

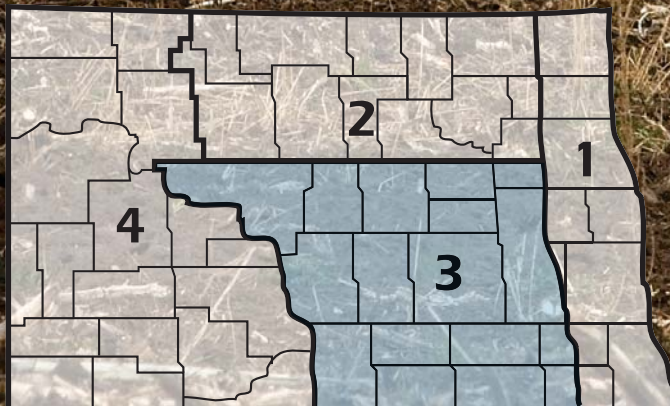
# 2012 ANNUAL REPORT

## Region 3

North Dakota Farm and Ranch  
Business Management Education



### Regional Reporting Areas



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# NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION

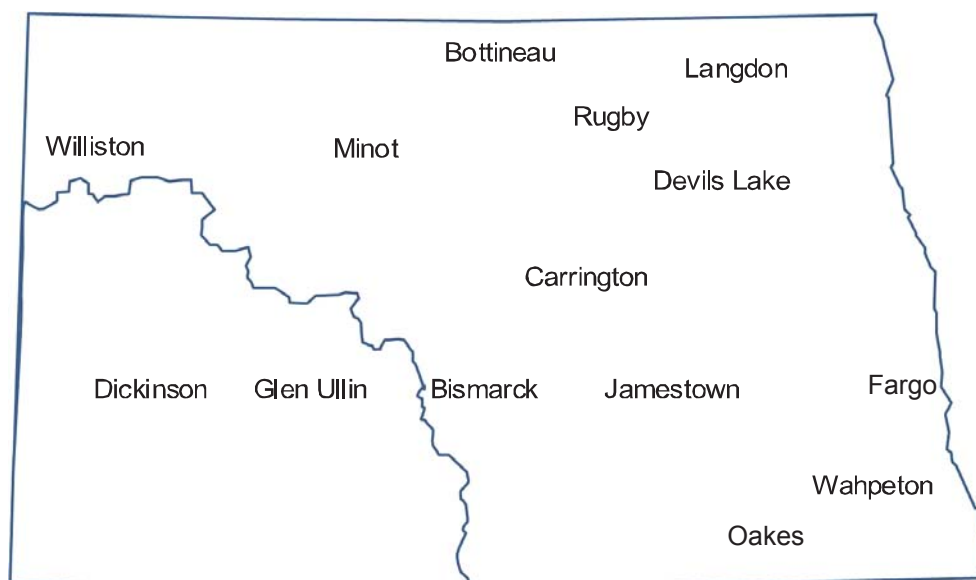
## REGION 3 – SOUTH CENTRAL AVERAGES 2012 ANNUAL REPORT

The South Central (Region 3) farm business analyses were submitted by the following instructors represented by their cooperating schools.

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This report was made possible by the farm families who cooperated with their farm management instructors in getting the records for 2012 closed out on a timely basis. The farm management instructors cited above generated the Finpack year-end farm analyses. Andrew Swenson, NDSU Extension Service, databased the Finpack analyses of farms and generated the comparative tables for this report.

Location of all Farm Business Management Education Programs in North Dakota



# 2012 South Central Report

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## INTRODUCTION

This report summarizes the individual farm records of the specific region or the whole state as identified on the acknowledgement page. The current financial status of farm operators and net returns from each crop and livestock enterprise is reported. In addition to the average of all farms, the averages for the high, middle, and low-income groups are also presented. All participating farm/ranch families are provided a copy of the regional averages report. They can compare their own Finan business analysis to the regional and/or state averages report and study the areas that may need management improvement. A review of the comparative information may reveal how certain aspects of the business or enterprises excel and help answer why they are profitable.

The regional and state averages reports are divided into three major sections; farm operators' reports, crop reports and livestock reports. Explanatory notes precede each section. The first section contains 15 tables with whole farm financial and operator information. The last three tables of this section are financial summaries in which farms are categorized by gross revenue, age of operator and farm type, respectively. The second section provides performance information on crop enterprises. The third section provides performance results on livestock enterprises. Lastly, figures 1 through 10 provide trend information for various measures of finance and/or production.

The 2012 summary reports are based upon data generated by the Finan individual farm analysis completed by farm/ranch families enrolled in the statewide Adult Farm and Ranch Business Management Education program in North Dakota. Instructors pooled the individual business analysis and submitted the combined school data to the FINPACK Center located at North Dakota State University. The FINPACK Center did provide schools with local averages in order to assist instructors with obtaining relevant local management trends.

Farm/ranch families enrolled in the statewide program are encouraged to request assistance from their instructors to determine short-term cash flow and long-term projections. Each instructor has access to FINPACK computer programs, which can be used to generate annual or multi-year (cash flow) farm plans and/or long term alternative projections.

This is the 24th year that the regional averages have been generated in North Dakota based upon the four regions shown in the state map on the cover of this publication. A regional report has been generated and published for Regions 2, 3 and 4 identified on the North Dakota map. Most farms in Region 1 are located within the Red River Valley. Those farms are contained in a combined Minnesota-North Dakota Red River Valley report. The state averages report includes all farms participating in the North Dakota Farm Business Management Education Program that were represented in the regional averages and also those farms which were processed and submitted after the March deadline date. All of these reports may be ordered from Farm Business Management, P.O. Box 6022, Bismarck, ND, 58506-6022 for \$5 per copy. The reports are available online at [www.ndfarmmanagement.com](http://www.ndfarmmanagement.com).



## EXPLANATORY NOTES FOR THE FARM OPERATORS' REPORTS

The tables include the same number of farms, which were all of the farms whose records were judged to be of sufficient quality to be included in the overall report. However, the balance sheets include only sole proprietors. Partnerships and corporations are excluded because some debt is held outside of the business causing potential misinterpretations of the financial statement. The number of farms included in each of the crop tables varies because all farms do not have the same enterprises. Also, some farmers' records were complete enough to be included in the whole-farm tables, but at times, these same farmers' crop records were not complete enough to include in the respective crop and livestock tables.

Rounding of individual items for the report may have caused minor discrepancies with the printed totals which are calculated before rounding.

### Farm Income Statement

This statement is a summary of income, expenses, or resultant profit or loss from farming operations during the calendar year.

The first section of the table lists cash farm income from all sources. There are three possible sources of cash income from crops. The first is income from cash sales. The second is income from crops stored under government loan programs when the loan is treated as income for the year in which the crop was stored. If the crop value has not been entered as income when it was stored, then it would be treated as cash income in the year it was sold. The third is Net Government Sales, which refers to the difference between income credited in the year a crop was stored and the actual cash income received at the time it was sold. There are two categories of cash income from livestock sales. "Raised" steer, hogs, and lambs refer to animals raised from birth to market weight on the farm. "Finished" animals refers to those purchased as feeders and fed to market weight. Government payments are grouped as "Direct, CCP & ACRE pymts;" "LDP payments" which are loan deficiency payments that may be received on production when local prices are below the county loan rate for the crop; "Other government payments" which refers to all other government payments such as disaster payments but not including CRP payments; and CRP payments.

The second section of the income statement lists cash expenses. "Labor" includes only labor hired. "Interest" includes only interest actually paid. No opportunity charges on farm equity capital or unpaid labor are included.

The difference between "Gross Cash Farm Income" and "Total Cash Expense" is the "Net Cash Farm Income." This is net farm income on a cash basis.

The last two sections of the income statement deal with the non-cash changes in the farm business. The "Inventory Changes" and "Depreciation" sections are used to convert the cash income statement (Net Cash Farm Income) derived from the first two sections into an accrual income statement. The final adjustment is for "Gain or loss on capital sales." The bottom line, labeled "Net farm Income," represents the return to the operator's and family's unpaid labor, management, and equity capital (net worth). In other words, it represents the return to all of the resources that are owned by the farm family and hence, not purchased or paid a wage. However, it does not include any debt forgiveness or asset repossessions.

### Inventory Changes

This is the detailed statement of inventory changes that is summarized in the income statement. It includes beginning and ending inventories and the calculated changes.



## Depreciation

This is the detailed statement of depreciation and other capital adjustments that is summarized in the income statement. It includes beginning and ending inventories, and capital sales and purchases.

## Profitability Measures

This table shows profitability when capital assets are valued at cost. Various measures of performance are calculated. In the previous tables no opportunity costs are used. In this table, opportunity costs for labor, capital, and management are used. The measures and their components are described below.

**"Rate of return on assets"** is the "Return on farm assets" divided by "Average farm assets."

**"Rate of return on equity"** is the "Return of farm equity" divided by "Average farm equity."

**"Operating profit margin"** is the "Return on farm assets" divided by "Value of farm production."

**"Asset turnover rate"** is the "Value of farm production" divided by "Average farm assets."

**"Farm interest expense"** is the accrual interest cost, usually it will be different from the cash interest expense.

**"Value of operator's labor and management"** is an opportunity cost for unpaid operator's labor and management that is used in the calculation of several financial performance measures. A value of \$20,000 per full time operator plus 5% of value of farm production is used.

**"Return of farm assets"** is calculated by adding "Farm interest expense" to "Net farm income" and then subtracting the "Value of operator's labor and management."

**"Average farm assets"** is the average of beginning and ending total farm assets.

**"Return on farm equity"** is calculated by subtracting the "Value of operator's labor and management" from "Net farm income."

**"Average farm equity"** is the average of beginning and ending farm net worth.

**"Value of farm production"** is gross cash farm income minus purchased feed and feeder livestock and adjusted for inventory changes in crops, market livestock, accounts receivable and breeding livestock.

## Liquidity & Repayment Capacity Measures

The table shows several measures of liquidity and repayment capacity. Calculation of repayment capacity starts with net farm income from operations and adds back the non-cash expense of depreciation. Personal income is also added. Family living expenses, personal debt payments and income taxes paid are subtracted to determine the capital debt repayment capacity.

## Balance Sheets

The ending balance sheet statements and solvency measures are presented for sole proprietors only. Current assets are valued at market price at the time of the inventory which is December 31. In balance sheet at cost values, intermediate and long-term assets that are depreciable are valued at cost remaining (amount remaining to be depreciated, plus salvage value). Raised breeding livestock is valued at conservative market replacement costs. Land is valued at cost or conservative market value. In balance sheet at market values, the intermediate and long term assets are listed at market value, and deferred income tax liabilities are estimated.

## Statement of Cash Flows

This statement organizes cash inflows and outflows by the following three categories: Operating activities, investing activities, and financing activities.

## Financial Standards Measures

The Farm Financial Standards Task Force recommended the use of these financial measures to evaluate a farm's financial position and financial performance. These measures are grouped by: Liquidity, Solvency, Profitability, Repayment Capacity, and Efficiency.

### Liquidity

Liquidity is the ability of the farm business to meet financial obligations in a timely manner, without disrupting normal business operations.

**Current Ratio:** The current ratio shows the value of current assets relative to current liabilities. It measures the extent current farm assets, if liquidated, would cover liabilities that are due during the next 12 months. The higher the ratio, the safer the short term position.

**Working Capital:** Working capital shows the dollar amount that current assets can or cannot cover current liabilities. It approximates the amount of capital available to purchase crop and livestock inputs and equipment necessary to produce farm products. The amount of working capital considered adequate must be related to the size of the farm business.

**Working Capital to Gross Revenues:** Measures operating capital available against the size of the business.

### Solvency

Solvency is important in evaluating the risk position of the farm and family and in considering future borrowing capacity. Solvency measures the ability of the business to pay off all debts if liquidated.

**Farm Debt To Asset Ratio:** The farm debt to asset ratio measures the financial position or solvency of the farm or ranch by comparing the total liabilities to the total assets. It measures the portion of the farm assets that have debt against them. A higher ratio is considered an indicator of greater financial risk.

**Farm Equity To Asset Ratio:** The farm equity to asset ratio measures the farm equity relative to the value of the farm assets. It measures the proportion of the farm assets financed by the owner's equity whereas the debt to asset ratio measured the proportion of farm assets financed by debt.

**Farm Debt To Equity Ratio:** The farm debt to equity ratio measures the amount of farm debt relative to the amount of farm equity. It measures the amount of debt the farm has for every dollar of equity.

### Profitability

Profitability is the measure of the value of goods produced by the business in relation to the cost of resources used in the production. Profitability calculated on a cost basis does not consider changes in market valuation of capital assets such as machinery and breeding livestock.

**Rate of Return on Assets:** Rate of return on assets is, in effect, the interest rate your farm earned in the past year on all money invested in the business. If assets are valued at market value, the rate of return on investment can be looked at as the "opportunity cost" of investing money in the farm instead of alternative investments. If assets are valued at cost (cost less depreciation), the rate of return represents the actual return on the average dollar invested in the business.

**Rate of Return on Equity:** Rate of return on equity is, in effect, the interest rate your investment in the business earned in the past year. If assets are valued at market value, this return can be compared with returns available if the assets were liquidated and invested in alternative investments. If assets are valued at cost, this represents the actual return to the amount of equity capital you have invested in the farm business.

If your return on assets is higher than your average interest rate, your return on equity will be still higher, reflecting the fact that there are residual returns to equity capital after paying all interest expense. This is positive use of financial leverage. If your return on assets is lower than your average interest rate, your return on equity will be still lower, reflecting the fact that borrowed capital did not earn enough to pay its interest cost. This is negative financial leverage. Profitability becomes a key concern when substantial debt capital is used in the business.

**Operating Profit Margin:** The operating profit margin is a measure of the profit margin from the employment of assets. It measures how effectively you are employing assets relative to the value of output produced. Low prices, high operating expenses, or production problems are all possible causes of a low operating profit margin.

**Net Farm Income:** Net farm income represents the returns to labor, management, and equity capital invested in the business. Without income from other sources, or appreciation of capital asset values, net farm income must cover family living expenses and taxes, or net worth will decrease.

**EBITDA:** This factor stands for: Earnings Before Interest, Taxes, Depreciation and Amortization. This represents a measure of earnings available for debt repayment.

#### **Repayment Capacity**

Repayment capacity shows the borrower's ability to repay term debts (longer than one year) on time. This includes non-farm income, and is therefore not a measure of business performance alone.

**Capital Debt Repayment Capacity:** Measures the amount generated from farm and non-farm sources, to cover debt repayment and capital replacement.

**Capital Debt Repayment Margin:** The amount of money remaining after all operating expenses, taxes, family living costs, and scheduled debt payments have been made. It is the money left, after paying all expenses, which is available for purchasing/financing new machinery, equipment, land or livestock.

**Replacement Margin:** The replacement margin is the amount of income remaining after paying principal and interest on term loans and unfunded (cash) capital purchases.

**Term Debt Coverage Ratio:** The term debt coverage ratio measures the ability of the business to cover all term debt payments. A number less than 100 percent indicates that the business, plus non-farm income, is not generating sufficient cash to meet all of the debt payments, after family living expenses and taxes have been paid. A number greater than 100 indicates the business is generating sufficient cash to pay all term debt obligations with some surplus margin remaining.

**Replacement Margin Coverage Ratio:** This represents the ability to term debt and unfunded capital purchases. A ratio under 1.0 indicated that you did not generate enough income to cover term debt payments and unfunded capital purchases.

#### **Efficiency**

These measures reflect the relationships between expense and income items to revenue and the efficiency of the farm business with regard to the use of cash and capital assets.

**Asset Turnover:** Asset turnover is a measure of how efficiently assets are used in the business. A farm with good operating profit margin and asset turnover will show a strong rate of return on farm assets. If operating profit margin is low, the asset turnover rate must be strong, or vice versa, to maintain the rate of return on assets.

**Operating Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to pay the operating expenses. Operating expenses do not include interest or depreciation expense.

**Depreciation Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to cover the depreciation expense.

**Interest Expense Ratio:** This ratio indicates the percent of the gross farm income, which is used to pay farm interest expenses.

**Net Farm Income Ratio:** The ratio indicates the percent of the gross farm income, which remains after all expenses.

## **Crop Production and Marketing Summary**

This table contains three sections. The first section reports averages for total acres owned, crop land by tenure and total pasture acres. The next two sections show average price received and average yields for major crops. These tables are sorted on the basis of "Net farm income."

## **Household and Personal Expenses**

For those farms that keep records, the household and personal expenses are summarized. The farms are grouped in the same ranking as in the Income Statement. Since not all farms keep these records, the number of farms in the low profit and high profit groups may be different. Averages are determined by the number of farms keeping these records. The Statement of Cash Flows presents calculated family living and includes all farms. Income tax paid is also shown in the Statement of Cash Flows and includes all farms.

## **Operator and Labor Information**

This table reports the average for the number of operators per farm, the operator's age, and the number of years farming.

## **Nonfarm Summary**

This table also reports nonfarm income. The figure reported is the average over all farms not just those reporting nonfarm income.



