital investment in land could be invested elsewhere for a return. In 2010 the interest per tillable acre owned was charged at 3.75%. The average land charge for Pennyroyal grain farms did not vary as widely as some other cost categories. The average Pennyroyal grain farm land cost was $144.77, with smaller farms averaging $127.72 and larger farms averaging $147.93 (Table 5).

Total non-feed costs averaged $714.47 per operator acre for the average Pennyroyal farm. This is significantly more than the average Kentucky farm at $694.54 (Table 4).
### Table 1 - Historical Data: Operator-Only Management Returns by Area

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Kentucky</th>
<th>Pennyroyal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>(80,987)</td>
<td>(18,916)</td>
</tr>
<tr>
<td>2000</td>
<td>35,675</td>
<td>19,919</td>
</tr>
<tr>
<td>2001</td>
<td>15,557</td>
<td>34,407</td>
</tr>
<tr>
<td>2002</td>
<td>(48,294)</td>
<td>(31,247)</td>
</tr>
<tr>
<td>2003</td>
<td>49,032</td>
<td>70,808</td>
</tr>
<tr>
<td>2004</td>
<td>41,968</td>
<td>64,754</td>
</tr>
<tr>
<td>2005</td>
<td>17,728</td>
<td>19,707</td>
</tr>
<tr>
<td>2006</td>
<td>55,984</td>
<td>100,390</td>
</tr>
<tr>
<td>2007</td>
<td>35,153</td>
<td>12,519</td>
</tr>
<tr>
<td>2008</td>
<td>168,343</td>
<td>241,418</td>
</tr>
<tr>
<td>2009</td>
<td>152,237</td>
<td>145,665</td>
</tr>
<tr>
<td>2010</td>
<td>127,940</td>
<td>116,979</td>
</tr>
</tbody>
</table>

5 Year Average | 107,931 | 123,394 |

10 Year Average | 61,565 | 77,540 |

### Table 2 - Historical Data: Operator-Only Net Farm Income by Area

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Kentucky</th>
<th>Pennyroyal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>112,623</td>
<td>73,046</td>
</tr>
<tr>
<td>2000</td>
<td>127,357</td>
<td>117,582</td>
</tr>
<tr>
<td>2001</td>
<td>112,832</td>
<td>147,171</td>
</tr>
<tr>
<td>2002</td>
<td>48,653</td>
<td>75,547</td>
</tr>
<tr>
<td>2003</td>
<td>152,018</td>
<td>183,897</td>
</tr>
<tr>
<td>2004</td>
<td>144,669</td>
<td>179,456</td>
</tr>
<tr>
<td>2005</td>
<td>132,867</td>
<td>152,417</td>
</tr>
<tr>
<td>2006</td>
<td>193,375</td>
<td>255,685</td>
</tr>
<tr>
<td>2007</td>
<td>232,824</td>
<td>159,966</td>
</tr>
<tr>
<td>2008</td>
<td>311,469</td>
<td>400,184</td>
</tr>
<tr>
<td>2009</td>
<td>307,633</td>
<td>316,750</td>
</tr>
<tr>
<td>2010</td>
<td>282,523</td>
<td>292,370</td>
</tr>
</tbody>
</table>