**Farm Income Statement**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	146	29	29	30
<b>Cash Farm Income</b>				
Barley	38,924	4,003	12,912	142,405
Beans, Black Turtle	1,473	-	-	7,171
Beans, Navy	796	-	-	-
Beans, Pinto	43,579	-	5,725	157,322
Buckwheat	285	-	-	-
Canola	13,866	1,961	4,723	52,776
Corn	209,949	11,645	98,830	520,909
Corn Silage	403	-	-	-
Flax	1,465	198	3,705	2,568
Hay, Alfalfa	1,337	-	-	1,000
Hay, Grass	988	1,187	164	365
Hay, Mixed	222	-	-	688
Hay, Mixed Alfalfa/Grass	590	747	1,512	-
Oats	178	398	498	-
Peas, Field	722	-	-	2,203
Rye	320	-	1,613	-
Soybeans	233,376	8,304	141,746	616,584
Stover	118	-	-	-
Straw	362	-	-	435
Sunflowers	22,292	6,842	21,107	46,760
Sunflowers, Confectionary	3,661	2,304	2,156	13,504
Wheat, Durum	3,109	1,931	1,331	-
Wheat, Spring	111,973	5,995	75,163	336,474
Wheat, Winter	8,627	3,664	22,248	9,457
Rented Out	2,340	1,758	910	3,596
Soybeans, Food	6,548	-	6,126	22,994
Beef Bulls	481	1,734	-	665
Beef Cow-Calf, Beef Calves	18,168	14,336	28,932	5,261
Beef Replacement Heifers	10,557	2,474	14,112	16,073
Beef Backgrounding	29,479	24,076	43,068	37,268
Beef Finishing	15,443	-	-	54,663
Beef Grazing	1,934	547	2,126	6,828
Dairy, Milk	25,816	3,559	5,432	116,945
Dairy Calves and Backgrounding	545	393	-	2,276
Dairy Replacement Heifers	238	379	-	793
Hogs, Farrow To Finish, Raised Ho	2,771	13,952	-	-
Hogs, Feeder Pig Prod, Feeder Pig	26	131	-	-
Sheep, Lamb Finishing	267	-	-	-
Sheep, Lamb Grazing	159	-	800	-
Sheep, Market Lamb Prod, Mkt Lamb	391	-	1,052	-
Sheep, Market Lamb Prod, Wool	40	-	140	-
Cull breeding livestock	9,138	6,512	9,850	14,386
Misc. livestock income	2,959	316	2,062	1,754
Direct, CCP & ACRE pymts	15,047	1,424	9,974	38,025
CRP payments	2,018	1,215	2,253	1,863
Other government payments	9,392	1,539	13,350	15,525
Custom work income	23,029	4,883	1,071	23,605
Patronage dividends, cash	3,583	473	3,141	10,206
Crop insurance income	24,996	1,104	8,994	56,785
Property insurance income	1,912	830	1,183	5,488
Other farm income	12,273	3,083	11,459	31,598
Gross Cash Farm Income	918,165	133,896	559,468	2,377,218

**Farm Income Statement (Continued)**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	146	29	29	30
<b>Cash Farm Expense</b>				
Seed	101,923	8,223	56,020	274,438
Fertilizer	118,097	13,566	81,334	301,558
Crop chemicals	52,638	6,145	32,161	153,953
Crop insurance	33,256	2,190	22,351	80,613
Drying expense	655	3	295	1,983
Storage	790	3	166	3,133
Irrigation expense	2,643	-	500	-
Crop marketing	331	-	-	1,036
Crop miscellaneous	1,276	55	2,528	3,120
Feeder livestock purchase	19,795	9,859	26,546	40,971
Purchased feed	34,146	19,458	15,950	58,085
Breeding fees	427	79	356	1,515
Veterinary	4,111	1,409	3,574	9,668
Supplies	2,731	1,157	1,552	9,213
Livestock custom hire	247	293	-	329
Livestock leases	171	439	-	-
Grazing fees	53	244	-	-
Hauling and trucking	650	-	-	3,163
Livestock marketing	1,513	748	1,013	1,902
Interest	27,216	6,985	22,820	50,827
Fuel & oil	43,361	8,259	27,392	111,067
Repairs	51,897	12,848	31,497	117,151
Custom hire	20,346	3,877	14,916	30,882
Hired labor	27,141	1,272	7,200	92,922
Land rent	75,593	9,686	41,848	205,590
Machinery leases	10,039	1,234	3,739	16,710
Building leases	230	-	-	498
Real estate taxes	4,717	1,079	4,563	8,274
Farm insurance	9,454	2,590	6,662	21,965
Utilities	6,678	2,933	4,912	14,801
Dues & professional fees	2,654	186	773	7,159
Miscellaneous	14,012	4,866	11,525	35,878
Total cash expense	668,792	119,685	422,194	1,658,402
Net cash farm income	249,373	14,212	137,274	718,816
<b>Inventory Changes</b>				
Prepays and supplies	32,769	-411	7,147	124,878
Accounts receivable	-5,469	-841	7,914	-46,882
Hedging accounts	-3,222	-	-2,596	-11,076
Other current assets	25	-116	201	93
Crops and feed	203,696	19,294	123,401	602,078
Market livestock	8,087	16,919	2,059	11,853
Breeding livestock	-3,637	-2,267	2,347	-6,048
Other assets	-1,251	441	-1,114	-4,027
Accounts payable	-782	-1,180	724	-10,833
Accrued interest	-1,272	-2,021	-1,903	-1,895
Total inventory change	228,944	29,818	138,182	658,141
Net operating profit	478,317	44,030	275,456	1,376,957
<b>Depreciation</b>				
Machinery and equipment	-49,731	-7,981	-26,794	-143,005
Titled vehicles	-3,413	-1,393	-1,973	-7,723
Buildings and improvements	-4,396	-565	-3,579	-11,040
Total depreciation	-57,540	-9,939	-32,346	-161,768
Net farm income from operations	420,776	34,091	243,109	1,215,190
Gain or loss on capital sales	959	-250	129	3,500
Net farm income	421,735	33,841	243,239	1,218,689

**Inventory Changes**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	146	29	29	30
Net cash farm income	249,373	14,212	137,274	718,816
<b>Crops and Feed</b>				
Ending inventory	643,734	59,184	302,298	2,018,389
Beginning inventory	440,039	39,890	178,897	1,416,311
Inventory change	203,696	19,294	123,401	602,078
<b>Market Livestock</b>				
Ending inventory	61,455	53,215	74,800	66,654
Beginning inventory	53,367	36,296	72,741	54,801
Inventory change	8,087	16,919	2,059	11,853
<b>Accts Receivable</b>				
Ending inventory	35,559	3,959	36,699	35,389
Beginning inventory	41,028	4,800	28,785	82,271
Inventory change	-5,469	-841	7,914	-46,882
<b>Prepaid Expenses and Supplies</b>				
Ending inventory	109,835	3,914	47,005	367,036
Beginning inventory	77,066	4,326	39,858	242,158
Inventory change	32,769	-411	7,147	124,878
<b>Hedging Activities</b>				
Ending inventory	3,464	-	887	12,919
Withdrawals	3,219	-	1,138	12,107
Beginning inventory	3,265	-	2,343	11,631
Deposits	6,640	-	2,278	24,471
Gain or loss	-3,222	-	-2,596	-11,076
<b>Other Current Assets</b>				
Ending inventory	2,370	262	5,600	3,802
Beginning inventory	2,345	379	5,398	3,710
Inventory change	25	-116	201	93
<b>Breeding Livestock</b>				
Ending inventory	93,730	72,932	105,075	131,747
Capital sales	3,072	3,349	1,246	2,816
Beginning inventory	85,482	63,493	96,506	124,558
Capital purchases	14,957	15,056	7,468	16,054
Depreciation, capital adjust	-3,637	-2,267	2,347	-6,048
<b>Other Capital Assets</b>				
Ending inventory	48,519	5,528	18,404	169,144
Capital sales	632	-	47	1,479
Beginning inventory	40,852	5,087	16,828	135,196
Capital purchases	9,549	-	2,738	39,453
Depreciation, capital adjust	-1,251	441	-1,114	-4,027
<b>Accounts Payable</b>				
Beginning inventory	17,055	8,550	14,615	27,029
Ending inventory	17,837	9,730	13,891	37,862
Inventory change	-782	-1,180	724	-10,833
<b>Accrued Interest</b>				
Beginning inventory	10,889	3,949	10,088	23,015
Ending inventory	12,162	5,970	11,991	24,909
Inventory change	-1,272	-2,021	-1,903	-1,895
Total inventory change	228,944	29,818	138,182	658,141
Net operating profit	478,317	44,030	275,456	1,376,957

**Depreciation**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	146	29	29	30
Net operating profit	478,317	44,030	275,456	1,376,957
<b>Machinery and Equipment</b>				
Ending inventory	596,809	112,521	320,485	1,616,655
Capital sales	8,919	4,566	2,415	27,168
Beginning inventory	494,712	96,576	247,370	1,334,413
Capital purchases	160,747	28,492	102,323	452,415
Depreciation, capital adjust.	-49,731	-7,981	-26,794	-143,005
<b>Titled Vehicles</b>				
Ending inventory	33,997	12,778	23,273	71,391
Capital sales	574	-	93	1,273
Beginning inventory	26,559	12,253	20,420	58,943
Capital purchases	11,425	1,918	4,920	21,445
Depreciation, capital adjust.	-3,413	-1,393	-1,973	-7,723
<b>Buildings and Improvements</b>				
Ending inventory	165,880	22,943	122,008	444,488
Capital sales	145	253	-	459
Beginning inventory	137,682	18,785	102,107	356,517
Capital purchases	32,739	4,976	23,480	99,470
Depreciation, capital adjust.	-4,396	-565	-3,579	-11,040
Total depreciation, capital adj.	-57,540	-9,939	-32,346	-161,768
Net farm income from operations	420,776	34,091	243,109	1,215,190
Gain or loss on capital sales	959	-250	129	3,500
Net farm income	421,735	33,841	243,239	1,218,689



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**Profitability Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	146	29	29	30
<b>Profitability (assets valued at cost)</b>				
Net farm income from operations	420,776	34,091	243,109	1,215,190
Rate of return on assets	17.8 %	5.2 %	15.6 %	20.6 %
Rate of return on equity	24.9 %	6.6 %	23.1 %	26.5 %
Operating profit margin	36.0 %	17.2 %	34.1 %	39.5 %
Asset turnover rate	49.5 %	30.2 %	45.7 %	52.1 %
 Farm interest expense	 28,489	 9,006	 24,723	 52,722
Value of operator lbr and mgmt.	66,399	19,324	46,945	152,894
Return on farm assets	382,866	23,774	220,888	1,115,018
Average farm assets	2,144,917	456,688	1,416,570	5,420,114
Return on farm equity	354,378	14,768	196,164	1,062,296
Average farm equity	1,423,679	225,001	850,400	4,002,069
Value of farm production	1,062,590	138,139	647,949	2,825,261

**Liquidity & Repayment Capacity Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	146	29	29	30
<b>Liquidity</b>				
Current ratio	2.44	1.52	2.35	2.95
Working capital	395,842	46,075	290,559	1,220,991
Working capital to gross inc	44.2 %	27.5 %	42.1 %	52.3 %
Current assets	670,543	135,529	505,144	1,846,050
Current liabilities	274,701	89,453	214,585	625,060
Gross revenues (accrual)	896,132	167,455	690,446	2,333,554
<b>Repayment capacity</b>				
Net farm income from operations	420,776	34,091	243,109	1,215,190
Depreciation	57,540	9,939	32,346	161,768
Personal income	35,813	48,686	45,399	35,973
Family living/owner withdrawals	-65,881	-37,966	-57,738	-119,992
Payments on personal debt	-4,675	-4,660	-6,303	-5,564
Income taxes paid	-15,033	-8,847	-10,528	-25,705
Interest on term debt	18,876	6,626	15,563	33,180
Capital debt repayment capacity	447,417	47,869	261,849	1,294,849
Scheduled term debt payments	-73,897	-23,270	-53,574	-164,978
Capital debt repayment margin	373,519	24,599	208,275	1,129,872
Cash replacement allowance	-31,972	-3,379	-16,888	-94,512
Replacement margin	341,548	21,220	191,387	1,035,360
Term debt coverage ratio	6.05	2.06	4.89	7.85
Replacement coverage ratio	4.23	1.80	3.72	4.99

**Balance Sheet at Cost Values**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	134	29	29	22
<b>Assets</b>				
Current Farm Assets				
Cash and checking balance	35,133	14,994	37,855	77,747
Prepaid expenses & supplies	84,564	3,914	47,005	306,469
Growing crops	1,207	251	4,963	-
Accounts receivable	33,135	3,959	36,699	14,646
Hedging accounts	1,781	-	887	5,703
Crops held for sale or feed	451,044	59,184	302,298	1,370,460
Crops under government loan	-	-	-	-
Market livestock held for sale	63,094	53,215	74,800	70,662
Other current assets	584	12	637	364
Total current farm assets	670,543	135,529	505,144	1,846,050
Intermediate Farm Assets				
Breeding livestock	79,258	72,932	105,075	46,163
Machinery and equipment	474,524	112,521	320,485	1,318,261
Titled vehicles	28,978	12,778	23,273	50,637
Other intermediate assets	6,059	2,578	10,252	1,482
Total intermediate farm assets	588,819	200,810	459,085	1,416,543
Long Term Farm Assets				
Farm land	507,037	155,523	471,911	948,079
Buildings and improvements	119,022	22,943	122,008	292,208
Other long-term assets	11,885	2,950	8,152	17,700
Total long-term farm assets	637,944	181,416	602,071	1,257,987
Total Farm Assets	1,897,306	517,754	1,566,300	4,520,581
Total Nonfarm Assets	227,700	112,181	285,730	417,718
Total Assets	2,125,007	629,935	1,852,029	4,938,299
<b>Liabilities</b>				
Current Farm Liabilities				
Accrued interest	12,086	5,970	11,991	27,315
Accounts payable	13,686	9,730	13,891	18,137
Current notes	183,587	51,426	140,747	422,404
Government crop loans	-	-	-	-
Principal due on term debt	65,343	22,328	47,955	157,204
Total current farm liabilities	274,701	89,453	214,585	625,060
Total intermediate farm liabs	153,517	94,454	101,193	335,116
Total long term farm liabilities	290,220	95,255	301,521	498,078
Total farm liabilities	718,437	279,163	617,299	1,458,254
Total nonfarm liabilities	46,764	43,245	45,479	65,552
Total liabilities	765,202	322,408	662,778	1,523,806
Net worth (farm and nonfarm)	1,359,805	307,527	1,189,252	3,414,493
Net worth change	310,126	40,696	219,319	976,136
Percent net worth change	30 %	15 %	23 %	40 %
<b>Ratio Analysis</b>				
Current farm liabilities / assets	41 %	66 %	42 %	34 %
Intermediate farm liab. / assets	26 %	47 %	22 %	24 %
Long term farm liab. / assets	45 %	53 %	50 %	40 %
Total debt to asset ratio	36 %	51 %	36 %	31 %

**Statement Of Cash Flows**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	146	29	29	30
Beginning cash (farm & nonfarm)	37,324	19,012	42,244	86,280
<b>Cash Provided By Operating Activities</b>				
Gross cash farm income	918,165	133,896	559,468	2,377,218
Total cash farm expense	-668,792	-119,685	-422,194	-1,658,402
Net cash from hedging transactions	-3,421	-	-1,140	-12,364
Cash provided by operating	245,952	14,212	136,134	706,452
<b>Cash Provided By Investing Activities</b>				
Sale of breeding livestock	3,072	3,349	1,246	2,816
Sale of machinery & equipment	9,727	3,983	2,534	30,465
Sale of titled vehicles	659	-	103	1,475
Sale of farm land	1,274	-	-	6,202
Sale of farm buildings	211	586	-	459
Sale of other farm assets	632	-	47	1,479
Sale of nonfarm assets	2,705	276	788	10,837
Purchase of breeding livestock	-14,957	-15,056	-7,468	-16,054
Purchase of machinery & equip.	-160,747	-28,492	-102,323	-452,415
Purchase of titled vehicles	-11,425	-1,918	-4,920	-21,445
Purchase of farm land	-122,148	-51,874	-43,726	-317,798
Purchase of farm buildings	-32,739	-4,976	-23,480	-99,470
Purchase of other farm assets	-9,549	-	-2,738	-39,453
Purchase of nonfarm assets	-30,096	-12,035	-28,787	-73,588
Cash provided by investing	-363,383	-106,157	-208,724	-966,488
<b>Cash Provided By Financing Activities</b>				
Money borrowed	665,797	168,020	432,157	1,561,239
Principal payments	-514,445	-72,950	-332,376	-1,279,122
Personal income	35,813	48,686	45,399	35,973
Family living/owner withdrawals	-65,881	-37,966	-57,738	-119,992
Income and social security tax	-15,033	-8,847	-10,528	-25,705
Capital contributions	548	-	2,759	-
Capital distributions	-836	-	-4,208	-
Dividends paid	-	-	-	-
Cash gifts and inheritances	30,550	345	923	146,133
Gifts given	-2,235	-	-345	-9,852
Other cash flows	-	-	-	-
Cash provided by financing	134,278	97,288	76,043	308,674
Net change in cash balance	16,847	5,343	3,453	48,638
Ending cash (farm & nonfarm)	54,172	24,355	45,697	134,918



**Financial Standards Measures**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	146	29	29	30
<b>Liquidity</b>				
Current ratio	2.44	1.52	2.35	2.95
Working capital	395,842	46,075	290,559	1,220,991
Working capital to gross inc	44.2 %	27.5 %	42.1 %	52.3 %
<b>Solvency (cost)</b>				
Farm debt to asset ratio	38 %	54 %	39 %	32 %
Farm equity to asset ratio	62 %	46 %	61 %	68 %
Farm debt to equity ratio	0.61	1.17	0.65	0.48
<b>Profitability (cost)</b>				
Rate of return on farm assets	17.8 %	5.2 %	15.6 %	20.6 %
Rate of return on farm equity	24.9 %	6.6 %	23.1 %	26.5 %
Operating profit margin	36.0 %	17.2 %	34.1 %	39.5 %
Net farm income	421,735	33,841	243,239	1,218,689
EBIDTA	506,805	53,036	300,179	1,429,680
<b>Repayment Capacity</b>				
Capital debt repayment capacity	447,417	47,869	261,849	1,294,849
Capital debt repayment margin	373,519	24,599	208,275	1,129,872
Replacement margin	341,548	21,220	191,387	1,035,360
Term debt coverage ratio	6.05	2.06	4.89	7.85
Replacement coverage ratio	4.23	1.80	3.72	4.99
<b>Efficiency</b>				
Asset turnover rate (cost)	49.5 %	30.2 %	45.7 %	52.1 %
Operating expense ratio	54.6 %	68.3 %	56.5 %	51.1 %
Depreciation expense ratio	5.2 %	5.9 %	4.7 %	5.5 %
Interest expense ratio	2.6 %	5.4 %	3.6 %	1.8 %
Net farm income ratio	37.8 %	20.2 %	35.2 %	41.7 %