5 Year Average | 265,565 | 284,991 |

10 Year Average | 191,886 | 216,344 |
# Table 3 - Summary of Pennyroyal Grain Farms by Size

<table>
<thead>
<tr>
<th>Range in Size (Acres)</th>
<th>Pennyroyal</th>
<th>Pennyroyal</th>
<th>Pennyroyal</th>
<th>Pennyroyal</th>
<th>Pennyroyal</th>
<th>Pennyroyal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Returns</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Number of Farms</td>
<td>104</td>
<td>29</td>
<td>27</td>
<td>15</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>Total Acres in Farm</td>
<td>2,992</td>
<td>771</td>
<td>1,696</td>
<td>2,821</td>
<td>3,775</td>
<td>8,536</td>
</tr>
<tr>
<td>Tillable Acres in Farm</td>
<td>2,761</td>
<td>643</td>
<td>1,535</td>
<td>2,562</td>
<td>3,494</td>
<td>8,080</td>
</tr>
<tr>
<td>Operator Tillable Acres</td>
<td>2,598</td>
<td>604</td>
<td>1,405</td>
<td>2,382</td>
<td>3,193</td>
<td>7,975</td>
</tr>
<tr>
<td>Percent Land Owned</td>
<td>30.6%</td>
<td>40.6%</td>
<td>27.0%</td>
<td>27.5%</td>
<td>25.5%</td>
<td>27.1%</td>
</tr>
<tr>
<td>Percent Land Crop Share</td>
<td>22.7%</td>
<td>19.2%</td>
<td>30.2%</td>
<td>23.1%</td>
<td>25.2%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Percent Land Cash Rent</td>
<td>46.7%</td>
<td>40.3%</td>
<td>42.8%</td>
<td>49.5%</td>
<td>49.3%</td>
<td>59.4%</td>
</tr>
<tr>
<td>Months of Hired Labor</td>
<td>61.72</td>
<td>16.50</td>
<td>52.09</td>
<td>51.71</td>
<td>72.12</td>
<td>158.25</td>
</tr>
<tr>
<td>Months of Unpaid Labor</td>
<td>18.30</td>
<td>14.34</td>
<td>16.52</td>
<td>18.27</td>
<td>20.12</td>
<td>26.59</td>
</tr>
<tr>
<td>Total Months Labor</td>
<td>80.02</td>
<td>30.84</td>
<td>68.60</td>
<td>69.97</td>
<td>92.24</td>
<td>184.84</td>
</tr>
</tbody>
</table>

## FARM RETURNS

| Total Cash Operating | 2,247,159  | 491,330  | 1,284,347  | 1,896,712  | 2,528,439  | 7,084,025  |
| Inventory Change     | (79,537)   | (3,954)   | (76,899)   | (155,929)  | (97,416)   | (130,367)  |
| Accounts Receivable Change| 47,058     | 3,968     | (227)      | 7,425      | 15,895     | 275,217    |
| Farm Products Used   | 0          | 0         | 0          | 0          | 0          | 0          |
| Less Purchased Feed & Grain | 69,921   | 16,319    | 73,274     | 63,816     | 123,947    | 109,735    |
| Less Purchased Livestock | 9,204     | 18,589    | 3,981      | 4,122      | 11,754     | 3,065      |
| GROSS FARM RETURNS   | 2,135,555  | 456,436   | 1,129,966  | 1,680,269  | 2,311,218  | 7,116,075  |

## FARM COSTS

| Total Cash Operating | 1,649,477  | 327,660   | 927,053    | 1,274,178  | 1,768,530  | 5,489,711  |
| Prepaid Expense Change | (78,747)  | (13,475)  | (40,258)   | (111,749)  | (121,826)  | (185,291)  |
| Accounts Payable Change | 27,985   | (377)     | (5,204)    | 15,486     | 21,130     | 154,400    |
| TOTAL OPERATING EXPENSE | 1,598,715 | 313,808   | 881,591    | 1,177,915  | 1,667,834  | 5,458,820  |

## INCOME BEFORE DEPRECIATION

| 536,839 | 142,628 | 248,375 | 502,354 | 643,384 | 1,657,253 |
| Less Depreciation | 189,681 | 47,609 | 99,690 | 175,735 | 201,867 | 599,176 |
| FARM OPERATING INCOME | 347,157 | 95,018 | 148,686 | 326,619 | 441,517 | 1,058,077 |

| Capital Account Adjustment | 10,546 | 1,896 | 3,696 | 7,296 | 3,288 | 48,546 |
| NET FARM INCOME (NFI) | 357,704 | 96,914 | 152,381 | 333,916 | 444,805 | 1,106,623 |
| Less Unpaid Family Labor | 3,033 | 3,325 | 918 | 3,673 | 2,107 | 6,457 |
| RETURNS TO OPERATOR LABOR | 354,671 | 93,589 | 151,463 | 330,242 | 442,698 | 1,100,166 |
| CAPITAL, & MANAGEMENT | 47,391 | 36,195 | 44,590 | 46,651 | 53,317 | 66,809 |
| Less Unpaid Operator Labor | 30,729 | 57,394 | 106,873 | 283,591 | 389,381 | 1,033,357 |
| RETURNS TO EQUITY CAPITAL & MANAGEMENT | 146,236 | 47,089 | 76,464 | 170,726 | 203,496 | 359,881 |
| MANAGEMENT RETURNS | 161,043 | 10,304 | 30,409 | 112,864 | 185,885 | 673,476 |

## FINANCIAL EFFICIENCY RATIOS

| Operating Expense Ratio (%) | 70.67% | 64.13% | 73.32% | 67.62% | 69.40% | 71.84% |
| Depreciation Expense Ratio (%) | 8.88% | 10.43% | 8.82% | 10.46% | 8.73% | 8.42% |
| Interest Expense Ratio (%) | 4.19% | 4.63% | 4.70% | 2.48% | 2.77% | 4.87% |
| NFI from Operations Ratio (%) | 16.26% | 20.82% | 13.16% | 19.44% | 19.10% | 14.87% |
## Table 4 - Economic Management Analysis per Operator Acre-2010

<table>
<thead>
<tr>
<th></th>
<th>Kentucky</th>
<th>Pennyroyal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range in Size (Acres)</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Management Returns</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Number of Farms</td>
<td>255</td>
<td>140</td>
</tr>
<tr>
<td>Total Acres in Farm</td>
<td>2,142</td>
<td>2,431</td>
</tr>
<tr>
<td>Tillable Acres in Farm</td>
<td>1,942</td>
<td>2,194</td>
</tr>
<tr>
<td>Operator Tillable Acres</td>
<td>1,780</td>
<td>2,068</td>
</tr>
<tr>
<td>Percent Land Owned</td>
<td>36.2%</td>
<td>39.5%</td>
</tr>
<tr>
<td>Percent Land Crop Share</td>
<td>23.5%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Percent Land Cash Rent</td>
<td>40.3%</td>
<td>42.0%</td>
</tr>
<tr>
<td>Months of Hired Labor</td>
<td>47.07</td>
<td>55.67</td>
</tr>
<tr>
<td>Months of Unpaid Labor</td>
<td>17.34</td>
<td>17.60</td>
</tr>
<tr>
<td>Total Months Labor</td>
<td>64.41</td>
<td>73.28</td>
</tr>
</tbody>
</table>

### FARM RETURNS

<table>
<thead>
<tr>
<th></th>
<th>Kentucky</th>
<th>Pennyroyal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop Returns</td>
<td>610.59</td>
<td>619.61</td>
</tr>
<tr>
<td>Livestock Return Above Feed</td>
<td>69.76</td>
<td>49.12</td>
</tr>
<tr>
<td>Custom Work</td>
<td>7.21</td>
<td>7.84</td>
</tr>
<tr>
<td>Other Farm Receipts</td>
<td>28.73</td>
<td>36.05</td>
</tr>
<tr>
<td>Tobacco Returns</td>
<td>45.93</td>
<td>55.24</td>
</tr>
<tr>
<td><strong>GROSS FARM RETURNS</strong></td>
<td>762.22</td>
<td>767.86</td>
</tr>
</tbody>
</table>