**Crop Production and Marketing Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	146	29	29	30
<b>Acreage Summary</b>				
Total acres owned	1,009	379	927	1,635
Total crop acres	1,914	417	1,342	4,729
Crop acres owned	587	137	594	1,107
Crop acres cash rented	1,221	258	670	3,356
Crop acres share rented	105	22	79	266
Total pasture acres	552	487	682	397
Percent crop acres owned	31 %	33 %	44 %	23 %
<b>Average Price Received (Cash Sales Only)</b>				
Corn per bushel	6.06	6.21	6.10	6.08
Soybeans per bushel	12.81	13.17	13.07	12.68
Wheat, Spring per bushel	8.08	7.30	8.29	8.07
Barley per bushel	6.39	-	6.67	6.29
Sunflowers per cwt	27.30	-	26.59	29.34
Beans, Pinto per cwt	37.33	-	-	36.84
Canola per cwt	23.39	-	-	23.24
Wheat, Winter per bushel	7.26	-	7.23	-
Flax per bushel	13.19	-	-	-
Hay, Grass per ton	69.95	-	-	-
Soybeans, Food per bushel	16.87	-	-	-
Sunflowers, Confectionary per cwt	34.39	-	-	-
Hay, Mixed Alfalfa/Grass per ton	71.01	-	-	-
<b>Average Yield Per Acre</b>				
Soybeans (bushel)	36.35	32.80	36.81	37.17
Corn (bushel)	130.79	84.92	115.53	138.36
Wheat, Spring (bushel)	53.90	-	47.51	59.21
Pasture (aum)	1.04	0.922	0.932	1.16
Barley (bushel)	71.13	-	56.38	79.90
Hay, Grass (ton)	1.88	1.40	2.06	1.58
Sunflowers (cwt)	17.19	-	17.61	17.76
Hay, Mixed Alfalfa/Grass (ton)	1.85	1.67	1.97	-
Hay, Alfalfa (ton)	2.39	-	2.33	2.60
Beans, Pinto (cwt)	20.14	-	-	20.39
Canola (cwt)	12.46	-	11.22	12.67
Wheat, Winter (bushel)	61.41	-	62.95	-
Corn Silage (ton)	14.07	-	-	16.03
Wheat, Durum (bushel)	42.64	-	-	-
Soybeans, Food (bushel)	32.93	-	-	-
Flax (bushel)	16.69	-	-	-
Hay, Small Grain (ton)	2.74	-	-	-
Sunflowers, Confectionary (cwt)	16.72	-	-	-

**Household and Personal Expenses**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	69	12	14	11
Average family size	2.8	2.1	3.3	3.3
Family Living Expenses				
Food and meals expense	7,838	5,414	7,067	10,197
Medical care	3,505	2,195	2,696	4,968
Health insurance	6,036	1,758	7,979	8,539
Cash donations	1,852	998	2,507	2,040
Household supplies	7,047	6,679	4,803	11,203
Clothing	1,875	524	1,467	4,456
Personal care	6,883	2,333	8,150	10,393
Child / Dependent care	479	779	458	661
Alimony and child support	193	-	-	-
Gifts	1,970	335	3,166	1,860
Education	1,144	265	841	2,664
Recreation	4,145	2,571	2,698	4,850
Utilities (household share)	2,859	2,208	2,987	3,753
Personal vehicle operating exp	3,292	3,009	4,728	3,003
Household real estate taxes	402	-	402	566
Dwelling rent	188	252	-	-
Household repairs	2,490	1,226	3,364	2,785
Personal interest	1,062	367	1,419	2,692
Disability / Long term care ins	218	314	562	-
Life insurance payments	2,152	1,176	2,058	3,152
Personal property insurance	295	308	302	558
Miscellaneous	548	489	522	444
Total cash family living expense	56,473	33,196	58,175	78,786
Family living from the farm	194	83	687	82
Total family living	56,667	33,280	58,862	78,868
Other Nonfarm Expenditures				
Income taxes	16,194	9,046	9,273	27,521
Furnishing & appliance purchases	326	-	294	836
Nonfarm vehicle purchases	5,162	-	8,825	9,200
Nonfarm real estate purchases	11,158	14,010	1,075	36,300
Other nonfarm capital purchases	3,540	84	10,000	-4,741
Nonfarm savings & investments	4,093	6,294	582	5,778
Total other nonfarm expenditures	40,473	29,434	30,049	74,894
Total cash family living investment & nonfarm capital purch	96,946	62,630	88,224	153,681

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**Operator and Labor Information**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	146	29	29	30
<b>Operator Information</b>				
Average number of operators	1.1	1.0	1.0	1.3
Average age of operators	45.7	40.3	48.6	48.1
Average number of years farming	21.8	15.4	24.4	25.0
<b>Results Per Operator</b>				
Working capital	541,968	46,075	290,559	1,493,332
Total assets (cost)	2,452,869	629,935	1,852,029	5,167,813
Total liabilities	784,661	322,408	662,778	1,283,881
Net worth (cost)	1,668,209	307,527	1,189,252	3,883,932
Gross farm income	1,038,303	167,455	690,446	2,308,671
Total farm expense	647,007	133,364	447,336	1,349,311
Net farm income from operations	391,295	34,091	243,109	959,360
Net nonfarm income	33,304	48,686	45,399	28,400
Family living & tax withdrawals	75,245	46,813	68,266	115,024
Total acres owned	937.9	378.6	926.7	1,291.1
Total crop acres	1,779.5	417.5	1,342.3	3,733.3
Crop acres owned	545.8	137.3	594.0	873.6
Crop acres cash rented	1,135.8	258.3	669.6	2,649.6
Crop acres share rented	97.8	21.8	78.8	210.1
Total pasture acres	513.3	486.9	682.1	313.8
<b>Labor Analysis</b>				
Number of farms	146	29	29	30
Total unpaid labor hours	1,972	1,053	2,028	2,787
Total hired labor hours	1,386	111	410	4,405
Total labor hours per farm	3,358	1,164	2,437	7,192
Unpaid hours per operator	1,834	1,053	2,028	2,200



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**Nonfarm Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Farm Income)**

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	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of farms	146	29	29	30
<b>Nonfarm Income</b>				
Personal wages & salary	21,038	39,767	18,696	17,523
Net nonfarm business income	4,720	1,849	16,473	1,709
Personal rental income	2,840	1,375	2,570	2,619
Personal interest income	278	31	96	1,184
Personal cash dividends	50	-	54	95
Tax refunds	575	1,935	580	6
Other nonfarm income	6,312	3,729	6,931	12,838
Total nonfarm income	35,813	48,686	45,399	35,973
Gifts and inheritances	30,550	345	923	146,133

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Gross Farm Income)**

	<u>Avg. Of All Farms</u>	<u>Less than 50,000</u>	<u>50,001 - 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>Over 1,000,000</u>
Number of farms	146	10	8	16	30	42	40
<b>Income Statement</b>							
Gross cash farm income	918,165	25,253	74,905	196,204	378,314	710,780	2,221,473
Total cash farm expense	668,792	36,340	66,102	151,721	282,101	516,459	1,604,240
Net cash farm income	249,373	-11,087	8,803	44,483	96,213	194,320	617,234
Inventory change	228,944	25,900	39,805	65,254	98,513	173,165	539,399
Depreciation	-57,540	-2,918	-3,961	-11,356	-20,198	-45,497	-141,038
Net farm income from operations	420,776	11,895	44,647	98,381	174,527	321,988	1,015,595
Gain or loss on capital sales	959	-585	-	125	96	1,321	2,137
Average net farm income	421,735	11,310	44,647	98,506	174,624	323,310	1,017,732
Median net farm income	237,541	12,479	37,094	88,260	167,713	318,510	862,923
<b>Profitability (cost)</b>							
Rate of return on assets	17.8 %	3.4 %	9.6 %	13.9 %	16.6 %	16.0 %	19.3 %
Rate of return on equity	24.9 %	3.2 %	14.5 %	22.4 %	27.8 %	21.9 %	26.1 %
Operating profit margin	36.0 %	20.5 %	26.1 %	35.2 %	35.4 %	35.5 %	36.5 %
Asset turnover rate	49.5 %	16.4 %	36.8 %	39.5 %	47.1 %	45.0 %	52.8 %
<b>Liquidity &amp; Repayment (end of year)</b>							
Current assets	670,543	53,639	94,435	215,762	385,788	605,786	1,671,650
Current liabilities	274,701	25,723	41,965	106,145	184,322	235,303	665,193
Current ratio	2.44	2.09	2.25	2.03	2.09	2.57	2.51
Working capital	395,842	27,916	52,470	109,618	201,466	370,484	1,006,457
Working capital to gross inc	44.2 %	52.1 %	45.8 %	42.3 %	42.6 %	42.8 %	45.3 %
Term debt coverage ratio	6.05	1.99	3.97	4.37	4.82	5.38	6.79
Replacement coverage ratio	4.23	1.67	3.48	3.57	3.86	3.80	4.54
<b>Solvency (end of year at cost)</b>							
Number of sole proprietors	134	10	8	16	29	42	29
Total farm assets	1,897,306	363,103	321,118	656,450	1,108,337	2,010,613	4,170,634
Total farm liabilities	718,437	213,248	136,426	296,461	524,962	679,108	1,536,446
Total assets	2,125,007	432,161	436,836	766,697	1,330,530	2,268,549	4,510,450
Total liabilities	765,202	238,189	201,992	334,687	568,069	716,946	1,606,843
Net worth	1,359,805	193,971	234,844	432,011	762,461	1,551,603	2,903,607
Net worth change	310,126	29,934	56,806	87,979	154,503	268,714	814,789
Farm debt to asset ratio	38 %	59 %	42 %	45 %	47 %	34 %	37 %
Total debt to asset ratio	36 %	55 %	46 %	44 %	43 %	32 %	36 %
<b>Nonfarm Information</b>							
Net nonfarm income	35,813	56,170	55,971	36,422	40,816	27,363	31,568
Farms reporting living expenses	69	6	3	4	21	21	14
Total family living expense	56,667	26,343	-	-	56,548	55,160	80,891
<b>Crop Acres</b>							
Total acres owned	1,009	276	160	567	547	1,375	1,500
Total crop acres	1,914	134	367	562	872	1,651	4,266
Total crop acres owned	587	104	38	257	309	730	1,008
Total crop acres cash rented	1,221	30	259	217	492	858	3,042
Total crop acres share rented	105	-	70	87	71	63	216

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Age Of Operator)**

	<u>Avg. Of All Farms</u>	<u>Less Than 31</u>	<u>31 - 40</u>	<u>41 - 50</u>	<u>51 - 60</u>	<u>Over 60</u>
Number of farms	146	32	22	31	38	23
<b>Income Statement</b>						
Gross cash farm income	918,165	381,311	1,044,264	1,416,141	981,207	769,137
Total cash farm expense	668,792	272,825	858,058	1,048,103	669,185	526,772
Net cash farm income	249,373	108,486	186,206	368,038	312,021	242,364
Inventory change	228,944	105,648	216,386	339,758	268,928	197,077
Depreciation	-57,540	-18,965	-46,617	-91,875	-69,790	-55,144
Net farm income from operations	420,776	195,169	355,975	615,921	511,160	384,298
Gain or loss on capital sales	959	222	665	801	890	2,593
Average net farm income	421,735	195,391	356,640	616,722	512,050	386,891
Median net farm income	237,541	115,597	215,106	353,035	326,509	242,207
<b>Profitability (cost)</b>						
Rate of return on assets	17.8 %	25.8 %	17.3 %	18.9 %	17.5 %	14.1 %
Rate of return on equity	24.9 %	50.9 %	29.9 %	28.8 %	22.3 %	16.2 %
Operating profit margin	36.0 %	38.9 %	30.1 %	35.2 %	39.0 %	36.5 %
Asset turnover rate	49.5 %	66.3 %	57.5 %	53.7 %	44.8 %	38.7 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	670,543	273,727	671,407	1,025,175	793,433	577,879
Current liabilities	274,701	120,152	335,698	420,574	315,489	185,177
Current ratio	2.44	2.28	2.00	2.44	2.51	3.12
Working capital	395,842	153,574	335,709	604,601	477,944	392,702
Working capital to gross inc	44.2 %	35.9 %	31.6 %	43.7 %	49.1 %	59.7 %
Term debt coverage ratio	6.05	6.40	5.06	4.90	7.61	7.57
Replacement coverage ratio	4.23	5.43	4.41	3.71	4.64	3.90
<b>Solvency (end of year at cost)</b>						
Number of sole proprietors	134	31	19	28	35	21
Total farm assets	1,897,306	771,120	1,790,359	2,671,904	2,332,854	1,897,825
Total farm liabilities	718,437	422,818	805,977	1,060,614	806,382	472,816
Total assets	2,125,007	864,071	1,953,676	2,939,186	2,597,141	2,268,941
Total liabilities	765,202	481,015	841,592	1,131,522	830,000	519,176
Net worth	1,359,805	383,055	1,112,085	1,807,663	1,767,141	1,749,765
Net worth change	310,126	160,661	295,357	440,283	382,886	249,317
Farm debt to asset ratio	38 %	55 %	45 %	40 %	35 %	25 %
Total debt to asset ratio	36 %	56 %	43 %	38 %	32 %	23 %
<b>Nonfarm Information</b>						
Net nonfarm income	35,813	28,781	39,515	32,925	33,226	50,220
Farms reporting living expenses	69	12	11	11	20	15
Total family living expense	56,667	32,483	56,134	88,347	53,772	57,034
<b>Crop Acres</b>						
Total acres owned	1,009	155	572	1,374	1,317	1,612
Total crop acres	1,914	847	1,619	2,925	2,213	1,822
Total crop acres owned	587	93	350	903	682	918
Total crop acres cash rented	1,221	720	1,177	1,851	1,414	794
Total crop acres share rented	105	33	92	171	117	109

**Financial Summary**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Farm Type)**

	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Beef</u>	<u>Crop and Beef</u>	<u>Other</u>
Number of farms	146	97	11	23	11
<b>Income Statement</b>					
Gross cash farm income	918,165	1,067,138	167,739	662,369	455,546
Total cash farm expense	668,792	750,533	105,113	534,485	436,023
Net cash farm income	249,373	316,605	62,626	127,884	19,524
Inventory change	228,944	296,363	12,273	114,631	119,737
Depreciation	-57,540	-73,230	-8,947	-27,728	-18,412
Net farm income from operations	420,776	539,739	65,953	214,787	120,848
Gain or loss on capital sales	959	1,426	-	-	-128
Average net farm income	421,735	541,164	65,953	214,787	120,720
Median net farm income	237,541	349,674	74,846	174,983	50,144
<b>Profitability (cost)</b>					
Rate of return on assets	17.8 %	19.3 %	10.4 %	12.7 %	12.0 %
Rate of return on equity	24.9 %	26.1 %	18.0 %	19.6 %	21.4 %
Operating profit margin	36.0 %	37.5 %	31.0 %	31.5 %	30.5 %
Asset turnover rate	49.5 %	51.4 %	33.4 %	40.3 %	39.4 %
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	670,543	820,738	148,540	546,629	333,625
Current liabilities	274,701	299,042	78,501	297,710	243,612
Current ratio	2.44	2.74	1.89	1.84	1.37
Working capital	395,842	521,696	70,039	248,918	90,014
Working capital to gross inc	44.2 %	48.6 %	39.0 %	32.2 %	16.2 %
Term debt coverage ratio	6.05	7.30	3.17	3.80	2.78
Replacement coverage ratio	4.23	4.73	2.67	3.20	2.34
<b>Solvency (end of year at cost)</b>					
Number of sole proprietors	134	87	11	23	11
Total farm assets	1,897,306	2,244,812	504,469	1,733,342	1,029,191
Total farm liabilities	718,437	780,476	263,584	786,953	560,064
Total assets	2,125,007	2,519,280	656,230	1,882,847	1,143,349
Total liabilities	765,202	835,297	338,851	805,105	581,022
Net worth	1,359,805	1,683,983	317,379	1,077,742	562,328
Net worth change	310,126	408,609	67,721	177,601	108,335
Farm debt to asset ratio	38 %	35 %	52 %	45 %	54 %
Total debt to asset ratio	36 %	33 %	52 %	43 %	51 %
<b>Nonfarm Information</b>					
Net nonfarm income	35,813	40,631	53,439	12,387	35,673
Farms reporting living expenses	69	46	3	13	6
Total family living expense	56,667	61,561	-	54,797	36,302
<b>Crop Acres</b>					
Total acres owned	1,009	1,067	446	1,027	1,172
Total crop acres	1,914	2,359	496	1,166	620
Total crop acres owned	587	686	140	560	284
Total crop acres cash rented	1,221	1,535	317	542	335
Total crop acres share rented	105	139	39	64	1

## EXPLANATORY NOTES FOR CROPS TABLES

The "Crop Enterprise Analysis" tables show the average physical production, gross return, direct costs, overhead costs, and net returns per acre. The "Net Return per Acre" is the "Gross Return per Acre" minus the direct and overhead costs. "Net Return" represents the return to the operator's and family's unpaid labor, management, and equity. It represents the return to all of the resources which are owned by the farm family and hence, not purchased or paid a wage. Net returns are also calculated after a charge for unpaid operator labor and management and after an allocation of direct government payments. The last section of each crop table contains breakeven yield measures which provide useful standards or goals for the individual managers.

There are potentially three tables for each crop depending on the farmer's tenure on the land. The crop tables may be for (1) owned land, (2) cash rented land, and (3) share rented land. Individual farms may have data in all three tables if all three land tenure categories are represented in that farm business. When there are less than five farms with a particular crop and tenure, that table is not included in the report. Farms may be classified into the low 20%, the mid 20%, or the high 20% on the basis of net return per acre. The classification is done separately for each table, i.e., an individual farm may be in the low 20% for one crop, the high 20% for a second, and the middle 20% for a third crop. When there are less than 25 total farms with any particular crop and farmer's tenure, only overall averages are presented.

Several cost items, such as "utilities," "hired labor," and "interest paid," are listed under both "direct" and "overhead" costs because some of these costs are specific to that crop whereas others are general overhead costs of the farm. For example, "Machinery leases" as direct expense refers to machinery leased and used only in that crop enterprise; the most common example is the lease of equipment that is crop specific. However, cost of leasing machinery that is used for the entire farm operation is listed as an overhead cost. Interest payments are likewise divided into those incurred directly for a specific crop and those that are not. "Land Rent" is listed as a direct cost for each crop enterprise on cash rented land. In the case of double cropping, one-half of the rent is charged to each crop.

"Total direct expense per unit" and "Total dir & ovhd exp per unit" are calculated by dividing "Total direct expense per acre" and "Total dir & ovhd expenses per acre," respectively, by "Yield per acre." "With labor & management" is the breakeven yield after direct, overhead and a labor and management charge are considered. "Total exp less govt & oth income" is the breakeven yield after all costs (including a labor and management charge) are reduced by government payments and miscellaneous income.