### FARM COSTS

<table>
<thead>
<tr>
<th></th>
<th>Kentucky</th>
<th>Pennyroyal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Fertility</td>
<td>96.09</td>
<td>99.85</td>
</tr>
<tr>
<td>Pesticides</td>
<td>39.49</td>
<td>41.30</td>
</tr>
<tr>
<td>Seed</td>
<td>62.49</td>
<td>61.79</td>
</tr>
<tr>
<td>Crop Total</td>
<td>198.06</td>
<td>202.94</td>
</tr>
<tr>
<td>Utilities</td>
<td>11.00</td>
<td>10.75</td>
</tr>
<tr>
<td>Machine Repairs</td>
<td>34.82</td>
<td>35.54</td>
</tr>
<tr>
<td>Machine Hire &amp; Lease</td>
<td>19.68</td>
<td>20.47</td>
</tr>
<tr>
<td>Fuel &amp; Oil</td>
<td>27.67</td>
<td>30.18</td>
</tr>
<tr>
<td>Light Vehicle</td>
<td>0.17</td>
<td>0.07</td>
</tr>
<tr>
<td>Machine Depreciation</td>
<td>53.74</td>
<td>55.97</td>
</tr>
<tr>
<td><strong>Power &amp; Equip. Total</strong></td>
<td>147.07</td>
<td>152.97</td>
</tr>
<tr>
<td>Drying</td>
<td>3.01</td>
<td>3.58</td>
</tr>
<tr>
<td>Storage</td>
<td>1.46</td>
<td>1.67</td>
</tr>
<tr>
<td>Building Repair &amp; Rent</td>
<td>12.85</td>
<td>9.83</td>
</tr>
<tr>
<td>Building Depreciation</td>
<td>15.66</td>
<td>15.98</td>
</tr>
<tr>
<td><strong>Building Total</strong></td>
<td>32.98</td>
<td>31.05</td>
</tr>
<tr>
<td>Labor, Unpaid</td>
<td>24.34</td>
<td>22.05</td>
</tr>
<tr>
<td>Labor, Paid</td>
<td>59.38</td>
<td>65.87</td>
</tr>
<tr>
<td><strong>Labor Total</strong></td>
<td>83.72</td>
<td>87.93</td>
</tr>
<tr>
<td>Vet, Med, Livestock Supply</td>
<td>8.31</td>
<td>8.11</td>
</tr>
<tr>
<td>Insurance</td>
<td>23.01</td>
<td>23.68</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>9.10</td>
<td>9.49</td>
</tr>
<tr>
<td>Interest Charge - Nonland</td>
<td>54.46</td>
<td>55.10</td>
</tr>
<tr>
<td><strong>Other Costs Total</strong></td>
<td>94.89</td>
<td>96.38</td>
</tr>
<tr>
<td>Land Charge Total</td>
<td>137.81</td>
<td>143.20</td>
</tr>
<tr>
<td><strong>TOTAL NON-FEED COSTS</strong></td>
<td>694.54</td>
<td>714.47</td>
</tr>
</tbody>
</table>

### Gain/loss Capital Sales

<table>
<thead>
<tr>
<th></th>
<th>Kentucky</th>
<th>Pennyroyal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain/loss Capital Sales</td>
<td>4.64</td>
<td>3.78</td>
</tr>
</tbody>
</table>

### MANAGEMENT RETURNS

<table>
<thead>
<tr>
<th></th>
<th>Kentucky</th>
<th>Pennyroyal</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAGEMENT RETURNS</td>
<td>72.32</td>
<td>57.16</td>
</tr>
</tbody>
</table>
Table 5 - Summary of Pennyroyal Grain Farms by Size & Management - 2010