In the last section of the crop table, "machinery cost per acre" is the sum of fuel, repairs, all custom hire and machinery leases, machinery depreciation and interest on intermediate debt.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals.



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Barley on Owned Land**

	<u>Avg. Of All Farms</u>
Number of fields	24
Number of farms	19
Acres	195.56
Yield per acre (bu.)	70.77
Operators share of yield %	100.00
Value per bu.	6.81
Total product return per acre	481.72
Crop insurance per acre	3.77
Gross return per acre	485.49
<b>Direct Expenses</b>	
Seed	21.81
Fertilizer	75.95
Crop chemicals	30.13
Crop insurance	16.03
Fuel & oil	18.67
Repairs	21.08
Custom hire	5.56
Machinery leases	0.28
Operating interest	3.74
Miscellaneous	0.02
Total direct expenses per acre	193.28
Return over direct exp per acre	292.22
<b>Overhead Expenses</b>	
Hired labor	8.78
Machinery leases	1.33
RE & pers. property taxes	7.55
Farm insurance	4.49
Utilities	2.21
Dues & professional fees	0.89
Interest	18.45
Mach & bldg depreciation	28.48
Miscellaneous	7.48
Total overhead expenses per acre	79.67
Total dir & ovhd expenses per acre	272.95
Net return per acre	212.54
Government payments	12.70
Net return with govt pmts	225.24
Labor & management charge	28.84
Net return over lbr & mgt	196.40
<b>Cost of Production</b>	
Total direct expense per bu.	2.73
Total dir & ovhd exp per bu.	3.86
Less govt & other income	3.62
With labor & management	4.03
Net value per unit	6.81
Machinery cost per acre	74.92
Est. labor hours per acre	1.04

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Barley on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	37	9	5	7
Number of farms	28	5	5	6
Acres	292.24	144.28	246.40	714.66
Yield per acre (bu.)	71.69	40.28	69.06	82.90
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.80	7.42	6.32	6.93
Total product return per acre	487.28	298.97	436.64	574.86
Crop insurance per acre	4.26	34.48	-	-
Gross return per acre	491.53	333.45	436.64	574.86
<b>Direct Expenses</b>				
Seed	17.76	27.63	20.27	12.11
Fertilizer	71.67	85.62	62.59	72.53
Crop chemicals	28.84	26.87	45.95	23.26
Crop insurance	15.57	15.86	15.50	14.41
Fuel & oil	20.03	23.26	17.82	20.88
Repairs	23.30	30.07	15.89	26.25
Custom hire	5.50	5.55	4.73	6.72
Land rent	51.93	49.95	51.59	57.51
Operating interest	1.94	5.29	1.33	0.66
Miscellaneous	0.13	-	-	0.04
Total direct expenses per acre	236.68	270.09	235.66	234.36
Return over direct exp per acre	254.86	63.36	200.97	340.50
<b>Overhead Expenses</b>				
Hired labor	8.03	9.01	0.46	11.20
Machinery leases	0.41	0.10	1.01	0.27
Farm insurance	4.53	6.37	3.61	4.24
Utilities	2.35	2.58	1.72	2.44
Dues & professional fees	1.61	0.57	0.95	2.67
Interest	1.73	1.30	2.48	1.31
Mach & bldg depreciation	27.81	31.81	32.16	28.32
Miscellaneous	6.66	12.52	6.90	5.64
Total overhead expenses per acre	53.13	64.24	49.31	56.10
Total dir & ovhd expenses per acre	289.81	334.33	284.97	290.46
Net return per acre	201.72	-0.88	151.67	284.40
Government payments	11.05	15.54	9.49	9.01
Net return with govt pmts	212.77	14.66	161.16	293.41
Labor & management charge	28.31	32.61	32.10	28.21
Net return over lbr & mgt	184.46	-17.96	129.06	265.20
<b>Cost of Production</b>				
Total direct expense per bu.	3.30	6.71	3.41	2.83
Total dir & ovhd exp per bu.	4.04	8.30	4.13	3.50
Less govt & other income	3.83	7.06	3.99	3.40
With labor & management	4.22	7.87	4.45	3.74
Net value per unit	6.80	7.42	6.32	6.93
Machinery cost per acre	76.98	90.33	72.55	81.55
Est. labor hours per acre	1.03	1.36	1.03	0.91

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Beans, Pinto on Owned Land**

	<u>Avg. Of All Farms</u>
Number of fields	8
Number of farms	6
Acres	239.48
Yield per acre (cwt.)	20.35
Operators share of yield %	100.00
Value per cwt.	34.28
Total product return per acre	697.67
Crop insurance per acre	1.87
Gross return per acre	699.54
<b>Direct Expenses</b>	
Seed	52.85
Fertilizer	60.23
Crop chemicals	36.44
Crop insurance	38.65
Fuel & oil	25.24
Repairs	31.53
Custom hire	4.07
Operating interest	5.73
Total direct expenses per acre	254.74
Return over direct exp per acre	444.80
<b>Overhead Expenses</b>	
Hired labor	25.12
Machinery leases	2.75
Building leases	0.35
RE & pers. property taxes	5.87
Farm insurance	6.21
Utilities	2.68
Dues & professional fees	2.08
Interest	18.07
Mach & bldg depreciation	29.09
Miscellaneous	16.97
Total overhead expenses per acre	109.18
Total dir & ovhd expenses per acre	363.92
Net return per acre	335.62
Government payments	10.60
Net return with govt pmts	346.21
Labor & management charge	33.03
Net return over lbr & mgt	313.18
<b>Cost of Production</b>	
Total direct expense per cwt.	12.52
Total dir & ovhd exp per cwt.	17.88
Less govt & other income	17.27
With labor & management	18.89
Net value per unit	34.28
Machinery cost per acre	95.01
Est. labor hours per acre	1.41

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Beans, Pinto on Cash Rent**

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	<u>Avg. Of All Farms</u>
Number of fields	20
Number of farms	14
Acres	379.43
Yield per acre (cwt.)	20.04
Operators share of yield %	100.00
Value per cwt.	35.02
Total product return per acre	701.66
Crop insurance per acre	0.61
Gross return per acre	702.28
<b>Direct Expenses</b>	
Seed	52.61
Fertilizer	47.83
Crop chemicals	62.30
Crop insurance	33.88
Fuel & oil	20.30
Repairs	23.18
Custom hire	6.59
Land rent	60.30
Operating interest	3.25
Total direct expenses per acre	310.28
Return over direct exp per acre	392.00
<b>Overhead Expenses</b>	
Hired labor	12.31
Machinery leases	4.30
Farm insurance	4.20
Utilities	2.93
Dues & professional fees	1.60
Interest	2.80
Mach & bldg depreciation	37.34
Miscellaneous	8.40
Total overhead expenses per acre	73.88
Total dir & ovhd expenses per acre	384.16
Net return per acre	318.12
Government payments	11.00
Net return with govt pmts	329.12
Labor & management charge	35.06
Net return over lbr & mgt	294.06
<b>Cost of Production</b>	
Total direct expense per cwt.	15.49
Total dir & ovhd exp per cwt.	19.17
Less govt & other income	18.59
With labor & management	20.34
Net value per unit	35.02
Machinery cost per acre	92.41
Est. labor hours per acre	1.15

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Canola on Owned Land**

	<u>Avg. Of All Farms</u>
Number of fields	7
Number of farms	7
Acres	181.06
Yield per acre (cwt.)	12.97
Operators share of yield %	100.00
Value per cwt.	25.75
Total product return per acre	334.04
Crop insurance per acre	16.65
Gross return per acre	350.68
<b>Direct Expenses</b>	
Seed	52.23
Fertilizer	79.20
Crop chemicals	19.89
Crop insurance	10.21
Fuel & oil	14.62
Repairs	12.35
Custom hire	1.46
Machinery leases	0.42
Operating interest	1.81
Total direct expenses per acre	192.19
Return over direct exp per acre	158.49
<b>Overhead Expenses</b>	
Hired labor	8.35
Machinery leases	0.83
RE & pers. property taxes	5.68
Farm insurance	3.28
Utilities	1.99
Dues & professional fees	1.72
Interest	10.50
Mach & bldg depreciation	27.13
Miscellaneous	9.28
Total overhead expenses per acre	68.76
Total dir & ovhd expenses per acre	260.95
Net return per acre	89.73
Government payments	11.69
Net return with govt pmts	101.43
Labor & management charge	26.34
Net return over lbr & mgt	75.08
<b>Cost of Production</b>	
Total direct expense per cwt.	14.82
Total dir & ovhd exp per cwt.	20.12
Less govt & other income	17.93
With labor & management	19.97
Net value per unit	25.75
Machinery cost per acre	57.90
Est. labor hours per acre	1.04



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Canola on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of fields	14
Number of farms	9
Acres	200.32
Yield per acre (cwt.)	12.27
Operators share of yield %	100.00
Value per cwt.	27.05
Total product return per acre	332.07
Crop insurance per acre	29.89
Gross return per acre	361.95
<b>Direct Expenses</b>	
Seed	50.28
Fertilizer	75.69
Crop chemicals	18.07
Crop insurance	13.36
Fuel & oil	22.44
Repairs	21.88
Custom hire	1.78
Land rent	50.51
Machinery leases	0.05
Operating interest	2.85
Miscellaneous	0.23
Total direct expenses per acre	257.12
Return over direct exp per acre	104.83
<b>Overhead Expenses</b>	
Hired labor	7.02
Machinery leases	2.06
Farm insurance	2.66
Utilities	1.60
Interest	2.20
Mach & bldg depreciation	20.27
Miscellaneous	5.67
Total overhead expenses per acre	41.48
Total dir & ovhd expenses per acre	298.60
Net return per acre	63.36
Government payments	13.61
Net return with govt pmts	76.96
Labor & management charge	28.27
Net return over lbr & mgt	48.69
<b>Cost of Production</b>	
Total direct expense per cwt.	20.95
Total dir & ovhd exp per cwt.	24.33
Less govt & other income	20.78
With labor & management	23.09
Net value per unit	27.05
Machinery cost per acre	69.66
Est. labor hours per acre	1.03

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Corn on Owned Land**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	60	11	12	12
Number of farms	56	11	11	12
Acres	248.19	148.36	469.00	239.68
Yield per acre (bu.)	131.43	84.49	134.64	154.49
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.58	6.47	6.51	6.75
Other product return per acre	0.05	0.47	-	-
Total product return per acre	864.53	547.33	877.16	1,042.51
Hedging gains/losses per acre	0.31	-	-	-
Crop insurance per acre	1.07	0.60	2.10	-
Gross return per acre	865.91	547.92	879.27	1,042.51
<b>Direct Expenses</b>				
Seed	81.18	66.37	84.26	81.52
Fertilizer	118.36	96.82	115.76	117.01
Crop chemicals	23.88	27.25	21.25	20.34
Crop insurance	29.64	22.05	34.15	25.96
Drying expense	1.17	-	1.10	0.61
Fuel & oil	27.21	18.83	28.61	30.10
Repairs	33.81	30.10	36.69	28.39
Custom hire	8.97	21.03	7.19	6.85
Machinery leases	0.19	0.06	-	0.53
Operating interest	7.55	6.63	9.14	8.37
Miscellaneous	0.18	1.41	-	-
Total direct expenses per acre	332.15	290.56	338.15	319.68
Return over direct exp per acre	533.76	257.37	541.12	722.83
<b>Overhead Expenses</b>				
Hired labor	12.42	8.28	18.80	8.90
Machinery leases	6.12	7.32	10.61	2.98
RE & pers. property taxes	6.95	5.90	5.65	7.13
Farm insurance	4.86	4.44	5.65	4.85
Utilities	2.54	3.22	2.22	2.98
Dues & professional fees	1.15	0.07	0.93	1.19
Interest	21.78	17.48	19.68	26.04
Mach & bldg depreciation	40.32	30.04	41.36	53.06
Miscellaneous	6.21	3.43	8.04	5.91
Total overhead expenses per acre	102.34	80.17	112.95	113.05
Total dir & ovhd expenses per acre	434.48	370.73	451.10	432.73
Net return per acre	431.43	177.19	428.16	609.78
Government payments	11.62	14.04	9.71	12.94
Net return with govt pmts	443.05	191.23	437.87	622.71
Labor & management charge	40.23	33.18	37.34	43.79
Net return over lbr & mgt	402.82	158.05	400.54	578.92
<b>Cost of Production</b>				
Total direct expense per bu.	2.53	3.44	2.51	2.07
Total dir & ovhd exp per bu.	3.31	4.39	3.35	2.80
Less govt & other income	3.21	4.21	3.26	2.72
With labor & management	3.51	4.60	3.54	3.00
Net value per unit	6.58	6.47	6.51	6.75
Machinery cost per acre	119.22	108.32	129.28	122.37
Est. labor hours per acre	1.87	2.06	1.76	1.61

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Corn on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	96	20	21	15
Number of farms	73	14	14	15
Acres	308.54	156.45	375.35	300.83
Yield per acre (bu.)	130.82	78.57	134.96	156.91
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	6.45	6.34	6.42	6.65
Other product return per acre	0.04	0.37	-	-
Total product return per acre	843.83	498.81	866.75	1,043.95
Hedging gains/losses per acre	0.82	-	-	-
Crop insurance per acre	1.92	13.93	0.11	1.66
Other crop income per acre	0.15	-	-	0.96
Gross return per acre	846.72	512.75	866.86	1,046.57
<b>Direct Expenses</b>				
Seed	82.40	74.88	84.94	86.75
Fertilizer	114.43	99.50	122.85	112.47
Crop chemicals	23.90	23.93	18.27	20.15
Crop insurance	24.51	20.32	31.95	22.13
Drying expense	1.45	0.70	1.37	1.37
Fuel & oil	28.10	24.99	30.67	28.74
Repairs	33.58	35.27	33.25	28.45
Custom hire	9.13	10.15	3.09	4.62
Land rent	65.09	50.31	71.61	58.25
Operating interest	5.21	9.00	4.35	6.77
Miscellaneous	0.14	0.48	-	-
Total direct expenses per acre	387.94	349.53	402.36	369.70
Return over direct exp per acre	458.78	163.22	464.50	676.87
<b>Overhead Expenses</b>				
Hired labor	13.56	8.98	19.05	7.02
Machinery leases	4.31	2.83	6.60	5.66
Farm insurance	4.02	3.28	3.60	5.03
Utilities	2.59	3.47	2.77	2.03
Dues & professional fees	1.36	0.11	1.73	0.92
Interest	2.79	4.34	2.35	3.24
Mach & bldg depreciation	40.10	24.18	44.35	54.08
Miscellaneous	6.10	4.71	6.43	6.27
Total overhead expenses per acre	74.83	51.90	86.87	84.26
Total dir & ovhd expenses per acre	462.77	401.43	489.23	453.96
Net return per acre	383.96	111.32	377.63	592.61
Government payments	11.77	13.42	11.44	10.39
Net return with govt pmts	395.73	124.74	389.07	603.00
Labor & management charge	42.13	31.67	42.37	48.94
Net return over lbr & mgt	353.60	93.07	346.70	554.06
<b>Cost of Production</b>				
Total direct expense per bu.	2.97	4.45	2.98	2.36
Total dir & ovhd exp per bu.	3.54	5.11	3.62	2.89
Less govt & other income	3.43	4.76	3.54	2.81
With labor & management	3.75	5.16	3.85	3.12
Net value per unit	6.46	6.34	6.42	6.65
Machinery cost per acre	116.14	98.66	118.93	121.75
Est. labor hours per acre	1.64	1.75	1.81	1.60

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Corn Silage on Cash Rent**

	<u><b>Avg. Of All Farms</b></u>
Number of fields	10
Number of farms	10
Acres	106.40
Yield per acre (ton)	15.61
Operators share of yield %	100.00
Value per ton	44.80
Total product return per acre	699.43
Gross return per acre	699.43
<b>Direct Expenses</b>	
Seed	78.02
Fertilizer	94.18
Crop chemicals	22.25
Crop insurance	17.94
Fuel & oil	27.49
Repairs	55.40
Custom hire	10.20
Land rent	70.92
Operating interest	6.17
Miscellaneous	0.04
Total direct expenses per acre	382.62
Return over direct exp per acre	316.81
<b>Overhead Expenses</b>	
Hired labor	23.18
Machinery leases	5.71
Farm insurance	3.16
Utilities	0.79
Dues & professional fees	1.09
Interest	0.69
Mach & bldg depreciation	30.45
Miscellaneous	2.65
Total overhead expenses per acre	67.73
Total dir & ovhd expenses per acre	450.35
Net return per acre	249.08
Government payments	12.96
Net return with govt pmts	262.04
Labor & management charge	24.76
Net return over lbr & mgt	237.29
<b>Cost of Production</b>	
Total direct expense per ton	24.51
Total dir & ovhd exp per ton	28.84
Less govt & other income	28.01
With labor & management	29.60
Net value per unit	44.80
Machinery cost per acre	128.78
Est. labor hours per acre	1.86

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**CRP on Owned Land**

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	<u><b>Avg. Of All Farms</b></u>
Number of fields	19
Number of farms	18
Acres	145.62
Yield per acre (\$)	41.96
Operators share of yield %	100.00
Value per \$	1.00
Total product return per acre	41.96
Gross return per acre	41.96
<b>Direct Expenses</b>	
Crop chemicals	1.20
Fuel & oil	0.93
Repairs	0.68
Custom hire	0.48
Total direct expenses per acre	3.42
Return over direct exp per acre	38.53
<b>Overhead Expenses</b>	
RE & pers. property taxes	7.31
Farm insurance	1.26
Dues & professional fees	0.32
Interest	16.03
Mach & bldg depreciation	1.39
Miscellaneous	0.54
Total overhead expenses per acre	26.85
Total dir & ovhd expenses per acre	30.27
Net return per acre	11.69

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Hay, Alfalfa on Owned Land**

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	<u>Avg. Of All Farms</u>
Number of fields	18
Number of farms	18
Acres	60.52
Yield per acre (ton)	2.04
Operators share of yield %	100.00
Value per ton	62.49
Total product return per acre	127.59
Crop insurance per acre	6.50
Gross return per acre	134.09
<b>Direct Expenses</b>	
Seed	2.82
Crop insurance	1.02
Fuel & oil	13.07
Repairs	14.25
Custom hire	3.30
Operating interest	2.85
Miscellaneous	1.07
Total direct expenses per acre	38.38
Return over direct exp per acre	95.71
<b>Overhead Expenses</b>	
Hired labor	3.03
Machinery leases	0.75
Building leases	0.10
RE & pers. property taxes	5.77
Farm insurance	2.59
Utilities	2.52
Dues & professional fees	0.60
Interest	14.18
Mach & bldg depreciation	18.87
Miscellaneous	1.21
Total overhead expenses per acre	49.63
Total dir & ovhd expenses per acre	88.02
Net return per acre	46.07
Government payments	6.01
Net return with govt pmts	52.08
Labor & management charge	21.66
Net return over lbr & mgt	30.42
<b>Cost of Production</b>	
Total direct expense per ton	18.80
Total dir & ovhd exp per ton	43.11
Less govt & other income	36.98
With labor & management	47.59
Net value per unit	62.49
Machinery cost per acre	50.80
Est. labor hours per acre	1.19

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Hay, Alfalfa on Cash Rent**

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	<u>Avg. Of All Farms</u>
Number of fields	17
Number of farms	17
Acres	84.68
Yield per acre (ton)	2.65
Operators share of yield %	100.00
Value per ton	78.74
Total product return per acre	208.71
Gross return per acre	208.71
<b>Direct Expenses</b>	
Seed	2.10
Fertilizer	9.26
Crop chemicals	3.22
Crop insurance	1.52
Fuel & oil	17.11
Repairs	24.97
Custom hire	13.79
Land rent	57.89
Operating interest	3.11
Miscellaneous	1.04
Total direct expenses per acre	134.00
Return over direct exp per acre	74.71
<b>Overhead Expenses</b>	
Hired labor	8.92
Machinery leases	2.84
Farm insurance	3.62
Utilities	2.19
Dues & professional fees	1.36
Interest	1.99
Mach & bldg depreciation	20.90
Miscellaneous	1.12
Total overhead expenses per acre	42.93
Total dir & ovhd expenses per acre	176.93
Net return per acre	31.78
Government payments	10.04
Net return with govt pmts	41.82
Labor & management charge	24.27
Net return over lbr & mgt	17.55
<b>Cost of Production</b>	
Total direct expense per ton	50.55
Total dir & ovhd exp per ton	66.75
Less govt & other income	62.96
With labor & management	72.12
Net value per unit	78.74
Machinery cost per acre	80.62
Est. labor hours per acre	1.34

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Hay, Grass on Owned Land**

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	<u>Avg. Of All Farms</u>
Number of fields	10
Number of farms	9
Acres	155.60
Yield per acre (ton)	1.88
Operators share of yield %	100.00
Value per ton	42.84
Total product return per acre	80.54
Gross return per acre	80.54
<b>Direct Expenses</b>	
Fuel & oil	10.57
Repairs	12.36
Custom hire	3.48
Operating interest	2.21
Miscellaneous	2.13
Total direct expenses per acre	30.75
Return over direct exp per acre	49.79
<b>Overhead Expenses</b>	
Hired labor	4.78
Machinery leases	0.50
RE & pers. property taxes	3.27
Farm insurance	2.23
Utilities	1.26
Dues & professional fees	0.35
Interest	2.83
Mach & bldg depreciation	13.98
Miscellaneous	1.41
Total overhead expenses per acre	30.60
Total dir & ovhd expenses per acre	61.35
Net return per acre	19.18
Government payments	-
Net return with govt pmts	19.18
Labor & management charge	14.53
Net return over lbr & mgt	4.66
<b>Cost of Production</b>	
Total direct expense per ton	16.36
Total dir & ovhd exp per ton	32.64
Less govt & other income	32.64
With labor & management	40.36
Net value per unit	42.84
Machinery cost per acre	41.00
Est. labor hours per acre	0.97

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Hay, Grass on Cash Rent**

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	<u>Avg. Of All Farms</u>
Number of fields	24
Number of farms	18
Acres	254.55
Yield per acre (ton)	1.81
Operators share of yield %	100.00
Value per ton	50.22
Total product return per acre	90.96
Gross return per acre	90.96
<b>Direct Expenses</b>	
Fuel & oil	11.35
Repairs	13.47
Custom hire	1.71
Land rent	13.90
Operating interest	2.55
Miscellaneous	2.21
Total direct expenses per acre	45.21
Return over direct exp per acre	45.75
<b>Overhead Expenses</b>	
Hired labor	6.11
Machinery leases	0.63
Building leases	0.19
Farm insurance	1.18
Utilities	0.72
Dues & professional fees	0.45
Interest	1.23
Mach & bldg depreciation	12.15
Miscellaneous	1.98
Total overhead expenses per acre	24.64
Total dir & ovhd expenses per acre	69.85
Net return per acre	21.11
Government payments	-
Net return with govt pmts	21.11
Labor & management charge	14.22
Net return over lbr & mgt	6.89
<b>Cost of Production</b>	
Total direct expense per ton	24.96
Total dir & ovhd exp per ton	38.56
Less govt & other income	38.56
With labor & management	46.41
Net value per unit	50.22
Machinery cost per acre	39.93
Est. labor hours per acre	0.90

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Hay, Mixed Alfalfa/Grass on Owned Land**

	<u>Avg. Of All Farms</u>
Number of fields	20
Number of farms	17
Acres	122.64
Yield per acre (ton)	1.78
Operators share of yield %	100.00
Value per ton	61.35
Total product return per acre	109.24
Crop insurance per acre	4.62
Gross return per acre	113.86
<b>Direct Expenses</b>	
Crop chemicals	0.35
Crop insurance	1.21
Fuel & oil	9.85
Repairs	14.97
Custom hire	2.23
Machinery leases	1.15
Operating interest	2.30
Miscellaneous	0.32
Total direct expenses per acre	32.39
Return over direct exp per acre	81.47
<b>Overhead Expenses</b>	
Custom hire	0.29
Hired labor	4.87
RE & pers. property taxes	5.87
Farm insurance	2.88
Utilities	4.95
Dues & professional fees	0.73
Interest	16.21
Mach & bldg depreciation	17.11
Miscellaneous	2.04
Total overhead expenses per acre	54.95
Total dir & ovhd expenses per acre	87.34
Net return per acre	26.52
Government payments	8.42
Net return with govt pmts	34.95
Labor & management charge	17.04
Net return over lbr & mgt	17.91
<b>Cost of Production</b>	
Total direct expense per ton	18.19
Total dir & ovhd exp per ton	49.05
Less govt & other income	41.72
With labor & management	51.29
Net value per unit	61.35
Machinery cost per acre	48.19
Est. labor hours per acre	1.15

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Hay, Mixed Alfalfa/Grass on Cash Rent**

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	<u>Avg. Of All Farms</u>
Number of fields	18
Number of farms	17
Acres	213.84
Yield per acre (ton)	1.96
Operators share of yield %	100.00
Value per ton	58.03
Total product return per acre	113.45
Gross return per acre	113.45
<b>Direct Expenses</b>	
Crop chemicals	0.14
Fuel & oil	9.46
Repairs	12.68
Custom hire	0.69
Land rent	25.59
Operating interest	2.07
Miscellaneous	0.58
Total direct expenses per acre	51.21
Return over direct exp per acre	62.24
<b>Overhead Expenses</b>	
Hired labor	4.05
Farm insurance	3.65
Utilities	6.98
Dues & professional fees	1.27
Interest	25.37
Mach & bldg depreciation	14.18
Miscellaneous	2.38
Total overhead expenses per acre	57.87
Total dir & ovhd expenses per acre	109.08
Net return per acre	4.37
Government payments	3.52
Net return with govt pmts	7.89
Labor & management charge	15.72
Net return over lbr & mgt	-7.83
<b>Cost of Production</b>	
Total direct expense per ton	26.19
Total dir & ovhd exp per ton	55.79
Less govt & other income	53.99
With labor & management	62.03
Net value per unit	58.03
Machinery cost per acre	61.80
Est. labor hours per acre	0.93

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Pasture on Owned Land**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	34	6	7	9
Number of farms	32	6	7	7
Acres	390.70	329.17	398.21	322.30
Yield per acre (aum)	1.01	0.79	0.84	1.27
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	20.82	20.31	23.91	20.89
Total product return per acre	21.11	16.00	20.15	26.52
Crop insurance per acre	0.16	0.86	0.14	-
Other crop income per acre	0.23	-	-	1.03
Gross return per acre	21.50	16.86	20.29	27.56
<b>Direct Expenses</b>				
Crop insurance	0.22	0.68	0.22	-
Fuel & oil	0.49	0.52	0.47	0.51
Repairs	0.61	0.42	0.64	0.68
Total direct expenses per acre	1.59	1.73	1.93	1.60
Return over direct exp per acre	19.91	15.13	18.37	25.95
<b>Overhead Expenses</b>				
RE & pers. property taxes	2.45	3.22	2.05	2.37
Interest	4.86	15.74	4.75	1.86
Mach & bldg depreciation	0.66	0.50	0.60	0.72
Miscellaneous	0.89	0.62	0.80	0.78
Total overhead expenses per acre	8.87	20.09	8.20	5.73
Total dir & ovhd expenses per acre	10.45	21.81	10.12	7.33
Net return per acre	11.04	-4.96	10.17	20.22



**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Pasture on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	59	10	11	18
Number of farms	48	9	9	10
Acres	662.24	445.50	936.27	310.37
Yield per acre (aum)	0.97	1.00	0.83	1.20
Operators share of yield %	100.00	100.00	100.00	100.00
Value per aum	19.33	20.52	18.30	20.55
Total product return per acre	18.80	20.61	15.19	24.66
Crop insurance per acre	0.07	-	-	-
Other crop income per acre	0.29	-	-	2.03
Gross return per acre	19.16	20.61	15.19	26.69
<b>Direct Expenses</b>				
Fuel & oil	0.47	0.61	0.42	0.46
Repairs	0.64	0.77	0.47	0.48
Land rent	14.70	23.33	12.39	13.87
Total direct expenses per acre	16.09	25.00	13.43	15.04
Return over direct exp per acre	3.07	-4.39	1.76	11.65
<b>Overhead Expenses</b>				
Farm insurance	0.35	1.68	0.08	0.16
Dues & professional fees	0.14	0.93	0.02	0.03
Interest	0.14	0.53	0.08	0.08
Mach & bldg depreciation	0.61	0.49	0.43	0.74
Miscellaneous	0.43	0.77	0.39	0.55
Total overhead expenses per acre	1.66	4.41	1.01	1.56
Total dir & ovhd expenses per acre	17.76	29.41	14.44	16.60
Net return per acre	1.41	-8.80	0.75	10.09

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Prevented planting on Cash Rent**

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	<u><b>Avg. Of All Farms</b></u>
Number of fields	25
Number of farms	16
Acres	143.56
Yield per acre	-
Operators share of yield %	-
Value	-
Total product return per acre	-
Crop insurance per acre	129.99
Gross return per acre	129.99
<b>Direct Expenses</b>	
Crop chemicals	0.79
Crop insurance	13.68
Fuel & oil	8.94
Repairs	7.66
Land rent	64.18
Operating interest	1.45
Total direct expenses per acre	96.77
Return over direct exp per acre	33.22
<b>Overhead Expenses</b>	
Hired labor	4.12
Machinery leases	2.11
Farm insurance	4.30
Utilities	1.91
Dues & professional fees	1.67
Interest	3.20
Mach & bldg depreciation	14.29
Miscellaneous	7.07
Total overhead expenses per acre	38.66
Total dir & ovhd expenses per acre	135.43
Net return per acre	-5.44
Government payments	10.54
Net return with govt pmts	5.10
Labor & management charge	14.56
Net return over lbr & mgt	-9.46

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Soybeans on Owned Land**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	74	17	14	16
Number of farms	61	12	12	13
Acres	260.48	140.66	244.44	309.44
Yield per acre (bu.)	36.57	30.88	35.30	39.83
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	13.84	13.69	13.75	13.85
Total product return per acre	506.08	422.62	485.24	551.66
Crop insurance per acre	3.45	0.47	6.17	0.28
Gross return per acre	509.53	423.08	491.42	551.94
<b>Direct Expenses</b>				
Seed	59.45	62.44	60.47	53.86
Fertilizer	16.73	24.71	14.61	8.12
Crop chemicals	18.74	26.76	18.39	13.12
Crop insurance	19.25	24.92	18.48	15.15
Fuel & oil	18.26	19.30	16.93	16.18
Repairs	21.93	29.25	20.14	12.39
Custom hire	8.49	15.55	5.61	5.92
Operating interest	5.09	5.31	4.17	2.34
Miscellaneous	0.35	-	0.45	0.05
Total direct expenses per acre	168.29	208.25	159.24	127.13
Return over direct exp per acre	341.24	214.83	332.18	424.81
<b>Overhead Expenses</b>				
Hired labor	5.33	1.11	3.77	5.27
Machinery leases	1.92	7.58	1.56	0.27
RE & pers. property taxes	7.94	9.90	8.03	7.48
Farm insurance	5.20	4.93	3.81	3.59
Utilities	2.58	3.18	2.41	1.46
Dues & professional fees	0.76	0.73	1.30	0.45
Interest	22.63	28.96	19.38	18.84
Mach & bldg depreciation	25.29	14.12	24.94	27.98
Miscellaneous	6.88	4.34	5.47	6.50
Total overhead expenses per acre	78.52	74.85	70.67	71.83
Total dir & ovhd expenses per acre	246.81	283.09	229.91	198.96
Net return per acre	262.72	139.99	261.50	352.98
Government payments	11.63	11.28	14.75	9.82
Net return with govt pmts	274.34	151.26	276.25	362.80
Labor & management charge	29.14	30.41	28.19	28.96
Net return over lbr & mgt	245.20	120.85	248.06	333.84
<b>Cost of Production</b>				
Total direct expense per bu.	4.60	6.74	4.51	3.19
Total dir & ovhd exp per bu.	6.75	9.17	6.51	5.00
Less govt & other income	6.34	8.79	5.92	4.74
With labor & management	7.13	9.77	6.72	5.47
Net value per unit	13.84	13.69	13.75	13.85
Machinery cost per acre	77.55	91.46	70.55	64.39
Est. labor hours per acre	1.22	1.61	1.10	1.12

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Soybeans on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	116	16	21	29
Number of farms	75	15	15	15
Acres	439.94	568.92	608.18	418.76
Yield per acre (bu.)	36.31	29.43	35.95	41.44
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	13.83	13.91	13.80	13.86
Total product return per acre	502.17	409.30	495.99	574.56
Crop insurance per acre	4.85	1.42	13.96	0.38
Gross return per acre	507.02	410.72	509.95	574.94
<b>Direct Expenses</b>				
Seed	60.01	62.35	62.41	53.19
Fertilizer	18.74	17.75	22.59	8.07
Crop chemicals	18.95	19.88	18.49	11.08
Crop insurance	19.51	20.16	20.56	16.11
Fuel & oil	18.50	18.14	20.36	16.91
Repairs	23.31	41.15	23.45	14.04
Custom hire	5.68	9.89	3.58	6.91
Land rent	67.66	77.14	62.22	64.72
Operating interest	3.56	5.83	2.80	2.52
Miscellaneous	0.11	0.15	0.19	0.00
Total direct expenses per acre	236.04	272.46	236.66	193.56
Return over direct exp per acre	270.98	138.26	273.29	381.38
<b>Overhead Expenses</b>				
Hired labor	9.36	12.71	11.26	7.68
Machinery leases	2.93	5.17	1.40	2.44
Farm insurance	3.96	3.59	4.37	3.71
Utilities	2.09	1.55	2.67	1.33
Dues & professional fees	1.42	0.64	1.90	0.49
Interest	2.64	2.09	2.59	1.72
Mach & bldg depreciation	25.06	16.43	25.23	25.57
Miscellaneous	5.78	2.28	6.21	7.69
Total overhead expenses per acre	53.23	44.45	55.63	50.64
Total dir & ovhd expenses per acre	289.26	316.91	292.29	244.20
Net return per acre	217.76	93.81	217.66	330.74
Government payments	10.54	9.87	9.87	9.76
Net return with govt pmts	228.29	103.68	227.53	340.50
Labor & management charge	26.69	19.90	26.45	30.70
Net return over lbr & mgt	201.60	83.78	201.09	309.81
<b>Cost of Production</b>				
Total direct expense per bu.	6.50	9.26	6.58	4.67
Total dir & ovhd exp per bu.	7.97	10.77	8.13	5.89
Less govt & other income	7.54	10.39	7.47	5.65
With labor & management	8.28	11.06	8.20	6.39
Net value per unit	13.83	13.91	13.80	13.86
Machinery cost per acre	76.89	92.72	74.79	65.95
Est. labor hours per acre	1.07	1.33	1.06	0.92

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Soybeans on Share Rent**

	<u><b>Avg. Of All Farms</b></u>
Number of fields	18
Number of farms	17
Acres	233.28
Yield per acre (bu.)	35.79
Operators share of yield %	69.42
Value per bu.	13.82
Total product return per acre	343.36
Crop insurance per acre	0.80
Gross return per acre	344.16
<b>Direct Expenses</b>	
Seed	61.79
Fertilizer	13.15
Crop chemicals	16.15
Crop insurance	14.54
Fuel & oil	14.27
Repairs	17.73
Custom hire	3.53
Operating interest	3.25
Total direct expenses per acre	144.43
Return over direct exp per acre	199.73
<b>Overhead Expenses</b>	
Hired labor	5.71
Machinery leases	1.55
Building leases	0.21
Farm insurance	3.63
Utilities	2.29
Dues & professional fees	0.92
Interest	3.92
Mach & bldg depreciation	22.29
Miscellaneous	9.16
Total overhead expenses per acre	49.68
Total dir & ovhd expenses per acre	194.11
Net return per acre	150.05
Government payments	6.78
Net return with govt pmts	156.83
Labor & management charge	28.69
Net return over lbr & mgt	128.14
<b>Cost of Production</b>	
Total direct expense per bu.	5.81
Total dir & ovhd exp per bu.	7.81
Less govt & other income	7.51
With labor & management	8.66
Net value per unit	13.82
Machinery cost per acre	62.12
Est. labor hours per acre	1.16