<table>
<thead>
<tr>
<th>Range in Size (Acres)</th>
<th>Pennyroyal</th>
<th>Pennyroyal</th>
<th>Pennyroyal</th>
<th>Pennyroyal</th>
<th>Pennyroyal</th>
<th>Pennyroyal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Returns</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Number of Farms</td>
<td>104</td>
<td>29</td>
<td>27</td>
<td>15</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>Total Acres in Farm</td>
<td>2,992</td>
<td>771</td>
<td>1,696</td>
<td>2,821</td>
<td>3,775</td>
<td>8,536</td>
</tr>
<tr>
<td>Tillable Acres in Farm</td>
<td>2,761</td>
<td>643</td>
<td>1,535</td>
<td>2,562</td>
<td>3,494</td>
<td>8,080</td>
</tr>
<tr>
<td>Operator Tillable Acres</td>
<td>2,598</td>
<td>604</td>
<td>1,405</td>
<td>2,382</td>
<td>3,193</td>
<td>7,795</td>
</tr>
<tr>
<td>Percent Land Owned</td>
<td>30.6%</td>
<td>40.6%</td>
<td>27.0%</td>
<td>27.5%</td>
<td>25.5%</td>
<td>27.1%</td>
</tr>
<tr>
<td>Percent Land Crop Share</td>
<td>22.7%</td>
<td>19.2%</td>
<td>30.2%</td>
<td>23.1%</td>
<td>25.2%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Percent Land Cash Rent</td>
<td>46.7%</td>
<td>40.3%</td>
<td>42.8%</td>
<td>49.5%</td>
<td>49.3%</td>
<td>59.4%</td>
</tr>
<tr>
<td>Months of Hired Labor</td>
<td>61.72</td>
<td>16.50</td>
<td>52.09</td>
<td>51.71</td>
<td>72.12</td>
<td>158.25</td>
</tr>
<tr>
<td>Months of Unpaid Labor</td>
<td>18.30</td>
<td>14.34</td>
<td>16.52</td>
<td>18.27</td>
<td>20.12</td>
<td>26.59</td>
</tr>
<tr>
<td>Total Months Labor</td>
<td>80.02</td>
<td>30.84</td>
<td>68.60</td>
<td>69.97</td>
<td>92.24</td>
<td>184.84</td>
</tr>
<tr>
<td>FARM RETURNS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crop Returns</td>
<td>631.07</td>
<td>544.65</td>
<td>590.52</td>
<td>566.91</td>
<td>597.47</td>
<td>688.55</td>
</tr>
<tr>
<td>Livestock Return Above Feed</td>
<td>9.73</td>
<td>24.48</td>
<td>7.56</td>
<td>6.71</td>
<td>11.63</td>
<td>8.36</td>
</tr>
<tr>
<td>Custom Work</td>
<td>8.03</td>
<td>10.25</td>
<td>7.28</td>
<td>5.55</td>
<td>4.11</td>
<td>10.37</td>
</tr>
<tr>
<td>Other Farm Receipts</td>
<td>37.35</td>
<td>35.81</td>
<td>29.13</td>
<td>40.37</td>
<td>34.94</td>
<td>40.26</td>
</tr>
<tr>
<td>Tobacco Returns</td>
<td>57.85</td>
<td>119.78</td>
<td>148.06</td>
<td>68.55</td>
<td>40.39</td>
<td>26.23</td>
</tr>
<tr>
<td>GROSS FARM RETURNS</td>
<td>744.04</td>
<td>734.97</td>
<td>782.55</td>
<td>688.09</td>
<td>688.55</td>
<td>773.78</td>
</tr>
<tr>
<td>FARM COSTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soil Fertility</td>
<td>102.16</td>
<td>94.15</td>
<td>113.26</td>
<td>93.83</td>
<td>88.36</td>
<td>108.30</td>
</tr>
<tr>
<td>Pesticides</td>
<td>42.75</td>
<td>36.68</td>
<td>42.31</td>
<td>41.23</td>
<td>39.76</td>
<td>45.47</td>
</tr>
<tr>
<td>Seed</td>
<td>63.71</td>
<td>58.36</td>
<td>67.90</td>
<td>62.35</td>
<td>61.77</td>
<td>64.43</td>
</tr>
<tr>
<td>Crop Total</td>
<td>208.62</td>
<td>189.19</td>
<td>223.46</td>
<td>197.41</td>
<td>189.89</td>
<td>218.19</td>
</tr>
<tr>
<td>Utilities</td>
<td>8.06</td>
<td>11.75</td>
<td>9.87</td>
<td>7.07</td>
<td>8.62</td>
<td>7.03</td>
</tr>
<tr>
<td>Machine Repairs</td>
<td>32.42</td>
<td>46.19</td>
<td>43.17</td>
<td>27.19</td>
<td>28.67</td>
<td>30.35</td>
</tr>
<tr>
<td>Machine Hire &amp; Lease</td>
<td>15.81</td>
<td>15.89</td>
<td>17.59</td>
<td>8.48</td>
<td>11.46</td>
<td>19.24</td>
</tr>
<tr>
<td>Fuel &amp; Oil</td>
<td>28.74</td>
<td>28.18</td>
<td>34.15</td>
<td>26.62</td>
<td>27.36</td>
<td>28.39</td>
</tr>
<tr>
<td>Light Vehicle</td>
<td>0.02</td>
<td>0.22</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Machine Depreciation</td>
<td>55.00</td>
<td>63.47</td>
<td>54.63</td>
<td>57.99</td>
<td>46.44</td>
<td>56.80</td>
</tr>
<tr>
<td>Power &amp; Equip. Total</td>
<td>140.06</td>
<td>165.69</td>
<td>159.41</td>
<td>127.36</td>
<td>122.55</td>
<td>141.83</td>
</tr>
<tr>
<td>Drying</td>
<td>3.82</td>
<td>3.16</td>
<td>5.30</td>
<td>4.93</td>
<td>2.59</td>
<td>3.69</td>
</tr>
<tr>
<td>Storage</td>
<td>1.53</td>
<td>0.86</td>
<td>2.50</td>
<td>2.10</td>
<td>1.47</td>
<td>1.20</td>
</tr>
<tr>
<td>Building Repair &amp; Rent</td>
<td>8.80</td>
<td>8.91</td>
<td>8.70</td>
<td>9.05</td>
<td>6.81</td>
<td>9.62</td>
</tr>
<tr>
<td>Building Depreciation</td>
<td>14.69</td>
<td>10.86</td>
<td>11.49</td>
<td>11.24</td>
<td>12.21</td>
<td>18.26</td>
</tr>
<tr>
<td>Building Total</td>
<td>28.85</td>
<td>23.79</td>
<td>27.99</td>
<td>27.32</td>
<td>23.08</td>
<td>32.76</td>
</tr>
<tr>
<td>Labor, Unpaid</td>
<td>18.01</td>
<td>61.64</td>
<td>29.60</td>
<td>19.29</td>
<td>15.87</td>
<td>8.93</td>
</tr>
<tr>
<td>Labor, Paid</td>
<td>59.47</td>
<td>61.53</td>
<td>78.64</td>
<td>53.54</td>
<td>52.47</td>
<td>58.10</td>
</tr>
<tr>
<td>Labor Total</td>
<td>77.49</td>
<td>123.17</td>
<td>108.24</td>
<td>72.82</td>
<td>68.34</td>
<td>67.03</td>
</tr>
<tr>
<td>Vet, Med, Livestock Supply</td>