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Sunflowers on Owned Land**

	<u>Avg. Of All Farms</u>
Number of fields	18
Number of farms	16
Acres	122.38
Yield per acre (cwt.)	17.90
Operators share of yield %	100.00
Value per cwt.	23.57
Total product return per acre	421.92
Crop insurance per acre	2.69
Gross return per acre	424.61
<b>Direct Expenses</b>	
Seed	37.22
Fertilizer	58.06
Crop chemicals	43.83
Crop insurance	15.39
Drying expense	0.13
Fuel & oil	16.15
Repairs	19.98
Custom hire	14.32
Machinery leases	0.73
Operating interest	3.55
Miscellaneous	0.38
Total direct expenses per acre	209.74
Return over direct exp per acre	214.86
<b>Overhead Expenses</b>	
Hired labor	8.03
Machinery leases	1.10
RE & pers. property taxes	5.51
Farm insurance	3.41
Utilities	2.33
Dues & professional fees	1.10
Interest	10.37
Mach & bldg depreciation	27.26
Miscellaneous	4.08
Total overhead expenses per acre	63.20
Total dir & ovhd expenses per acre	272.95
Net return per acre	151.66
Government payments	12.34
Net return with govt pmts	163.99
Labor & management charge	29.09
Net return over lbr & mgt	134.91
<b>Cost of Production</b>	
Total direct expense per cwt.	11.72
Total dir & ovhd exp per cwt.	15.25
Less govt & other income	14.41
With labor & management	16.03
Net value per unit	23.57
Machinery cost per acre	79.70
Est. labor hours per acre	1.36



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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Sunflowers on Cash Rent**

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	<u>Avg. Of All Farms</u>
Number of fields	28
Number of farms	15
Acres	190.89
Yield per acre (cwt.)	16.84
Operators share of yield %	100.00
Value per cwt.	25.10
Total product return per acre	422.84
Crop insurance per acre	12.84
Gross return per acre	435.68
<b>Direct Expenses</b>	
Seed	36.57
Fertilizer	66.71
Crop chemicals	45.16
Crop insurance	15.09
Drying expense	0.45
Fuel & oil	19.35
Repairs	19.05
Custom hire	9.21
Land rent	33.35
Operating interest	1.49
Miscellaneous	0.20
Total direct expenses per acre	246.63
Return over direct exp per acre	189.05
<b>Overhead Expenses</b>	
Hired labor	7.97
Machinery leases	2.24
Farm insurance	3.14
Utilities	2.43
Dues & professional fees	0.82
Interest	1.55
Mach & bldg depreciation	26.91
Miscellaneous	4.37
Total overhead expenses per acre	49.43
Total dir & ovhd expenses per acre	296.06
Net return per acre	139.62
Government payments	14.23
Net return with govt pmts	153.85
Labor & management charge	27.00
Net return over lbr & mgt	126.85
<b>Cost of Production</b>	
Total direct expense per cwt.	14.64
Total dir & ovhd exp per cwt.	17.58
Less govt & other income	15.97
With labor & management	17.57
Net value per unit	25.10
Machinery cost per acre	76.43
Est. labor hours per acre	1.08

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**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Wheat, Spring on Owned Land**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	56	11	8	12
Number of farms	41	8	8	9
Acres	194.06	182.98	166.36	244.62
Yield per acre (bu.)	51.26	39.48	45.50	64.51
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.22	8.14	8.15	8.35
Total product return per acre	421.15	321.50	370.93	538.65
Hedging gains/losses per acre	-0.07	-	-	-
Crop insurance per acre	0.81	-	2.07	1.40
Other crop income per acre	0.13	-	1.05	-
Gross return per acre	422.02	321.50	374.05	540.04
<b>Direct Expenses</b>				
Seed	23.75	28.33	22.07	24.81
Fertilizer	77.14	93.91	76.48	73.91
Crop chemicals	36.35	40.76	32.99	45.56
Crop insurance	15.30	12.16	13.46	17.14
Drying expense	0.24	0.04	1.18	-
Fuel & oil	16.21	15.12	14.36	19.53
Repairs	16.95	13.85	15.77	16.48
Custom hire	13.53	40.69	8.96	1.47
Operating interest	3.23	5.59	1.25	1.14
Miscellaneous	0.29	0.04	0.31	0.29
Total direct expenses per acre	203.00	250.47	186.84	200.33
Return over direct exp per acre	219.02	71.02	187.22	339.71
<b>Overhead Expenses</b>				
Hired labor	6.71	2.81	3.79	12.50
Machinery leases	0.99	1.26	1.44	1.11
RE & pers. property taxes	6.07	6.04	5.86	5.42
Farm insurance	3.86	3.29	3.69	3.65
Utilities	2.33	1.70	2.78	2.18
Dues & professional fees	0.81	0.62	0.37	2.08
Interest	15.87	16.31	14.58	3.66
Mach & bldg depreciation	23.70	19.26	23.49	26.88
Miscellaneous	5.65	1.59	3.79	7.36
Total overhead expenses per acre	66.00	52.89	59.79	64.85
Total dir & ovhd expenses per acre	269.00	303.36	246.63	265.18
Net return per acre	153.02	18.14	127.43	274.86
Government payments	12.47	12.12	12.19	12.76
Net return with govt pmts	165.49	30.26	139.62	287.62
Labor & management charge	27.36	29.91	22.17	28.50
Net return over lbr & mgt	138.14	0.34	117.44	259.12
<b>Cost of Production</b>				
Total direct expense per bu.	3.96	6.34	4.11	3.11
Total dir & ovhd exp per bu.	5.25	7.68	5.42	4.11
Less govt & other income	4.99	7.38	5.08	3.89
With labor & management	5.52	8.14	5.57	4.33
Net value per unit	8.21	8.14	8.15	8.35
Machinery cost per acre	71.78	87.75	64.24	64.86
Est. labor hours per acre	1.15	1.38	1.17	1.10

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Wheat, Spring on Cash Rent**

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>40 - 60%</u>	<u>High 20%</u>
Number of fields	73	11	15	20
Number of farms	48	9	9	10
Acres	316.33	173.24	284.59	373.99
Yield per acre (bu.)	55.01	36.41	52.71	65.21
Operators share of yield %	100.00	100.00	100.00	100.00
Value per bu.	8.32	8.27	8.35	8.40
Total product return per acre	457.53	301.05	440.25	547.94
Hedging gains/losses per acre	0.37	-	2.34	-
Crop insurance per acre	1.46	5.81	-	2.54
Gross return per acre	459.36	306.86	442.59	550.48
<b>Direct Expenses</b>				
Seed	23.74	23.58	22.84	26.40
Fertilizer	84.44	78.21	96.27	80.05
Crop chemicals	34.00	34.13	27.89	42.81
Crop insurance	16.62	17.49	15.83	19.61
Drying expense	0.23	-	1.04	-
Fuel & oil	16.68	16.61	17.25	18.88
Repairs	17.67	22.15	21.04	17.83
Custom hire	7.19	17.42	4.33	2.47
Land rent	56.52	56.48	61.29	56.27
Operating interest	2.43	5.91	2.64	1.90
Miscellaneous	0.14	0.24	0.10	0.11
Total direct expenses per acre	259.65	272.21	270.51	266.31
Return over direct exp per acre	199.71	34.66	172.08	284.17
<b>Overhead Expenses</b>				
Hired labor	8.01	4.64	9.73	10.17
Machinery leases	2.88	1.54	5.68	2.01
Farm insurance	3.28	3.73	3.26	3.73
Utilities	2.39	3.03	1.88	2.45
Dues & professional fees	0.94	1.32	0.27	2.10
Interest	2.31	3.20	2.46	1.95
Mach & bldg depreciation	23.97	15.49	26.73	26.59
Miscellaneous	5.67	3.17	5.45	7.94
Total overhead expenses per acre	49.46	36.13	55.46	56.95
Total dir & ovhd expenses per acre	309.11	308.34	325.98	323.26
Net return per acre	150.25	-1.47	116.62	227.22
Government payments	12.90	16.41	14.41	11.27
Net return with govt pmts	163.15	14.94	131.02	238.48
Labor & management charge	27.17	22.33	27.55	28.71
Net return over lbr & mgt	135.99	-7.39	103.48	209.77
<b>Cost of Production</b>				
Total direct expense per bu.	4.72	7.48	5.13	4.08
Total dir & ovhd exp per bu.	5.62	8.47	6.18	4.96
Less govt & other income	5.35	7.86	5.87	4.75
With labor & management	5.85	8.47	6.39	5.19
Net value per unit	8.32	8.27	8.40	8.40
Machinery cost per acre	68.92	74.88	75.44	67.46
Est. labor hours per acre	0.98	1.11	0.85	0.99

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Wheat, Spring on Share Rent**

	<u>Avg. Of All Farms</u>
Number of fields	11
Number of farms	10
Acres	181.25
Yield per acre (bu.)	55.50
Operators share of yield %	65.91
Value per bu.	8.33
Total product return per acre	304.61
Crop insurance per acre	3.07
Gross return per acre	307.67
<b>Direct Expenses</b>	
Seed	20.64
Fertilizer	67.67
Crop chemicals	24.68
Crop insurance	16.21
Fuel & oil	16.69
Repairs	19.67
Custom hire	4.24
Operating interest	3.81
Miscellaneous	0.36
Total direct expenses per acre	173.97
Return over direct exp per acre	133.70
<b>Overhead Expenses</b>	
Hired labor	13.74
Machinery leases	2.13
Farm insurance	4.07
Utilities	2.16
Dues & professional fees	1.33
Interest	4.01
Mach & bldg depreciation	22.72
Miscellaneous	13.41
Total overhead expenses per acre	63.57
Total dir & ovhd expenses per acre	237.54
Net return per acre	70.14
Government payments	6.47
Net return with govt pmts	76.60
Labor & management charge	27.82
Net return over lbr & mgt	48.78
<b>Cost of Production</b>	
Total direct expense per bu.	4.76
Total dir & ovhd exp per bu.	6.49
Less govt & other income	6.23
With labor & management	6.99
Net value per unit	8.33
Machinery cost per acre	68.81
Est. labor hours per acre	1.18

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Wheat, Winter on Owned Land**

	<u><b>Avg. Of All Farms</b></u>
Number of fields	9
Number of farms	9
Acres	111.09
Yield per acre (bu.)	58.77
Operators share of yield %	100.00
Value per bu.	7.35
Total product return per acre	431.83
Hedging gains/losses per acre	-0.37
Gross return per acre	431.46
<b>Direct Expenses</b>	
Seed	17.77
Fertilizer	85.35
Crop chemicals	37.13
Crop insurance	12.03
Fuel & oil	15.28
Repairs	17.21
Custom hire	11.93
Machinery leases	0.36
Operating interest	1.85
Miscellaneous	0.43
Total direct expenses per acre	199.35
Return over direct exp per acre	232.11
<b>Overhead Expenses</b>	
Hired labor	4.59
Machinery leases	0.62
Building leases	0.18
RE & pers. property taxes	5.22
Farm insurance	4.53
Utilities	2.30
Dues & professional fees	0.36
Interest	17.53
Mach & bldg depreciation	21.68
Miscellaneous	3.00
Total overhead expenses per acre	60.01
Total dir & ovhd expenses per acre	259.35
Net return per acre	172.10
Government payments	13.95
Net return with govt pmts	186.05
Labor & management charge	21.55
Net return over lbr & mgt	164.50
<b>Cost of Production</b>	
Total direct expense per bu.	3.39
Total dir & ovhd exp per bu.	4.41
Less govt & other income	4.18
With labor & management	4.55
Net value per unit	7.34
Machinery cost per acre	68.54
Est. labor hours per acre	1.04

**Crop Enterprise Analysis**  
**North Dakota Farm Business Management Education Program**  
**Region 3 - South Central North Dakota, 2012**  
**(Farms Sorted By Net Return)**

**Wheat, Winter on Cash Rent**

	<u>Avg. Of All Farms</u>
Number of fields	9
Number of farms	9
Acres	125.48
Yield per acre (bu.)	62.50
Operators share of yield %	100.00
Value per bu.	7.80
Total product return per acre	487.23
Hedging gains/losses per acre	-0.70
Gross return per acre	486.53
<b>Direct Expenses</b>	
Seed	18.70
Fertilizer	86.40
Crop chemicals	37.02
Crop insurance	10.73
Fuel & oil	13.85
Repairs	16.11
Custom hire	6.92
Land rent	46.64
Machinery leases	0.60
Operating interest	2.15
Miscellaneous	0.11
Total direct expenses per acre	239.23
Return over direct exp per acre	247.30
<b>Overhead Expenses</b>	
Hired labor	6.05
Machinery leases	3.28
Building leases	0.24
Farm insurance	3.14
Utilities	2.50
Interest	3.16
Mach & bldg depreciation	24.23
Miscellaneous	5.01
Total overhead expenses per acre	47.61
Total dir & ovhd expenses per acre	286.84
Net return per acre	199.69
Government payments	19.17
Net return with govt pmts	218.86
Labor & management charge	21.97
Net return over lbr & mgt	196.89
<b>Cost of Production</b>	
Total direct expense per bu.	3.83
Total dir & ovhd exp per bu.	4.59
Less govt & other income	4.29
With labor & management	4.65
Net value per unit	7.78
Machinery cost per acre	66.44
Est. labor hours per acre	1.05

## EXPLANATORY NOTES FOR LIVESTOCK TABLES

The "Livestock Enterprise Analysis" table shows the average physical production, gross returns, direct costs, overhead costs, and net return per unit. All costs are actual costs; no opportunity costs are included. The "Net Return" to the enterprise is the "Gross Margin" minus the direct and overhead costs. "Net Return" represents the return to the operators and family's unpaid labor, management, and equity. It represents the return to all of the resources, which are owned by the farm family and hence, not purchased or paid a wage. The last section of each livestock table contains both economic and technical efficiency measures, which are particularly useful to individual managers in assessing their performance as compared to their peers.

When there are less than five farms with a particular livestock enterprise, that enterprise is not included in the report. When there is a sufficient number (i.e., more than 24), farms are divided into low 20%, middle 20% and high 20% on the basis of returns to overhead costs. The classification is done separately for each livestock enterprise.

The "Dairy" enterprise contains the information for only the milking herd (which includes dry cows). "Dairy Replacement Heifers" are those heifers kept for replacement into the milking herd. "Dairy Heifers (for sale)" are heifers intended for feeding and sale. "Dairy Steers" includes only steers for feeding. The "Dairy and Replacement Heifers" table includes both "Dairy" and "Dairy Replacement Heifers."

"Lbs. feed per lb. of gain" is the lbs. of total feed divided by total gain. The total feed is calculated by adding total pounds of feed. For grains, these pounds per unit are used: corn, 56; oats, 32; barley, 48; grain sorghum, 56; wheat, 60; and millet, 48. For these roughages, the pounds are calculated by these factors: alfalfa haylage, 0.5; corn silage, 0.33; oatlage, 0.5; and sorghum silage, 0.33; and small grain silage, 0.33.

The calving and weaning percentages are calculated as the number of calves, which are calved and weaned, respectively, divided by the number of cows, which are supposed to bear young.

Rounding of individual items for the report has caused minor discrepancies with the calculated totals.



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**Beef Cow-Calf -- Average Per Cwt. Produced**

	<b>Avg. Of All Farms</b>		<b>Low20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
Number of farms	29		5		6		6	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	28.82	43.52	32.35	48.40	54.65	77.62	10.20	14.83
Transferred out (lb)	71.23	109.59	67.99	106.06	45.35	70.05	89.80	137.61
Cull sales		28.86		32.01		22.81		18.16
Other income		2.57		0.46		10.91		0.75
Purchased		-29.71		-50.59		-23.36		-36.89
Transferred in		-18.45		-8.10		-40.03		-0.25
Inventory change		6.04		15.35		26.62		10.46
Gross margin		142.42		143.60		144.63		144.68
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	11.97	3.75	4.62	2.10	8.68	2.78	7.06	2.05
Creep / Starter (lb.)	15.68	2.89	0.12	0.29	20.18	2.93	26.45	6.60
Complete Ration (lb.)	60.93	3.80	48.64	7.27	18.17	2.93	-	0.90
Corn Silage (lb.)	145.92	2.70	148.34	3.23	-	-	234.50	4.50
Hay, Alfalfa (lb.)	131.87	3.53	303.59	8.70	-	-	340.91	8.55
Hay, Grass (lb.)	936.04	22.00	1,075.64	21.68	1,059.68	29.32	1,126.92	19.81
Pasture (aum)	1.27	22.64	1.42	21.26	1.29	30.61	1.29	12.69
Other feed stuffs (lb)	163.54	4.07	82.79	7.85	20.35	1.25	57.97	0.95
Veterinary		5.52		6.68		5.80		3.76
Supplies		3.50		2.88		3.25		2.64
Fuel & oil		4.47		7.94		3.53		3.44
Repairs		5.46		12.56		5.99		2.54
Custom hire		2.22		3.74		5.13		1.66
Livestock leases		0.62		3.02		-		-
Bedding		0.74		2.39		-		0.67
Operating interest		1.76		3.29		0.37		2.00
Total direct expenses		89.68		114.90		93.87		72.78
Return over direct expense		52.73		28.70		50.76		71.90
<b>Overhead Expenses</b>								
Hired labor		2.89		7.08		2.04		1.11
Farm insurance		1.66		2.47		1.83		1.34
Interest		1.94		3.43		1.78		1.24
Mach & bldg depreciation		5.99		3.56		7.41		6.33
Miscellaneous		4.16		6.08		2.81		6.48
Total overhead expenses		16.65		22.63		15.87		16.50
Total dir & ovhd expenses		106.33		137.53		109.74		89.28
Net return		36.09		6.07		34.89		55.40
Labor & management charge		14.34		12.84		14.64		13.85
Net return over lbr & mgt		21.75		-6.76		20.24		41.55
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		89.68		114.90		93.87		72.78
Total dir & ovhd expense per unit		106.33		137.53		109.74		89.28
With other revenue adjustments		117.32		148.33		113.14		97.38
With labor and management		131.66		161.17		127.78		111.23
Est. labor hours per unit		0.94		1.51		0.85		0.61
<b>Other Information</b>								
Number of cows		164.1		165.1		160.2		138.0
Pregnancy percentage		96.7		95.0		91.8		99.8
Pregnancy loss percentage		1.2		1.2		1.3		-
Culling percentage		15.6		17.4		11.6		11.4
Calving percentage		95.5		93.8		90.6		99.8
Weaning percentage		89.9		85.7		84.4		97.5
Calves sold per cow		0.92		0.88		0.88		1.00
Calf death loss percent		5.5		9.3		6.1		3.5
Cow death loss percent		2.2		2.8		0.7		1.3
Average weaning weight		547		569		548		597
Lb. weaned/exposed female		492		487		463		583
Feed cost per cow		340.87		360.56		359.93		326.33
Avg wgt/ Beef Calves sold		601		602		634		673
Avg price / cwt.		151.01		149.60		142.04		145.44