<td>1.63</td>
<td>3.46</td>
<td>0.90</td>
<td>1.14</td>
<td>1.66</td>
<td>1.74</td>
</tr>
<tr>
<td>Insurance</td>
<td>23.95</td>
<td>23.73</td>
<td>29.64</td>
<td>22.85</td>
<td>22.21</td>
<td>23.32</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>9.06</td>
<td>10.09</td>
<td>12.70</td>
<td>5.82</td>
<td>8.66</td>
<td>8.90</td>
</tr>
<tr>
<td>Interest Charge - Nonland</td>
<td>51.03</td>
<td>54.20</td>
<td>55.24</td>
<td>51.70</td>
<td>47.91</td>
<td>50.48</td>
</tr>
<tr>
<td>Other Costs Total</td>
<td>85.67</td>
<td>91.48</td>
<td>98.48</td>
<td>81.51</td>
<td>80.43</td>
<td>84.43</td>
</tr>
<tr>
<td>Land Charge Total</td>
<td>144.77</td>
<td>127.72</td>
<td>145.96</td>
<td>137.36</td>
<td>147.07</td>
<td>147.93</td>
</tr>
<tr>
<td>TOTAL NON-FEED COSTS</td>
<td>685.46</td>
<td>721.05</td>
<td>763.55</td>
<td>643.78</td>
<td>631.35</td>
<td>692.19</td>
</tr>
<tr>
<td>Gain/loss Capital Sales</td>
<td>4.06</td>
<td>3.14</td>
<td>2.63</td>
<td>3.06</td>
<td>1.03</td>
<td>6.23</td>
</tr>
<tr>
<td>MANAGEMENT RETURNS</td>
<td>62.64</td>
<td>17.06</td>
<td>21.64</td>
<td>47.38</td>
<td>58.22</td>
<td>87.82</td>
</tr>
<tr>
<td>Table 6 - Summary of All Farms by Type - 2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Range in Size (Acres)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Farms</td>
<td>Grain Farms</td>
<td>Hog Farms</td>
<td>Beef Farms</td>
<td>Dairy Farms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Management Returns</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td>All</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of Farms</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>255</td>
<td>198</td>
<td>5</td>
<td>14</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Acres in Farm</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,142</td>
<td>2,528</td>
<td>1,611</td>
<td>1,031</td>
<td>595</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tillable Acres in Farm</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,942</td>
<td>2,350</td>
<td>977</td>
<td>592</td>
<td>420</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operator Tillable Acres</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,780</td>
<td>2,146</td>
<td>949</td>
<td>568</td>
<td>415</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percent Land Owned</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36.2%</td>
<td>28.4%</td>
<td>65.7%</td>
<td>64.1%</td>
<td>65.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percent Land Crop Share</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.5%</td>
<td>28.2%</td>
<td>11.3%</td>
<td>9.3%</td>
<td>3.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percent Land Cash Rent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40.3%</td>
<td>43.5%</td>
<td>22.9%</td>
<td>26.6%</td>
<td>31.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Months of Hired Labor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47.07</td>
<td>47.42</td>
<td>190.60</td>
<td>25.54</td>
<td>38.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Months of Unpaid Labor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.34</td>
<td>18.11</td>
<td>12.80</td>
<td>12.14</td>
<td>16.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Months of Labor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64.41</td>
<td>65.52</td>
<td>203.40</td>
<td>37.68</td>
<td>54.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FARM RETURNS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Crop Returns</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>610.59</td>
<td>621.90</td>
<td>382.26</td>
<td>258.18</td>
<td>552.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Livestock Return Above Feed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>69.76</td>
<td>15.02</td>
<td>2,448.67</td>
<td>220.61</td>
<td>832.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Custom Work</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.21</td>
<td>7.41</td>
<td>0.79</td>
<td>5.75</td>
<td>5.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Farm Receipts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.73</td>
<td>29.08</td>
<td>53.57</td>
<td>14.55</td>
<td>21.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tobacco Returns</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45.93</td>
<td>47.50</td>
<td>0.00</td>
<td>55.24</td>
<td>15.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GROSS FARM RETURNS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>762.22</td>
<td>720.91</td>
<td>2,885.28</td>
<td>554.32</td>
<td>1,426.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FARM COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Soil Fertility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>96.09</td>
<td>98.07</td>
<td>49.95</td>
<td>56.32</td>