**Livestock Enterprise Analysis**  
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**Beef Cow-Calf -- Average Per Cow**

	<b>Avg. Of All Farms</b>		<b>Low20%</b>		<b>40 - 60%</b>		<b>High 20%</b>	
Number of farms	29		5		6		6	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	150.3	226.92	161.1	241.06	281.7	400.17	59.4	86.33
Transferred out (lb)	371.4	571.36	338.6	528.19	233.8	361.14	522.7	800.95
Cull sales		150.47		159.44		117.59		105.71
Other income		13.38		2.30		56.26		4.37
Purchased		-154.92		-251.94		-120.44		-214.73
Transferred in		-96.20		-40.33		-206.35		-1.45
Inventory change		31.51		76.47		137.25		60.91
Gross margin		742.52		715.19		745.63		842.09
<b>Direct Expenses</b>								
Protein Vit Minerals (lb.)	62.4	19.55	23.0	10.45	44.7	14.34	41.1	11.96
Creep / Starter (lb.)	81.7	15.06	0.6	1.47	104.1	15.09	154.0	38.44
Complete Ration (lb.)	317.6	19.82	242.2	36.22	93.7	15.11	-	5.27
Corn Silage (lb.)	760.8	14.05	738.8	16.08	-	-	1,364.9	26.18
Hay, Alfalfa (lb.)	687.5	18.43	1,512.0	43.34	-	-	1,984.3	49.76
Hay, Grass (lb.)	4,880.2	114.71	5,357.0	107.98	5,463.1	151.16	6,559.2	115.31
Pasture (aum)	6.6	118.03	7.1	105.90	6.6	157.78	7.5	73.89
Other feed stuffs (lb)	852.7	21.22	412.3	39.12	104.9	6.45	337.4	5.54
Veterinary		28.80		33.27		29.88		21.86
Supplies		18.25		14.36		16.75		15.39
Fuel & oil		23.32		39.54		18.19		20.02
Repairs		28.48		62.56		30.87		14.77
Custom hire		11.59		18.62		26.43		9.69
Livestock leases		3.22		15.02		-		-
Bedding		3.87		11.93		-		3.87
Operating interest		9.19		16.38		1.90		11.66
Total direct expenses		467.58		572.24		483.95		423.60
Return over direct expense		274.94		142.95		261.68		418.49
<b>Overhead Expenses</b>								
Hired labor		15.08		35.26		10.50		6.45
Farm insurance		8.64		12.32		9.45		7.82
Utilities		6.04		7.88		8.28		6.30
Interest		10.13		17.08		9.18		7.23
Mach & bldg depreciation		31.25		17.75		38.21		36.82
Miscellaneous		15.66		22.41		6.22		31.43
Total overhead expenses		86.79		112.70		81.83		96.05
Total dir & ovhd expenses		554.37		684.94		565.78		519.65
Net return		188.15		30.25		179.85		322.44
Labor & management charge		74.77		63.93		75.49		80.62
Net return over lbr & mgt		113.37		-33.68		104.37		241.82
<b>Cost of Production Per Cwt. Produced</b>								
Total direct expense per unit		89.68		114.90		93.87		72.78
Total dir & ovhd expense per unit		106.33		137.53		109.74		89.28
With other revenue adjustments		117.32		148.33		113.14		97.38
With labor and management		131.66		161.17		127.78		111.23
Est. labor hours per unit		4.93		7.54		4.36		3.55
<b>Other Information</b>								
Number of cows		164.1		165.1		160.2		138.0
Pregnancy percentage		96.7		95.0		91.8		99.8
Pregnancy loss percentage		1.2		1.2		1.3		-
Culling percentage		15.6		17.4		11.6		11.4
Calving percentage		95.5		93.8		90.6		99.8
Weaning percentage		89.9		85.7		84.4		97.5
Calves sold per cow		0.92		0.88		0.88		1.00
Calf death loss percent		5.5		9.3		6.1		3.5
Cow death loss percent		2.2		2.8		0.7		1.3
Average weaning weight		547		569		548		597
Lb. weaned/exposed female		492		487		463		583
Feed cost per cow		340.87		360.56		359.93		326.33
Avg wgt/ Beef Calves sold		601		602		634		673
Avg price / cwt.		151.01		149.60		142.04		145.44

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**Beef Cow-Calf Whole Herd w/backgrounding -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>	
Number of farms	9	
	Quantity	Value
Beef Calves sold (lb)	41.09	59.74
Transferred out (lb)	55.83	84.63
Cull sales		18.93
Other income		-
Purchased		-27.26
Transferred in		-31.08
Inventory change		33.16
Gross margin		138.12
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	14.09	5.17
Creep / Starter (lb.)	9.86	1.95
Complete Ration (lb.)	2.79	0.32
Corn Silage (lb.)	464.93	7.26
Hay, Alfalfa (lb.)	150.87	3.25
Hay, Grass (lb.)	1,519.51	32.72
Oats (bu.)	0.24	0.88
Pasture (aum)	1.08	21.26
Other feed stuffs (lb)	58.42	2.11
Veterinary		3.71
Supplies		3.08
Fuel & oil		3.70
Repairs		4.56
Custom hire		1.44
Livestock leases		2.81
Operating interest		1.29
Total direct expenses		95.52
Return over direct expense		42.60
<b>Overhead Expenses</b>		
RE & pers. property taxes		0.57
Farm insurance		1.96
Utilities		1.81
Interest		3.93
Mach & bldg depreciation		7.01
Miscellaneous		3.07
Total overhead expenses		18.35
Total dir & ovhd expenses		113.87
Net return		24.25
Labor & management charge		15.36
Net return over lbr & mgt		8.89
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		95.52
Total dir & ovhd expense per unit		113.87
With other revenue adjustments		123.29
With labor and management		138.64
Est. labor hours per unit		0.86
<b>Other Information</b>		
Number of cows		85.2
Pregnancy percentage		98.1
Pregnancy loss percentage		0.3
Culling percentage		12.8
Calving percentage		97.8
Weaning percentage		90.2
Calves sold per cow		0.90
Calf death loss percent		5.8
Cow death loss percent		1.6
Average weaning weight		532
Lb. weaned/exposed female		479
Feed cost per cow		420.43
Avg wgt/ Beef Calves sold		640
Avg price / cwt.		145.37

**Livestock Enterprise Analysis**  
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**(Farms Sorted By Net Return Per Unit)**

**Beef Cow-Calf Whole Herd w/backgrounding -- Average Per Cow**

	<u>Avg. Of All Farms</u>	
Number of farms	9	
	Quantity	Value
Beef Calves sold (lb)	230.6	335.23
Transferred out (lb)	313.3	474.91
Cull sales		106.21
Other income		-
Purchased		-152.97
Transferred in		-174.41
Inventory change		186.08
Gross margin		775.06
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	79.1	29.03
Creep / Starter (lb.)	55.3	10.96
Complete Ration (lb.)	15.7	1.78
Corn Silage (lb.)	2,608.9	40.76
Hay, Alfalfa (lb.)	846.6	18.23
Hay, Grass (lb.)	8,526.6	183.59
Oats (bu.)	1.4	4.94
Pasture (aum)	6.0	119.30
Other feed stuffs (lb)	327.8	11.83
Veterinary		20.80
Supplies		17.29
Fuel & oil		20.79
Repairs		25.60
Custom hire		8.09
Livestock leases		15.75
Operating interest		7.24
Total direct expenses		535.99
Return over direct expense		239.07
<b>Overhead Expenses</b>		
RE & pers. property taxes		3.22
Farm insurance		11.01
Utilities		10.13
Interest		22.07
Mach & bldg depreciation		39.35
Miscellaneous		17.20
Total overhead expenses		102.99
Total dir & ovhd expenses		638.97
Net return		136.08
Labor & management charge		86.18
Net return over lbr & mgt		49.90
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		95.52
Total dir & ovhd expense per unit		113.87
With other revenue adjustments		123.29
With labor and management		138.64
Est. labor hours per unit		4.85
<b>Other Information</b>		
Number of cows		85.2
Pregnancy percentage		98.1
Pregnancy loss percentage		0.3
Culling percentage		12.8
Calving percentage		97.8
Weaning percentage		90.2
Calves sold per cow		0.90
Calf death loss percent		5.8
Cow death loss percent		1.6
Average weaning weight		532
Lb. weaned/exposed female		479
Feed cost per cow		420.43
Avg wgt/ Beef Calves sold		640
Avg price / cwt.		145.37

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**Beef Replacement Heifers -- Average Per Head Sold/Trans**

	<u>Avg. Of All Farms</u>		<u>40 - 60%</u>		<u>High 20%</u>	
Number of farms	22		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value
Beef Replace sold (hd)	0.4	544.43	0.4	505.59	0.6	837.13
Transferred out (hd)	0.6	880.59	0.6	756.80	0.4	702.98
Cull sales (hd)	0.0	11.38	0.0	35.37	0.0	6.69
Other income		0.85		-		-
Purchased (hd)	0.3	-242.76	0.3	-351.30	0.4	-268.76
Transferred in (hd)	0.4	-338.26	0.7	-544.22	0.1	-72.41
Inventory change (hd)	-0.3	-304.15	-	-	-0.6	-506.14
Gross margin		552.07		402.25		699.49
<b>Direct Expenses</b>						
Beet Pulp (dry) (lb.)	260.0	4.10	-	-	475.6	7.85
Protein Vit Minerals (lb.)	41.5	11.98	21.8	5.61	52.7	14.13
Complete Ration (lb.)	152.8	7.35	-	-	42.6	1.76
Corn (bu.)	3.9	23.67	3.7	21.89	4.0	23.84
Corn Silage (lb.)	814.5	15.77	1,129.3	23.71	621.3	10.33
Hay, Alfalfa (lb.)	384.8	10.04	-	-	547.1	14.21
Hay, Grass (lb.)	2,318.2	69.38	2,278.2	65.88	1,658.0	61.35
Oats (bu.)	1.3	4.15	2.3	7.63	-	-
Pasture (aum)	4.3	77.84	4.4	104.51	4.0	61.10
Sorghum Silage (lb.)	31.5	0.47	-	-	-	-
DDGS, dry (lb.)	112.8	11.81	-	-	213.0	22.29
Other feed stuffs (lb)	260.8	6.91	136.1	1.36	363.1	11.88
Breeding fees		4.23		-		8.36
Veterinary		15.38		13.59		17.83
Supplies		1.80		2.80		1.13
Fuel & oil		9.99		9.66		12.68
Repairs		8.32		11.32		7.27
Custom hire		4.75		1.21		5.32
Bedding		3.48		-		6.53
Operating interest		3.10		8.48		1.11
Total direct expenses		294.54		277.64		288.96
Return over direct expense		257.54		124.61		410.52
<b>Overhead Expenses</b>						
Hired labor		8.90		3.16		14.84
Farm insurance		4.16		5.12		4.96
Interest		2.31		1.84		2.28
Mach & bldg depreciation		14.51		12.51		18.71
Miscellaneous		10.30		4.87		15.00
Total overhead expenses		40.18		27.51		55.79
Total dir & ovhd expenses		334.71		305.14		344.75
Net return		217.36		97.11		354.74
Labor & management charge		30.34		27.59		36.56
Net return over lbr & mgt		187.02		69.51		318.18
Est. labor hours per unit		1.65		2.36		1.40
<b>Other Information</b>						
No. purchased or trans in		40		61		58
Number sold or trans out		59		59		132
Average number of head		49		45		104
Percentage death loss		0.3		-		0.8
Feed cost/head sold/trans		243.48		230.58		228.74

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**Beef Backgrounding -- Average Per Cwt. Produced**

	<u>Avg. Of All Farms</u>	
Number of farms	8	
	Quantity	Value
Backgnd Beef sold (lb)	227.27	321.96
Transferred out (lb)	132.35	184.80
Other income		-
Transferred in (lb)	-265.08	-410.46
Inventory change (lb)	5.45	8.72
Gross margin		105.02
<b>Direct Expenses</b>		
Beet Pulp (dry) (lb.)	116.67	0.79
Protein Vit Minerals (lb.)	17.73	5.72
Creep / Starter (lb.)	37.88	5.59
Complete Ration (lb.)	66.50	5.99
Corn (bu.)	2.98	19.54
Corn Silage (lb.)	519.40	11.01
Hay, Alfalfa (lb.)	107.61	3.23
Hay, Grass (lb.)	304.60	6.60
Stover (lb.)	25.33	0.51
Screenings, Heavy (lb.)	72.58	6.44
DDGS, dry (lb.)	72.18	7.13
Veterinary		2.01
Supplies		2.15
Fuel & oil		1.83
Repairs		1.37
Machinery leases		0.22
Marketing		2.34
Operating interest		0.85
Total direct expenses		83.30
Return over direct expense		21.72
<b>Overhead Expenses</b>		
Hired labor		1.35
Machinery leases		0.38
Mach & bldg depreciation		2.63
Miscellaneous		3.56
Total overhead expenses		7.92
Total dir & ovhd expenses		91.22
Net return		13.81
Labor & management charge		6.33
Net return over lbr & mgt		7.47
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		134.87
Total dir & ovhd expense per unit		137.07
With other revenue adjustments		137.07
With labor and management		138.83
Est. labor hours per unit		0.30
<b>Other Information</b>		
No. purchased or trans in		182
Number sold or trans out		178
Percentage death loss		0.5
Avg. daily gain (lb.)		2.11
Lb. of conc / lb. of gain		5.50
Lb. of feed / lb. of gain		11.55
Feed cost per cwt. of gain		72.53
Feed cost per head		146.88
Avg wgt / Backgnd Beef sold		728
Avg sales price / cwt.		141.66

**Livestock Enterprise Analysis**  
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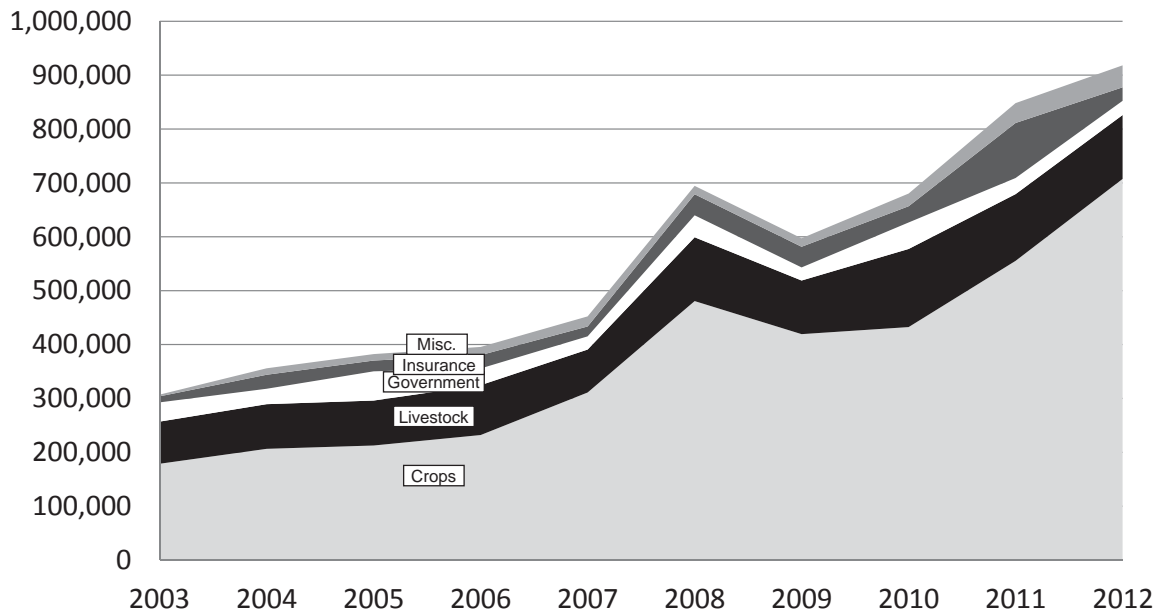
**Beef Backgrounding -- Average Per Head**

	<u>Avg. Of All Farms</u>	
Number of farms	8	
	Quantity	Value
Backgnd Beef sold (lb)	460.2	651.98
Transferred out (lb)	268.0	374.22
Other income		-
Transferred in (lb)	-536.8	-831.18
Inventory change (lb)	11.0	17.66
Gross margin		212.67
<b>Direct Expenses</b>		
Beet Pulp (dry) (lb.)	236.3	1.59
Protein Vit Minerals (lb.)	35.9	11.58
Creep / Starter (lb.)	76.7	11.31
Complete Ration (lb.)	134.7	12.12
Corn (bu.)	6.0	39.56
Corn Silage (lb.)	1,051.8	22.30
Hay, Alfalfa (lb.)	217.9	6.54
Hay, Grass (lb.)	616.8	13.37
Stover (lb.)	51.3	1.03
Screenings, Heavy (lb.)	147.0	13.03
DDGS, dry (lb.)	146.2	14.44
Veterinary		4.07
Supplies		4.36
Fuel & oil		3.71
Repairs		2.77
Machinery leases		0.44
Marketing		4.73
Operating interest		1.71
Total direct expenses		168.68
Return over direct expense		43.99
<b>Overhead Expenses</b>		
Hired labor		2.73
Machinery leases		0.77
Mach & bldg depreciation		5.33
Miscellaneous		7.20
Total overhead expenses		16.03
Total dir & ovhd expenses		184.72
Net return		27.96
Labor & management charge		12.83
Net return over lbr & mgt		15.13
<b>Cost of Production Per Cwt. Produced</b>		
Total direct expense per unit		134.87
Total dir & ovhd expense per unit		137.07
With other revenue adjustments		137.07
With labor and management		138.83
Est. labor hours per unit		0.61
<b>Other Information</b>		
No. purchased or trans in		182
Number sold or trans out		178
Percentage death loss		0.5
Avg. daily gain (lb.)		2.11
Lb. of conc / lb. of gain		5.50
Lb. of feed / lb. of gain		11.55
Feed cost per cwt. of gain		72.53
Feed cost per head		146.88
Avg wgt / Backgnd Beef sold		728
Avg sales price / cwt.		141.66



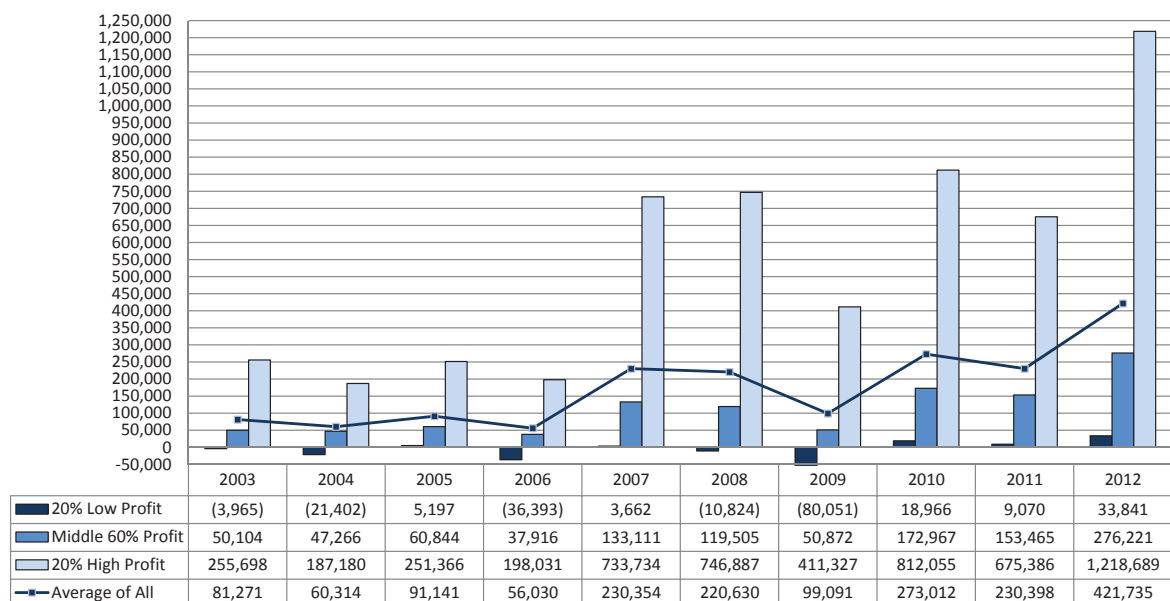
## Figure 1. Gross Cash Income Per Farm

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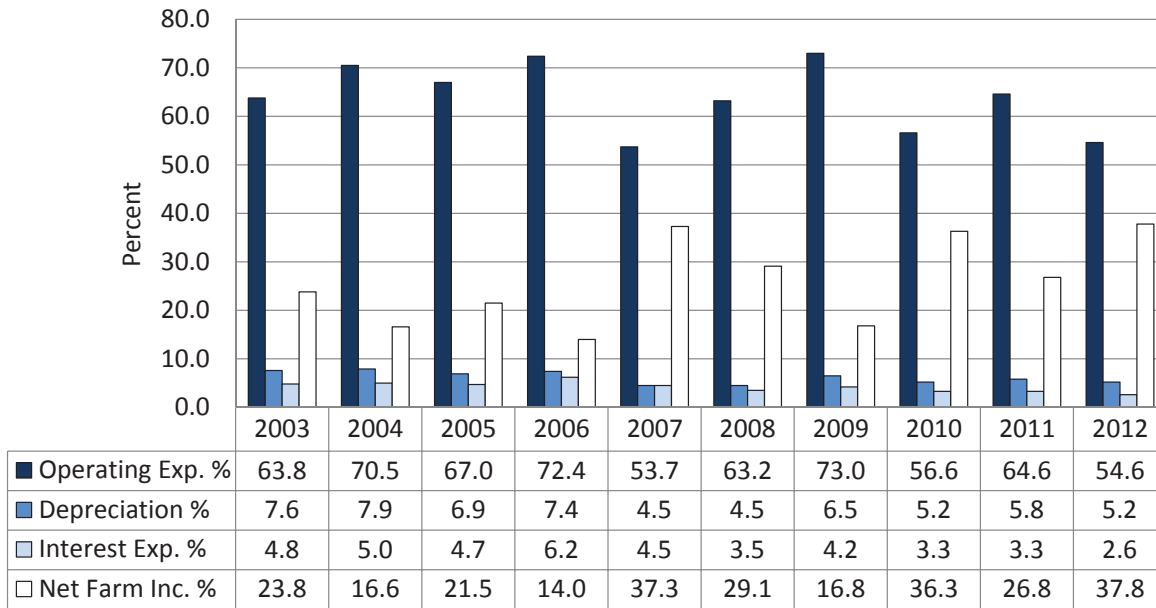
## Figure 2. Net Farm Income (Accrual) Per Farm

N.D. Farm Business Management Education Program – South Central Region



### Figure 3. Financial Efficiency Measures (As Percent of Gross Revenue)

N.D. Farm Business Management Education Program – South Central Region



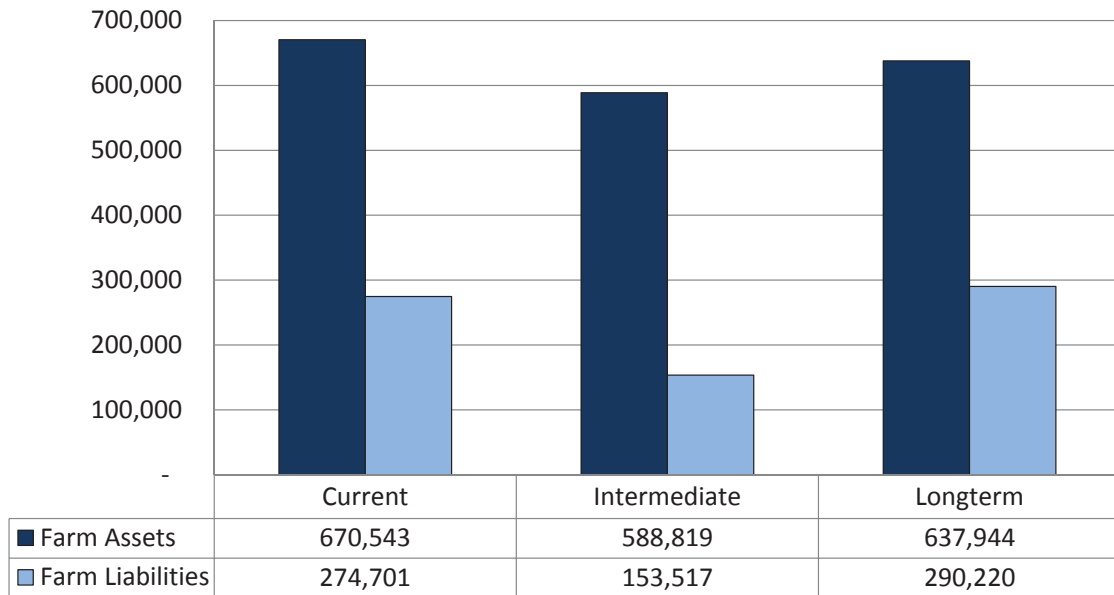
### Figure 4. Profitability Measures Per Farm

N.D. Farm Business Management Education Program – South Central Region



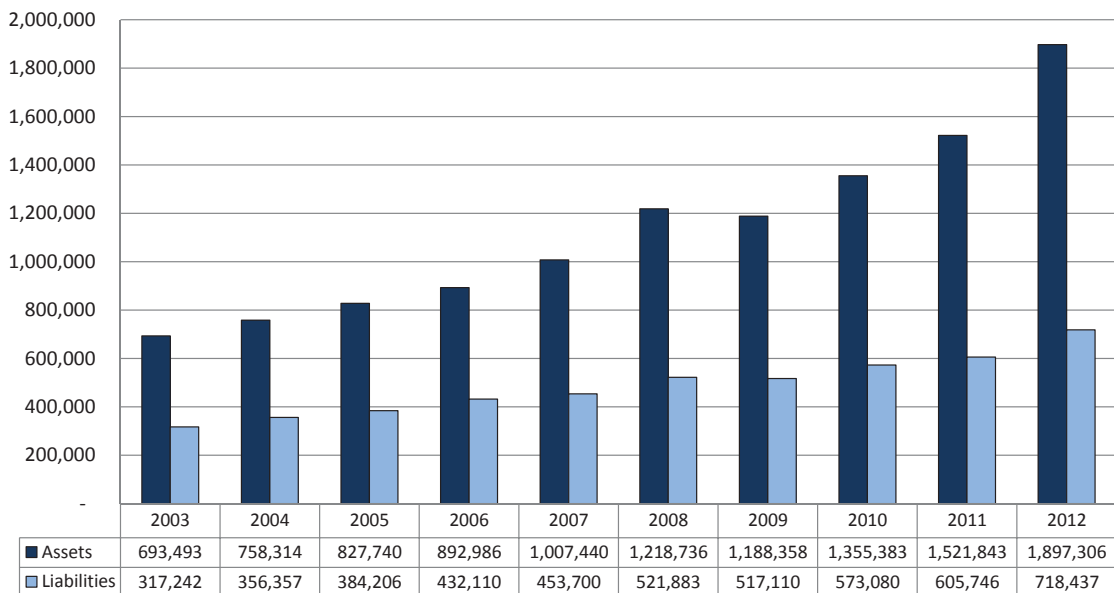
## Figure 5. Assets and Liabilities Per Farm, 2012

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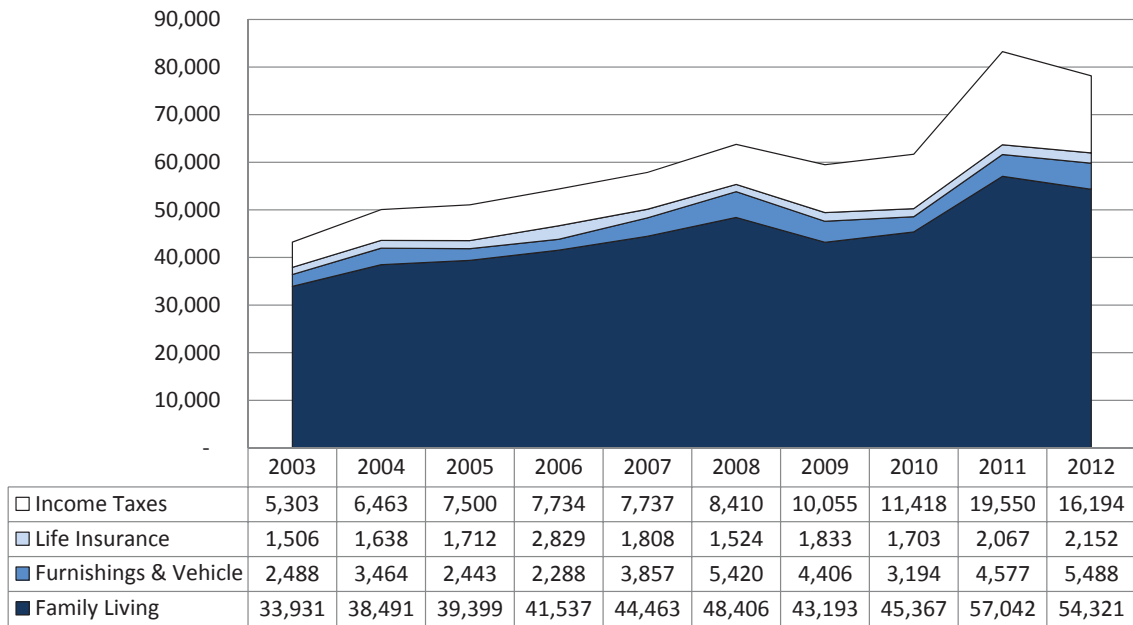
## Figure 6. Total Farm Assets and Liabilities

N.D. Farm Business Management Education Program – South Central Region



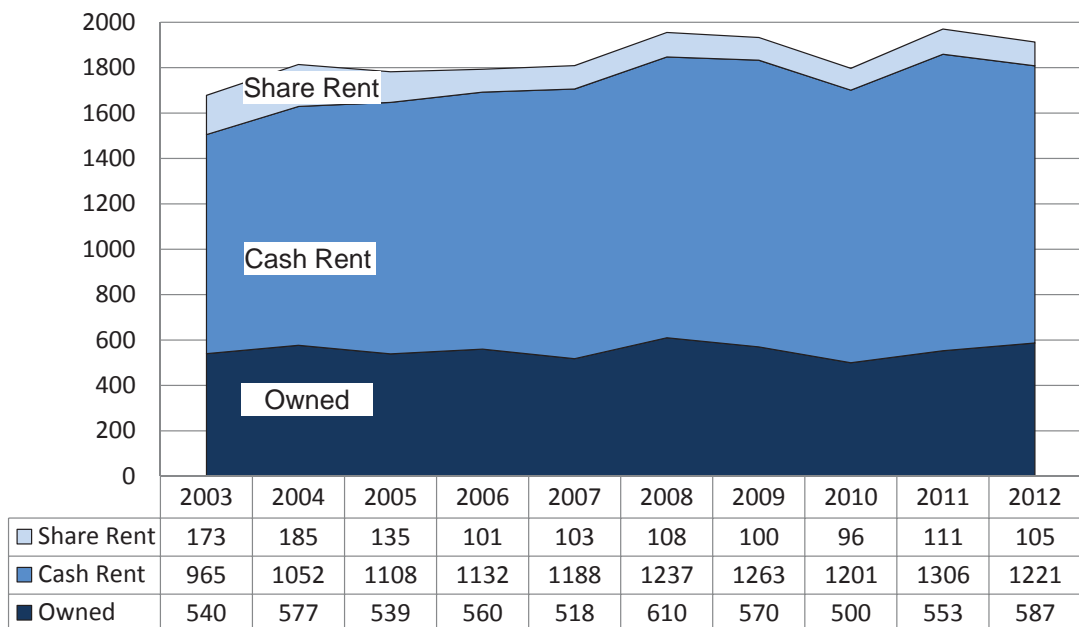
## Figure 7. Household and Personal Expenses

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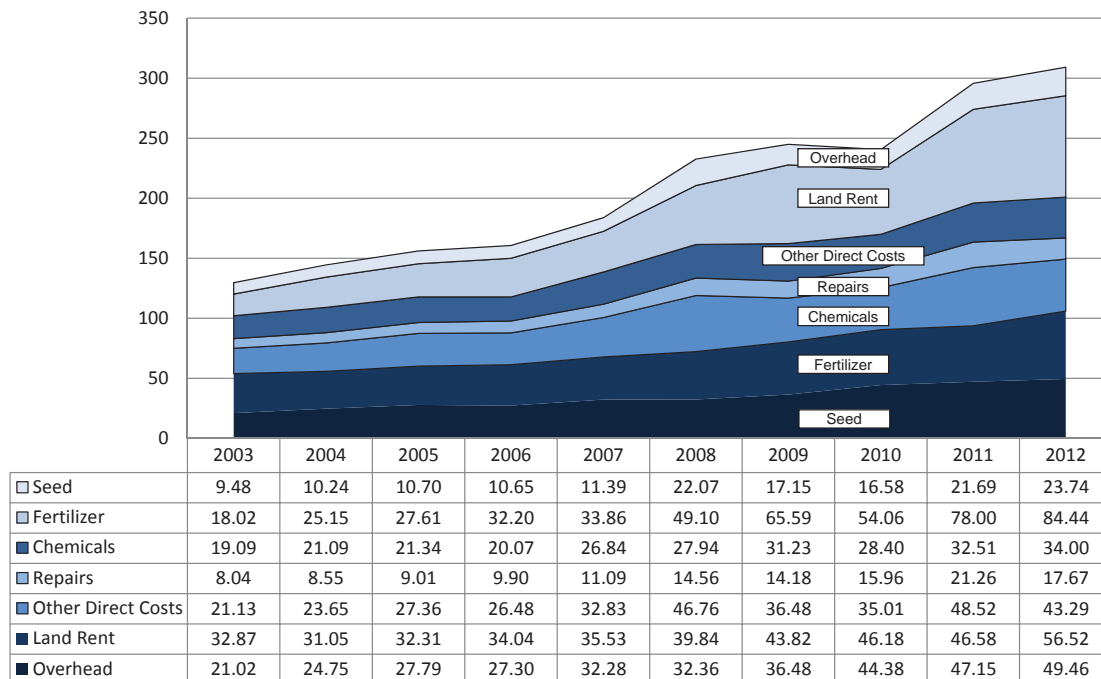
## Figure 8. Crop Acreage Per Farm

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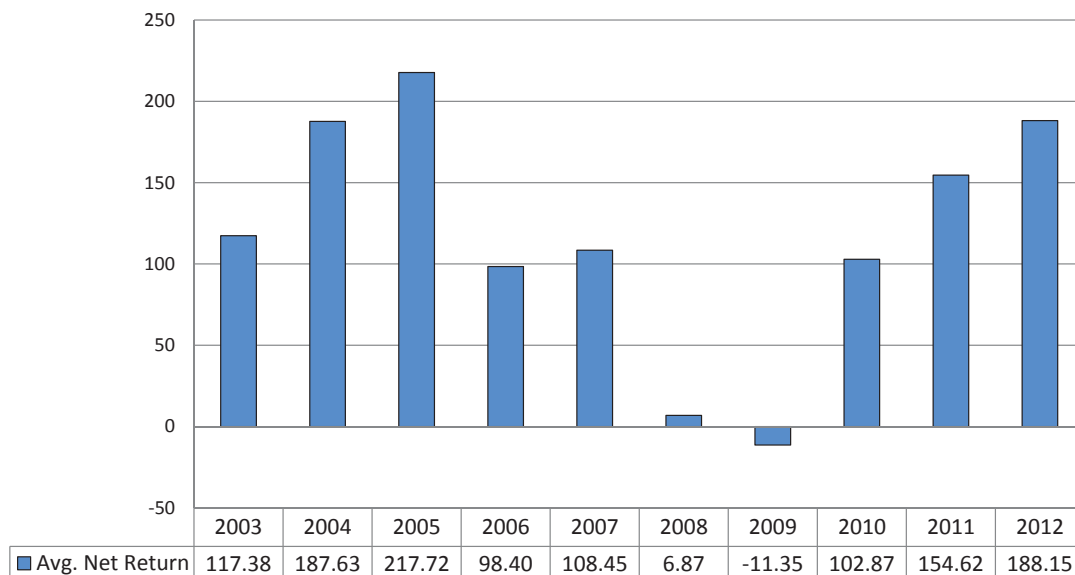
## Figure 9. Spring Wheat Costs Per Acre

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## Figure 10. Average Net Return Per Beef Cow

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