<td>73.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pesticides</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39.49</td>
<td>40.59</td>
<td>39.00</td>
<td>11.16</td>
<td>21.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Seed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62.49</td>
<td>64.18</td>
<td>39.57</td>
<td>21.59</td>
<td>39.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Crop Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>198.06</td>
<td>202.84</td>
<td>128.52</td>
<td>89.07</td>
<td>134.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.00</td>
<td>8.05</td>
<td>102.24</td>
<td>21.21</td>
<td>63.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Machine Repairs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34.82</td>
<td>32.05</td>
<td>81.58</td>
<td>44.36</td>
<td>98.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Machine Hire &amp; Lease</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.68</td>
<td>16.00</td>
<td>44.48</td>
<td>22.13</td>
<td>120.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fuel &amp; Oil</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.67</td>
<td>26.33</td>
<td>44.76</td>
<td>33.08</td>
<td>60.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Light Vehicle</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.17</td>
<td>0.13</td>
<td>0.00</td>
<td>1.01</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Machine Depreciation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53.74</td>
<td>52.73</td>
<td>83.85</td>
<td>46.22</td>
<td>80.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Power &amp; Equip. Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>147.07</td>
<td>135.29</td>
<td>356.91</td>
<td>168.01</td>
<td>424.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Drying</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.01</td>
<td>3.19</td>
<td>0.49</td>
<td>0.40</td>
<td>0.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.46</td>
<td>1.36</td>
<td>0.13</td>
<td>3.09</td>
<td>4.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Building Repair &amp; Rent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.85</td>
<td>8.57</td>
<td>332.92</td>
<td>27.52</td>
<td>25.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Building Depreciation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.66</td>
<td>12.88</td>
<td>178.74</td>
<td>21.16</td>
<td>42.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Building Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.98</td>
<td>26.00</td>
<td>512.27</td>
<td>52.18</td>
<td>71.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Labor, Unpaid</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.34</td>
<td>20.74</td>
<td>32.08</td>
<td>55.91</td>
<td>109.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Labor, Paid</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59.38</td>
<td>51.77</td>
<td>298.31</td>
<td>99.45</td>
<td>189.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Labor Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>83.72</td>
<td>72.51</td>
<td>330.38</td>
<td>155.35</td>
<td>298.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vet, Med, Livestock Supply</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.31</td>
<td>1.68</td>
<td>161.81</td>
<td>39.91</td>
<td>138.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Insurance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.01</td>
<td>23.04</td>
<td>34.10</td>
<td>17.87</td>
<td>22.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Miscellaneous</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.10</td>
<td>8.40</td>
<td>37.35</td>
<td>7.38</td>
<td>21.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interest Charge - Nonland</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54.46</td>
<td>49.34</td>
<td>249.33</td>
<td>72.22</td>
<td>134.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Costs Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>94.89</td>
<td>82.47</td>
<td>482.58</td>
<td>137.38</td>
<td>316.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Land Charge Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>137.81</td>
<td>137.94</td>
<td>182.51</td>
<td>129.02</td>
<td>130.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL NON-FEED COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>694.54</td>
<td>657.05</td>
<td>1,993.17</td>
<td>731.00</td>
<td>1,376.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gain/loss Capital Sales</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.64</td>
<td>4.81</td>
<td>8.52</td>
<td>-0.22</td>
<td>1.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MANAGEMENT RETURNS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72.32</td>
<td>68.67</td>
<td>900.63</td>
<td>(176.90)</td>
<td>52.14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 7 - Pennyroyal Area Crop Yield Data

<table>
<thead>
<tr>
<th>Year</th>
<th>Yellow Corn</th>
<th>Full Season Soybeans</th>
<th>Double Crop Soybeans</th>
<th>Wheat</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>161</td>
<td>50</td>
<td>41</td>
<td>83</td>
</tr>
<tr>
<td>2007</td>
<td>107</td>
<td>21</td>
<td>11</td>
<td>31</td>
</tr>
<tr>
<td>2008</td>
<td>147</td>
<td>41</td>
<td>30</td>
<td>84</td>
</tr>
<tr>
<td>2009</td>
<td>182</td>
<td>51</td>
<td>47</td>
<td>66</td>
</tr>
<tr>
<td>2010</td>
<td>126</td>
<td>32</td>
<td>27</td>
<td>69</td>
</tr>
<tr>
<td>5 Year Average</td>
<td>144.6</td>
<td>39</td>
<td>31.2</td>
<td>66.6</td>
</tr>
</tbody>
</table>

### Table 8 - Pennyroyal Area Crop Price History

<table>
<thead>
<tr>
<th>Year</th>
<th>Corn Old Crop</th>
<th>Corn New Crop</th>
<th>Full Season Soybeans Old Crop</th>
<th>Full Season Soybeans New Crop</th>
<th>Double Crop Old Crop</th>
<th>Double Crop New Crop</th>
<th>Wheat Old Crop</th>
<th>Wheat New Crop</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2.28</td>
<td>2.57</td>
<td>5.98</td>
<td>6.20</td>
<td>5.94</td>
<td>6.24</td>
<td>3.73</td>
<td>2.70</td>
</tr>
<tr>
<td>2008</td>
<td>4.32</td>
<td>4.60</td>
<td>6.68</td>
<td>9.54</td>
<td>9.73</td>
<td>9.39</td>
<td>5.24</td>
<td>3.00</td>
</tr>
<tr>
<td>2009</td>
<td>4.23</td>
<td>3.48</td>
<td>10.06</td>
<td>9.67</td>
<td>10.03</td>
<td>9.59</td>
<td>5.28</td>
<td>4.86</td>
</tr>
<tr>
<td>2010</td>
<td>3.78</td>
<td>4.13</td>
<td>9.95</td>
<td>10.57</td>
<td>9.79</td>
<td>10.42</td>
<td>5.85</td>
<td>5.73</td>
</tr>
</tbody>
</table>

| 5 Year Average | 3.59 | 3.65 | 7.90 | 8.65 | 8.47 | 8.47 | 4.82 | 4.34 |